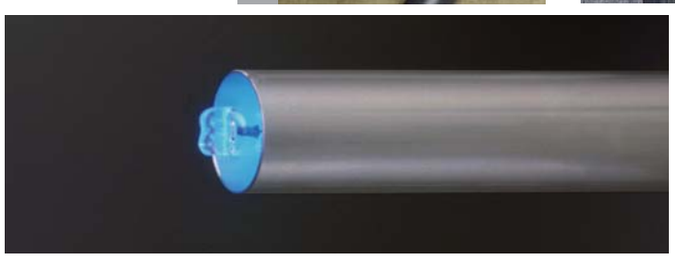
Safe Water Technologies, Inc.

SAFE WATER FOR A BETTER LIFE



















Thank you for your interest in the SWT product line.

What sets our products and company apart?

We are an engineering driven company. Our emphasis is on performance rather than looks, adaptability to the requirement rather than cost, value in place of a quick sale.

Like our competitors, we manufacture equipment for potable water supplies. But, unlike our competitors, we go after the health related problems that are becoming more and more prevelant in the world's water supply.

We want to make a difference in the time we have.

Dear Customer,

We are grateful that this catalog has found its way into your hands. As all of you probably know, catalogs do not happen by magic. A lot of hard work by the entire staff at SWT has played a part in its development. Your interest in our products is the reward for all our efforts.

For those of you that have been with us from the beginning, you may have followed the growth of our company by following the growth of our catalog. When we started in 1992, we had about 20 loose leaf pages. All these years later, we now we have hundreds of pages containing thousands of products; we have both print and expanded digital versions of the catalog; and we have a comprehensive website which includes even more detailed product information (visit swtwater.com).

Personally, I believe that life should be lived with humor, charity, and trust. Friendship is the net result. From that perspective, you will find occasional elements of humor in our catalog along with some plain talk. SWT is an aggressive, hard working company, but we are human over here, and I want to allow that humanity to always show through (anyone need a hug?).

So, here's the newest edition of our ever-growing catalog. Our goal is that we keep expanding our capabilities and share a productive, long-term business relationship. Our hope is that all of us can find friendship, humor, and prosperity along the way. Cheers!

Sincerely,

Brett Oleskow,
Owner

safe water technologies, inc.
996 Bluff City Boulevard, elgin, il 60120 usa
telephone 847 888 6900 • facsimile 847 888 6924
e mail: info@swtwater.com • WeB site: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1276
EFFECTIVE
NOVEMBER 2018

Table of Contents

Introduction

Miscellaneous ***SWT Policies, Procedures, Credit Applications, Banking, and Other Boring, but Necessary, Stuff***
Advice from Rusty: Analysis forms to help us do our job better

Section 1 ***SWT Ultraviolet Systems — Models, Technical Information***
Spectrum Plus™ Chemical and Bacteria Filters (All in One)
Spectrum Whole House Residential Point of Entry UV
Polisher™ In-Line UV for RO and Drinking Water Systems
Ultra Biolyte™ Countertop & Undersink UV
BetterLife™ Series Patented Filters and Softeners with Integrated UV
ChloraStick™ Pipe Sanitizing System
Commercial/Industrial UV Systems 3 to 1,345 GPM

Section 2 ***SWT Drinking Water Filtration Systems (POU) — Who Needs RO?***
Series 200 Point-of-Use Particulate, Chemical, Taste and Odor Removal
Series 200-UV Same as Above with Ultraviolet Added
Series 300 Three Stage Version of Above for When Two Stages Won't do the Trick
Series 300-UV Three Stage System Plus a Stainless Steel UV Chamber
Series 200BB 10 inch and 20 inch High Flow Filtration Systems with a UV Chamber
Gemini Bracketless Residential Drinking Water Systems, with and without UV
SWT Premium Faucets Feature Long Reach Spouts with an Air Gap Option

Section 3 ***SWT Reverse Osmosis Systems — Models, Technical Information***
SWT Premium™ TFC Membrane RO System, 50 GPD
SWT MetalsMaster™ TFC Membrane RO System with Heavy Metal Prefiltration, 50 GPD
SWT BioMaster™ TFC Membrane RO System with Ultraviolet Postfilter, 50 GPD
Gemini Reverse Osmosis Systems Most Compact 140 GPD Available
Commercial RO Systems 400 to 18,000 GPD
Reverse Osmosis Components for Residential, Commercial, and Industrial

Section 4 ***SWT Residential Whole House Systems — Customized for Your Region***
Softeners and Conditioners Computer Metered and Clock Timer Units for Hard Water Systems, Hard Water and Nitrate Systems, Hard Water and Tannin Systems, Hard Water and Carbon Systems
AllSoft™ Twin Alternating Softening Systems
Soft n' Pure™ Whole House Water Purification Systems with Softener and Chemical/Bacteria Filter
Nitrate Removal Systems
Tannin & Organic Removal Systems
Sediment Systems with Automatic or Manual Backwashing
Carbon Systems with Automatic or Manual Backwashing
Iron and Hydrogen Sulfide Removal Systems
Hydrogen Peroxide Dosing Systems
Specialty Carbon Filtration Systems Chloramines, Radon, VOC, and BOD Reduction
BraneWave™ UF Systems 0.02 Micron Ultrafiltration

Section 5 ***SWT Commercial / Industrial Equipment — 0 to 500 GPM***
Water Softeners with Time Initiated or Computer Metered Regeneration
Sediment Filters with Automatic Backwash
Carbon Filters In-line and Automatic Backwash
Iron, Hydrogen Sulfide, and Heavy Metal Filters with Automatic Backwash
Multi-media and Sand Filters

(Continued on other side)

Table of Contents

Section 6 ***Residential, Commercial, and Industrial Components***

Fiberglass Pressure Tanks Wound and Molded from 6 inch to 63 inch in Diameter
Steel Pressure Tanks Lined and Primed
Tank Heads and Adapters
Manual Backwashing Valves
Control Valves for Residential and Commercial Softening and Filtration
Industrial Diaphragm Valve Nests Pre-designed for All Types of Systems
Distribution Systems, Underdrain Assemblies, and Bulk Internals for All Tank Sizes
Hubs and Laterals Customized to Fit Any Application
Brine and Chemical Storage Tanks
Commercial Brine Safety Floats
PVC Pipe and Plumbing Fittings

Section 7 ***External Accessories & Service Tools For Filter Systems***

Industrial Controllers, Stagers, Diaphragm Valves, and Flow Meters
Pressure Tank Fittings, Flex Connectors, and Vacuum Breakers
Flow Controls, Eductors, and Y-Pattern Globe Valves
Service Tools

Section 8 ***Filtration Media, Zeolites, Carbons, Ion Exchange, Etc.***

FilterEase™ & FilterEase-HD™ Hard as Rock, Lighter Than Sand, 20 Micron Particulate Filtration
MetalEase™, MetalEase-AS™, & MetalEase-61™ Removes Iron, Hydrogen Sulfide and Other Heavy Metals without Chemicals — Simple Backwashing Cleans the Bed
ProActive™ GAC SWT's Brand of Coal Based, Acid Washed, Coconut Shell, and Catalytic Carbons
Zeolite Safe, Natural, Nontoxic, and Inexpensive Particulate Reduction Media
KDF® Low Level Chlorine Treatment
pH Neutralizer Raise Your pH
Manganese Greensand Oxidizing Agent Carrier
Anthracite, Sand, Silica, Quartz, Gravel, & Garnet Not to be Taken for Granite (All NSF Approved)
ProSoft™ Gold, Premium, Fine Mesh, High Porosity, & Heavy Duty The Professionals' Softening Resin Line
ProSelect™ General Purpose, Tannin, Nitrate, & Silica Selective Resin Line—Simple Cures for Common Problems
ProBlend™ High Capacity Mixed-Bed & Semiconductor SWT's Most Requested Mixed Bed Resins
Carbon & Resin & Media Selection & Compatibility Guides & Tables and More Reference Materials

Section9 ***Filter Housings and Cartridges — Unbelievably Large Selection, If You Need it, We Got it!***

Plastic, Stainless Steel, Valve-in-Head, Single & Multi-Cartridge Housings We Have Them All
Sediment, Carbon, Specialty, High Temperature, and Inline Cartridges to Fit All the Above
Absolute Rated Cartridges
Bag Filter Housings and Bag Filters

Section 10 ***Chemical Treatment Equipment***

Air Injectors
Inline Static Mixers
Chemical Feed Pumps Fixed Feed, Adjustable Feed, and Dual Control Feed Rate Pumps
Chemical Storage and Feeder Tanks

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

SAFE WATER TECHNOLOGIES, INC.

CONFIDENTIAL CREDIT APPLICATION

Company Name: Phone: Fax:

DBA (if any): E-Mail:

Federal I.D. Number State Resale Number:

Billing Address: Shipping Address:

❍ Corporation ❍ Partnership ❍ Other

Name of Owner(s):

President: Purchasing Agent:

Vice President: Accounts Payable:

Year Business Organized: Was business started by the above officers or owners? ❍ Yes ❍ No

If no, how long present officers or owners in control? ❍ less than 2 years ❍ 2 to 5 years ❍ over 5 years

Bank Name:

Bank Address:

Checking Account Number: Bank Representative:

Credit References (major suppliers in USA, preferably in the water treatment industry):

1. Company Name: Phone: Fax:
   Address:
2. Company Name: Phone: Fax:
   Address:
3. Company Name: Phone: Fax:
   Address:

I, hereby give this information for the purpose of obtaining credit and authorize the obtaining of information concerning any statement made herein.

Name (Print): Title:

Signature: Date:

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1066
EFFECTIVE
JUNE 1999

SAFE WATER TECHNOLOGIES, INC.

TERMS AND CONDITIONS OF SALE

Billing: Safe Water Technologies, Inc. (SWT) general terms are prepayment with PO for the first (3) three orders, unless other terms are arranged prior to quotation. The minimum order is $100.00 product cost per shipment. NET 30 DAYS terms will be available to qualified water treatment companies located in the USA that submit orders at least (3) three times per year with an annual minimum procurement of $10,000.00 from SWT subject to credit approval and limits. A credit application will be processed after 3 sales orders within a 12 month period have been completed. Please refer to the section below entitled "Special Orders/Custom Manufacturing" for exclusions. Delinquent accounts are subject to a 1.5% per month service charge and no shipments will be made until the account is current.

Cancellation or Change Orders: Generally, orders are processed as they are received. Once they are put into production, add-ons may have to be treated as a new order and may hold up shipment of the original order. Cancellations and/or change orders are subject to approval by SWT. A fee may be charged for either, depending on the progress of the order when the changes are received. Special orders or orders per customer's prints cannot be canceled once special material has been ordered and/or production has started.

Collection Charges: In the event it becomes necessary to incur any expense for the collections of any overdue account, reasonable collection charges, including reasonable attorney's fees, will be added to the balance due, and purchaser agrees to pay said fees.

Damaged Merchandise: Refer to back page for information.

Shortages: Refer to back page for information.

Errors and Returned Goods: Refer to back page for information.

Freight: Product will be shipped from our industrial building in Elgin, IL 60120 via UPS Small Package via Prepaid and Add. Shipping via FedEx, DHL, etc., small package is not available. Freight collect is not an option for UPS, FedEx, DHL, etc. for small package service. Trucking LTL or FTL Collect or Prepaid and Add can be selected by the customer.

Delivery: Contact SWT to obtain specific information regarding shipping time for any order. Orders will not be processed on delinquent accounts until all past due monies are paid and the account becomes current.

Open Account: A complete credit check is usually required prior to shipping on an open account basis. This requires correspondence between SWT, your suppliers, and your bank. The time involved depends on the response from the references that you give us. You will be notified when your credit is approved. In the interim, all orders must be shipped COD or check in advance.

Order Acceptance: SWT reserves the right to accept or reject any order (like we really want to reject an order). Possession of price sheet shall not be construed as an offer to sell the products listed. All orders, other than stock items, must be confirmed in writing.

Prices: SWT products are sold at prices in effect at time of order acceptance. These prices generally coincide with dated, printed price sheets found in our catalog. We do reserve the right to change prices without notice when necessary. All price F.O.B. shipping point.

Special Orders/Custom Manufacturing: If any material shall be manufactured and/or sold by SWT to meet buyer's particular specifications or requirements and is not part of SWT's standard line offered by it to the trade generally in the usual course of SWT's business, that material shall be a "Special Order/Custom Manufacturing" and buyer shall defend, protect, and save harmless SWT against all suits at law or in equity and from all damages, claims, and demands for actual infringement of any United States or foreign patent and shall defend any suit or actions which may be brought against SWT for any alleged infringement because of the manufacture and/or sale of the material covered thereby. SPECIAL ORDERS/CUSTOM MANUFACTURING MAY REQUIRE DEPOSITS IN ADVANCE OF PRODUCTION.

Warranties: Refer to back page for information.

I have read and understand the above and agree to the terms stated:

Name of Officer or Owner _____ Title _____

Company _____ Phone _____

Taxpayer Identification Number: ◯ Social Security Number **or** ◯ Employer Identification Number _____

Signature _____ Date _____

SAFE WATER TECHNOLOGIES, INC.

TERMS AND CONDITIONS OF SALE

Damaged Merchandise: SWT cannot be held liable for damage or loss to a shipment by a freight carrier. Claims for damaged products, suspected damages, container shortages, or pilferage within the container on delivery MUST BE NOTED ON THE CARRIER'S DELIVERY RECEIPT. The carrier claims representative MUST be notified immediately.

Shortages: All product shortages MUST BE REPORTED TO SWT WITHIN 7 DAYS AFTER DELIVERY. If the shortages are a result of damaged packaging during transit, the damage must be noted on the carrier's delivery receipt at the time of delivery (see Damaged Merchandise for more details).

Errors and Returned Goods: SWT cannot assume the responsibility for the errors of others. Merchandise ordered incorrectly cannot be returned without a written authorization. Material must be new and in marketable condition. We reserve the right to charge a 25% restocking fee on all returned goods. We will assume responsibility for our own errors at no charge to the customer.

Restocking fees are as follows:

1) Stock parts and easily resellable items. (Items must be unused and in "like new" condition on arrival, so please pack it well for the return trip.)

- Your fault 30%
- Your fault and you're really sorry 25%
- Your fault, you're really sorry, you're placing a new order for the right stuff 20%
- Manufacturer's fault on items we distribute 0%
- Our fault. We eat the freight, apologize like crazy, and yell at our people 0%

2) Non-stock, custom manufactured, and special ordered materials

- Your fault ..... 50 - 100%
  Chances are, if it's custom work, no one else will want it. If we can't use it, you'll be stuck with the tab. We'll try to help locate outlets for you if we can, but in all honesty, we can't afford to have special stuff sitting around.
- Our fault 0%
  Of course this rarely happens (?), but if it did, we'd scramble like all get out to get the situation fixed any way that we can to keep you as a happy customer. Then someone comes close to being fired. (Of course we don't actually fire people for making honest mistakes, but don't tell them that. We need to keep them on their toes.)

Freight: We need to know from you, on each order, what is most important to you; things such as "fastest way," or "lowest cost." (Obviously, if the fastest way is also the lowest cost, we'll send it that way). We believe that communication about freight is very important and can save money and aggravation. If you do not relay information to us, we will use our best judgment trying to weigh the benefits of timeliness vs. cost. We have good freight rates to some parts of the country, and not-so-good rates to other parts of the country. Sometimes it is better to ship collect. Other times, it is better to prepay the freight and add it to the invoice. Our point here is that we can usually ship however you want us to, but if we need to know things like "your cousin owns a truck and can save you some money," you need to tell us (and it does not hurt to verify this on each order).

Shipping and Back Order Policy: SWT's standard policy is to ship your order in a reasonably short period of time (1 to 3 days), and back order whatever is not going to be ready quickly. If you wish for shipments to ship complete, you must let us know on each order. Most items are shipped via UPS or truck common carrier. Orders requested to go via a special carrier or air freight must be specified at time of ordering.

Warranties: SWT expressly disclaims and shall have no liability whatsoever in excess of the purchase price of the item sold for any loss, damage, or injury to person or property, including any such loss, damage, or injury attributable to a manufacturer's negligence or fault and including any incidental or consequential damages. The seller makes no warranties, express or implied, including warranties as to merchantability or as to the fitness of the merchandise for any particular use or purpose, and shall not be liable for any loss or damage, directly or indirectly, arising from the use of such merchandise or for consequential damages. Buyer understands its sole warranties, if any, shall be those provided by the manufacturer.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1068
EFFECTIVE
SEPTEMBER 2025

SAFE WATER TECHNOLOGIES, INC.

LETTER OF CREDIT (L/C) INSTRUCTIONS

1. Before preparing your L/C application, please advise the issuing bank information so we are able to verify that JP Morgan Chase is willing to confirm a L/C from that particular issuing bank.

2. Please fax or e-mail a copy of your L/C application before giving it to your bank so we can confirm all the details are correct and complete. This helps prevent delays caused by amendments.

3. All Letters of Credit for Safe Water Technologies, Inc. should contain the following information:

    - Purchasing company's complete name, corporate and shipping address, telephone and fax
    - Irrevocable Letter of Credit drawn and confirmable by a U.S. bank, at sight. Reimbursement by wire transfer permitted.
    - All funds are to be in U.S. Dollars (USD).
    - All bank charges are for the account of the applicant.
    - Freight collect, ex-factory, origination point(s): Elgin, IL USA

    - **Advise the L/C to:** **JP Morgan Chase**
      Attn: Export Letter of Credit
      Mail Code # IL10236
      Swift Address: CHASUS 33 or CHASUS 33 XXX
      ABA Number: 021000021
      Mail: 1 Bank One Plaza
      Mail Code # IL10236
      Chicago, IL 60690 USA
      Contact: Denise White (312 954 5974)

    - **Beneficiary:** **Safe Water Technologies, Inc.**
      Account Number: 1115001032599
      996 Bluff City Blvd.
      Elgin, IL 60120 USA
      Tel: 847 888 6900 Fax: 847 888 6924

    - Latest Shipping Date: 12 weeks from issue date
    - Expiration Date: 6 weeks after latest shipping date
    - L/C must expire in the United States.
    - Partial Shipments Allowed.
    - Transshipments Allowed.
    - Freight Forwarders HBL Allowed.

Please remember to fax a copy of your L/C application to Safe Water Technologies before it is submitted to your bank. This will help prevent discrepancies and avoid unnecessary bank charges.

Thank you for your cooperation and your order.

Brett J. Oleskow, President
Safe Water Technologies, Inc.

SAFE WATER TECHNOLOGIES, INC.

LETTER OF CREDIT (L/C) & WIRE TRANSFER (T/T) INSTRUCTIONS AND BANK FEES

Your bank should be given the following information when authorizing a Wire Transfer (T/T) in U.S. Dollars (USD) to Safe Water Technologies, Inc.

Authorize the T/T to:	**JP Morgan Chase** 1 Chase Manhattan Plaza New York, NY 10005 USA Inside USA Tel: 866 223 0359 Ext 0 Outside USA Tel: 91 888 434 3030 **ABA Number: 021000021** **Swift Address: CHASUS 33 or CHASUS 33 XXX**
Beneficiary:	**Safe Water Technologies, Inc.** **Account Number: 1115001032599** 996 Bluff City Blvd. Elgin, IL 60120 USA Tel: 847 888 6900 Fax: 847 888 6924

Safe Water Technologies, Inc. will not accept any bank charges from outside the United States.

The following fees are charged by Safe Water Technologies, Inc. for all transactions involving banking and export document preparation. A minimum fee of $42.00 USD is charged on all export orders:

Export Document Preparation Fee:	**$ 42.00 USD Minimum**
Sight Draft, Direct Collection Letter, or Cash against Documents:	**Quote**
Letter of Credit:	**Quote**

Delivery date on all orders is applied from the date the T/T, L/C, or funds are received at Safe Water Technologies, Inc.

Sincerely,

Brett J. Oleskow, President
Safe Water Technologies, Inc.

SAFE WATER TECHNOLOGIES, INC.

ORDER FORM

Company: _____ Phone: _____

Address: _____ Cell: _____

_____ Fax: _____

_____ Email: _____

Ship To: _____ Date: _____

_____ PO Number: _____

_____ Date Needed: _____

_____ Ship Via: _____

Part Number	Description	Quantity	Price

_____ Check here if you want your order to ship complete. Otherwise, all orders will ship and backorder.

Notes: _____

_____

_____

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1067
EFFECTIVE
APRIL 2005

SAFE WATER TECHNOLOGIES, INC.

HOW TO ORDER BASIC COMMERCIAL / INDUSTRIAL EQUIPMENT IN 10 EASY(?) STEPS

Welcome to the Safe Water Technologies' Design-It-Yourself / Build-It-Yourself Commercial Systems Program. This tutorial is designed to save time, engineering, labor, shipping costs, and aid you in designing and building equipment the way you need it. This is a program for those of you who want to move into commercial markets, while learning and keeping expenses low. Engineering language has been kept to a minimum.

In Section Five of our catalog, we have prepared tables that do most of the calculation work for you. You just have to do a little quick cross-referencing. For instance, the valve nests have been prepared as kits. They include all the necessary diaphragm valves, backwash flow controllers, and eductors when needed. And, we tell you standard industry flow rates and backwash rates and pipe sizes for the system you need. Then we make the choice of system controls (stagers/controllers) easy to select also.

Please use the following steps to develop a rough idea of what you are looking for. These are the types of things we would need to know if you wanted us to design a system for you.

---

1) Have a water analysis, and determine your final product water requirements.

2) Know your flow rate requirements.
- The total volume of water consumed daily and weekly.
- The normal average operating flow rate per minute and per hour.
- The peak water flow rate required per minute. (What is the maximum amount of water that will be needed at any given moment?)

3) How much total water volume or flow is available?
- Know the pipe sizes at the installation site. You may need to adapt pipe connection sizes up or down.
- How many gallons per minute (gpm) of water is available for backwashing heavier filter media.

4) One, two, or three tank system?
- Does the system need to operate at a constant flow rate for 24 hours per day, and/or have large amounts of water always available?
- Is there enough time in the middle of the night for a filter tank, or segments of the system, to go off-line or be bypassed for a while when it regenerates?
- Will there be any advantages to using two alternating tanks (vs. one big tank) in any of the filtration stages?
- Would it be better to use two smaller tanks in parallel instead of one large tank?
- Consider two smaller tanks may be better than one in case of malfunction, maintenance, or lack of spare parts. (The client can at least run on one tank while the other tank is being fixed.)
- Is there enough room for the tank(s) to fit in all doorways, the truck, and the shipping container?

5) Determine how fast you want the water to run through the filter media, and what quality of water you need.
- How truly critical is the application?
- The SWT Filter Media and Resin Specification Sheets are located in Sections 6 and 7. Read them.
- The slower that water flows through a filter media bed, the better the filtration will be.
- The service flow for most softeners and carbon filters is calculated in terms of gallons per minute per cubic foot (gpm/cu.ft.) of media in the tank.
- Sediment filtration can be calculated in either gallons per minute per cubic foot and/or gallons per minute per square foot diameter of the filter bed in the tank. It all depends on the media, design, and application.
- All backwash rates are determined by the square foot diameter of the tank, media particle size, weight, density, and water temperature.

6) For water softeners...
- Are you sizing the tanks for flow rate or total hardness capacity in the tank?
- Are you more concerned with lower operating costs or initial installation costs?
- How many pounds of salt per cubic foot of resin do you want to use per regeneration?
- The less salt used per cubic foot of resin, the lower the operating cost, but the less total hardness capacity the softener will have between regenerations (which means more frequent regenerations unless you get a bigger tank), and the increased chance of hardness bleed through.
- Is zero grains of harness absolutely necessary, or can you save your customer a lot of money, by allowing 0.5 to 2 grains of hardness bleed through?
- Do you need to size for iron in the water?
- Do you need a heavy duty, or fine mesh softening resin, or chemical cleaners?

(Continued on back)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM IN01
EFFECTIVE
MAY 2001

SAFE WATER TECHNOLOGIES, INC.

HOW TO ORDER BASIC COMMERCIAL / INDUSTRIAL EQUIPMENT IN 10 EASY(?) STEPS

7) Determine if you want the system to be constructed in composite plastic or steel.

- We recommend plastic whenever possible, and when the budget allows.
- Plastic tanks and valves are less corrosive, easier to work with, lighter, longer lasting, and better looking after years in service than steel. But, they take less physical abuse and are generally more expensive than iron or steel.
- Steel tanks have more welding options, but are heavier and much more expensive to transport.
- Most plastic systems are cemented or flanged. Most iron or steel systems are NPT or flanged.
- Iron valves and steel tanks are less costly initially, but more costly to ship and work on.
- Plastic tanks use either plastic, iron, or brass valves. Steel tanks use iron or brass, but seldom use plastic valves.

8) Choose a controller by determining the regeneration method, frequency, and start.

- Do you want the system to have manual initiation?
- Does the system need to have clock initiated regeneration at preset times on preset days?
- Does the system need to be metered for a specific number of gallons to initiate the regeneration?
- Will you need battery backup?
- Consider the available voltages and power supply dependability when determining the automation of the system.

9) Some general guidelines to remember...

- SWT Commercial Water Softeners are designed at standard flow rates of 5 gpm per cubic foot of media, and are regenerated with 6 pounds of salt per cubic foot of resin. This design will have a small leakage of hardness, but this is a good trade-off between initial cost, ongoing cost efficiency, and performance efficiency. Performance can be increased by increasing salt dosage or slowing the flow rate down at a later date.
- To achieve zero hardness leakage, flow rates may have to be slowed down to 2 to 3.5 gpm per cubic foot of resin, and salt dosage for regeneration may have to be increased to 10 to 12 pounds per cubic foot of cation resin.
- Peak flow rates of 10 gpm per cubic foot of resin can be achieved in some applications, for short periods of time. but many factors come into play such as hardness levels, amount of salt dosage, type of softening resin used, newness, cleanliness of the bed, and application.
- Sand filters are a thing of the past. Most people are converting over to a "FilterEase™ type" of filter media or to multimedia filters.
- FilterEase is an excellent sediment filter. Carbon, anthracite, and Birm® also make good sediment filters and are easy to backwash (with service flow rates and backwash rates being nearly identical). On the other hand, multimedia filters (while excellent for small micron and high service flow filters) and MetalEase™ filters can require a backwash rate that is two times the service flow rate. That means a lot more water, bigger pump requirements, and bigger, more expensive piping and valves.
- Consider the addition of high flow bag filters as secondary or post-filters in micron critical applications.
- To achieve high quality water, calculate the water flow at 2 gpm per cubic foot of material.
- To achieve good quality water, calculate the water flow at 3.5 to 5 gpm per cubic foot of media.
- To achieve utility grade water, calculate the water flow at 5 to 10 gpm per cubic foot of media.
- The finer the filtration and the faster the water flows, the higher the pressure drop will be.
- The finer the carbon mesh size, the better the performance of the carbon, but the higher the pressure drop. 8 x 30 mesh GAC carbon is the most often used in commercial applications, but 12 x 40 is used on occasion.
- A well designed system will have an operating pressure drop of less than 15 psi during normal service flows and 25 psi during peak flows.

10) Now from our catalog, all you have to do is...

- Choose the appropriate filter media and the amount of cubic feet needed per the customer's required flow rate. (Do not forget the underbedding.)
- Choose the appropriate tank size and openings. (Remember to leave 50% freeboard in the tank by multiplying the total tank volume x 0.67 for the amount of media to be used.)
- Choose the pre-matched valve nest kit that matches the media type and tank size.
- Choose the pre-matched timer and stager from the options determined by the system type.
- Choose the distribution system from the guide book. (Hint: Top mount, and top & bottom mount systems are the easiest to work with and the least expensive. Keep it simple, and always keep pipe sizes the same to match the valve kit's.)

That's all there is to it. All piping and plumbing fittings can usually be found locally. Still not sure? Call us with what you have, and we will be more than happy to help you determine your requirements.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM IN01
EFFECTIVE
MAY 2001

SAFE WATER TECHNOLOGIES, INC.

COMMERCIAL / INDUSTRIAL SOFTENER & FILTER SITE ANALYSIS

Fill out completely and return to SWT for quotation.

Customer: _____ **Tel:** _____ **Fax:** _____

Contact: _____ **Email:** _____

Job Name/Reference: _____ **Site Location:** _____

System Application: _____

_____

Type of System: ___ Single Tank ___ Twin Alt. ___ Duplex ___ Triplex ___ Quad ___ Other _____

Backwash Req.: ___ Backwashing/Regenerating Capable ___ Non-backwashing/Non-regenerating

Tank Type: ___ Steel, L&P ___ 304 Stainless Steel ___ 316L Stainless Steel

___ Polyglass/ FRP ___ Other _____

Tank Coding: ___ Coded ___ Non-coded **Media supplied by SWT?** ___ Yes ___ No

Tank PSI Rating: ___ 100 PSI ___ 125 PSI ___ 150 PSI **Door Height or Dia. Restrictions:** _____

Avail. Elec.: ___ 120/60 ___ 240/60 ___ 240/50 **Elec. Type:** ___ 1 Phase ___ 3 Phase

Max. Water Temp.: _____ ºF **Min. Water Temp.:** _____ ºF **Pipe Size:** _____ **Avail. PSI:** _____

Service Flow Requirements: **Low:** _____ GPM **Normal Operating:** _____ GPM **Peak Flow:** _____ GPM

Water Usage: _____ GPD **Hours Per Day in Service:** _____ **Days Per Week in Service:** _____

Required Water Usage from 12:00 A.M. to 4:00 A.M.: _____ **Untreated Water Bypass Allowed?** ___ Yes ___ No

Water Source: ___ Well ___ Surface ___ Municipal ___ Private ___ Other: _____

Water Analysis: (Attach copy or fill out below)

pH: _____ PPM	TDS: _____ PPM	Hardness: _____ PPM/Gr	Chlorine: _____ PPM	Chloramines: _____ PPM
Sulfur: _____ PPM	Ferric Iron: _____ PPM	Ferrous Iron: _____ PPM	Heme Iron: _____ PPM	Total Iron: _____ PPM
Lead: _____ PPM	Copper: _____ PPM	Arsenic: _____ PPB	Fluoride: _____ PPM	Manganese: _____ PPM
Silica: _____ PPM	Sulfides: _____ PPM	Nitrates: _____ PPM	TSS: _____ NTU	Alkalinity ($CaCO^3$): _____ PPM
Tannins: _____ NTU	TOC: _____ PPM	Radon: _____ PPM	Uranium: _____ PPM	Radionuclides: _____ pC/L
VOCs: _____ PPM	MTBE: _____ PPM	Hydrocarbons: _____ PPM	Pesticides: _____ PPM	Tri-Halomethane: _____ PPM
Bacteria: _____ CFU	Other (Explain): _____			

Are there any other factors that may affect the performance of a system?
(i.e.: Oil in the water, brackish water, salt air, or
caustic environment that could cause corrosion): _____

_____

Are there any special product water requirements? _____

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM SAO1
EFFECTIVE
AUGUST 2014

SAFE WATER TECHNOLOGIES, INC.

COMMERCIAL / INDUSTRIAL REVERSE OSMOSIS SITE ANALYSIS

Fill out completely and return to SWT for quotation

Client: _____ **Tel:** _____ **Fax:** _____ **Date:** _____

Contact: _____ **Job Name/Reference:** _____

Site location: _____ **Tel:** _____ **Fax:** _____

Size of system (GPD): _____ **Application:** _____

Type of system: ___ Tap ___ Process ___ Brackish ___ Seawater ___ Ultrapure Polish

Pretreatment: ___ Required ___ Supplied ___ Not Needed ___ Sediment ___ Carbon ___ Softener

Water storage tank: ___ Required ___ Supplied ___ Not Needed **Est. size:** _____ X _____ **Gallons:** _____

Water usage: _____ GPD **Hours per day in service:** _____ **Number of days per week in service:** _____

Avail. elec: ___ 110/50 ___ 120/60 ___ 220/50 ___ 220/60 ___ 240/50 ___ 240/60

Max. oper. temp.: _____ F. **Min. oper. temp.:** _____ F. **Pipe size:** _____ **Avail PSI:** _____

Water source: ___ Well ___ Surface ___ Municipal ___ Other: _____

Optional equipment: ___ Carbon ___ Post UV ___ Post DI ___ Pressure Tank ___ Water Transfer Pumps

Water analysis: (Attach copy or fill out below)

Sodium: _____ PPM TDS: _____ PPM Hardness: _____ PPM Chlorine: _____ PPM Sulfides: _____ PPM

Sulfur: _____ PPM Color: _____ Tannins: _____ pH: _____ Other: _____

Cations	Ions (PPM)	Conversion	$CaCO_3$ (PPM)	Anions	Ions (PPM)	Conversion	$CaCO_3$ (PPM)
Calcium (Ca)	_____	x 2.50 =	_____	Bicarbonate (HCO_3)	_____	x 0.82 =	_____
Magnesium (Mg)	_____	x 4.12 =	_____	Sulfate (SO_4)	_____	x 1.04 =	_____
Sodium (Na)	_____	x 2.18 =	_____	Chloride (Cl)	_____	x 1.41 =	_____
Iron (Fe)	_____	x 1.79 =	_____	Fluoride (F)	_____	x 2.66 =	_____
Strontium (Sr)	_____	x 1.14 =	_____	Nitrates (NO_3)	_____	x 0.81 =	_____
Barium (Ba)	_____	x 0.73 =	_____	Carbonate (CO_3)	_____	x 1.67 =	_____
Potassium (K)	_____	x 1.28 =	_____	Phosphate (PO_4)	_____	x 1.58 =	_____
Totals	_____		_____	**Totals**	_____		_____

*Total Cations should equal total Anions. Cations + Anions = TDS

Are there any other factors that may affect the performance of a system? (i.e.: Oil in the water, brackish water, salt air, or caustic environment that could cause corrosion): _____

_____

Are there any special product water requirements? _____

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM SAO2
EFFECTIVE
NOVEMBER 2002

Dear Customer,

The following is one of a series of what we hope are helpful hints about actual water treatment problems, and the solutions, or tricks of the trade, that the greatest minds in water treatment, our customers, have assembled. We know that some of the most bizarre, aggravating water treatment problems have found the best solutions through a combination of experience and/or dumb luck—not from a manufacturer's, or a laboratory's testing.

This is no big deal, really, but we at SWT believe it is our obligation to give our customers a little edge if we can, to help them to be more knowledgeable and competitive.

These "Field Notes" by our special guest columnist, Rusty Waters, are being sent to our customers only, and not to everyone that may have sneaked on to our general mailing list. There is no set schedule for this. It will simply occur whenever Rusty hears of something he deems worth passing on. He wanted us to remind you, if you have something you would like to share with other members of the Safe Water Technologies family, do not hesitate to call us up so we can pass your story on to Rusty. Or, write a fax or letter about your experience. He is willing to listen to all ideas. Rusty says, "Even though I'm prob'ly the oldest dang water treatment pro out there, I ain't fool 'nuff to think I know it all yet."

(NOTE FROM MANAGEMENT: Rusty won't tell us his real age, but as near we can tell, he must be at least 20 years past the century mark. He is by no means feeble. In fact, the old curmudgeon can still be about the meanest, caustic, old salt we have ever met. He admits he became a caustic old salt from working with DI regeneration for so many years. Don't get us wrong. He has a heart of gold, but he's not afraid to spit in the eye of a City Plumbing Inspector half his age. On bad days when he gets a little too overbearing, we just start calling him "Crusty" and he eventually settles down. We should also mention that Rusty is a free spirit (understatement!) and we are not always able to edit everything he writes. If you like some of his ideas, please let us know. If you have serious disagreement with anything he says, please respond to him directly. Thank you.)

We at SWT hope that you find these real life applications useful, and that you can also contribute back to Rusty little things that you might have learned along the way. We believe new ideas should be shared. Any old ideas could be new to somebody else. Anyway, that's our story, and we're stickin' to it.

Yours truly,

The Folks at SWT

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

Field Notes *By Rusty Waters*



"Unscientific wisdom from a collection of the greatest minds in water quality improvement"

(We ain't passin' judgement,…we're passin' ideas!)

MetalEase™ Well Application

Here is a field tip for MetalEase that was passed on to us from a dealer in Sugar Grove, IL. We liked it so much, we wanted to pass it on to you. This one falls under the heading of "That's so simple, we should have thought of that before." John, at Supreme Soft Water, says that when he runs into particularly tough hydrogen sulfide problems, he recommends the following low cost solution before telling his customers to "drill a new well."

Real Life Solution # 1:

In this well application where the hydrogen sulfide level is reaching levels that fluctuate between 5 to 10 ppm and the well pump is not capable of pushing more than 6 gpm through the bed. John suggests instead of putting in a single 1 cubic foot unit of MetalEase, install two ½ cubic foot units in parallel.

He says to split the water stream in half by teeing into two 7 x 44 tanks, each with there own separate control valve. Each tank has a ½ cubic foot of MetalEase in it. Now, instead of running 6 gpm of flow through 1 cubic foot, you end up running 3 gpm through each ½ cubic foot of media. This increases the square foot surface area that the water comes into contact with. Most of MetalEase's reaction to metals occurs in the top portion of the bed anyway. After the twin tanks you bring the two water streams back together before sending it off to the rest of the house.

Here is the truly great benefit of this type of installation. John's simple engineering now allows you to utilize the full flow of the well pump to backwash the two tanks separately, giving a full 6 gpm to each ½ cubic foot of media. How? By setting the filter valves to backwash at two different times. He sets one valve to backwash at 2:00 AM, and the other valve to backwash at 3:00 AM. This allows tremendous lift to each bed separately. A further improvement to this is to use a heavy underbedding, such as quartz, for additional distribution of the water.

Most oxidation beds only work properly if the beds are kept clean. This unique installation idea allows the beds to backwash at twice the rate of service flow. This more powerful backwash would help keep the bed cleaner than if you were trying to lift a full cubic foot at a time. It also allows you to use filter valves that may not be fully ported.

— Rusty

If you have an unscientific idea that you would like to share with your fellow water quality improvement professionals, by all means let us hear it so we can pass the information along. Design by experience and evolution can be more reliable than what the eggheads can do in the lab or on a computer. We here at SWT believe that knowledge is meant to be shared. We do not presume to know more than our customers, and we really enjoy the exchange of ideas.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM FNO1
EFFECTIVE
JUNE 2001

Field Notes *By Rusty Waters*



"Unscientific wisdom from a collection of the greatest minds in water quality improvement"

(We ain't passin' judgement,...we're passin' ideas!)

Tannins

This field tip on ProSelect™ Tannin was taught to me by a Cajun friend of mine from just South of "N'Orleans" way, who learned his water treatment installing RO systems on oil platforms 80 feet below sea level in the Louisiana gulf. Clyde worked for Texaco, and several water treatment manufacturing companies before becoming a private consultant. Clyde possesses a degree in chemical engineering, but I was able to overlook that, and we have remained friends anyway.

Real Life Solution #2:

Once in a while, the organic(s) in water can lock iron in solution ("dissolved" or "ferrous iron"). This is often referred to as "organic iron." A more accurate term would be "organically bound iron." To the best of our knowledge, "organic iron" is caused by clear water iron in solution entering into an area in the water supply that is heavy with decayed vegetable or animal matter.

Since all life on this planet is carbon based (remember your Star Trek episodes), carbon molecules from the decayed matter attach themselves to the iron molecules. The extra attached carbon molecule prevents the iron from rapidly oxidizing. (This is also why we use carbon to remove oxidizing agents like chlorine from the water). Iron can exist in a mono carbonate, bicarbonate, or even tricarbonate state. The more organics (carbon) that you have binding the iron, the slower the oxidation process. That is how you get iron filter bleed through when your filter relies on oxidation to bring the iron out of solution before it deep bed filters it.

Organic(s) can clog up a filter faster than a weed sprouts. If you are having problems with your iron filter not working when it should be, you may have an organic problem. One solution is to use a tannin resin (such as ProSelect Tannin, our favorite brand , thank you very much!) as a pre-filter. A good tannin resin can solve a lot of problems and can be added to an existing softener, or set up as its own filter the same way you would set up a softener. Tannin resins are regenerated with chloride (as in "sodium chloride," or you may simply call it "salt") and a little soda ash. This is why tannin resin works well when added into an existing softener. When you regenerate the softener, the sodium will regenerate the softening resin and the chloride will regenerate the tannin resin. Normally the chloride would just be wasted in a standard softener. Most household applications would only need to use 1/3 cubic foot of (6^2 to 10^2) tannin resin on top of 1 cubic foot of softening resin (3 to 1 ratio), and you do not have to increase your salt dosage. Many water treatment technicians install low cost combination softener/tannin systems using fine mesh softening resin with a top layer of tannin resin to remove iron. In some areas, this softener/tannin system can remove more iron than iron filters if there are organic(s) present in the water supply.

— Rusty

If you have an unscientific idea that you would like to share with your fellow water quality improvement professionals, by all means let us hear it so we can pass the information along. Design by experience and evolution can be more reliable than what the eggheads can do in the lab or on a computer. We here at SWT believe that knowledge is meant to be shared. We do not presume to know more than our customers, and we really enjoy the exchange of ideas.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM FN02
EFFECTIVE
APRIL 2001

Field Notes *By Rusty Waters*



"Unscientific wisdom from a collection of the greatest minds in water quality improvement"

(We ain't passin' judgement,...we're passin' ideas!)

Tannin vs. Oxygen Potential of Water

I prefer to treat water without the use of chemicals whenever possible, but it ain't always easy. ('course, it's a heck of a lot easier than my gettin' a raise around this joint, but I digress.)

The following test is one of those quick, down and dirty, field tests we learned out of desperation many years ago when we had a lot of unexplained iron removal system failures in the field. For the longest time, we had absolutely no idea what was going on. (If I was a fast learner, I s'ppose I wouldn't have had to live so long.) When we did figure out what was going on, we determined that it was tannins (organic matter) going on to the iron, and preventing oxidizing. (Remember that you currently use carbon to remove chlorine, an oxidant, from water. And also remember, that all organic life forms are carbon based. You would have learned this from Dr. McCoy ("Bones") on those early Star Trek episodes if you were paying attention. "Damn it Jim! I'm a space doctor, not a water treatment specialist!")This is the cause of heme (or organically bound) iron.

This test has no formal lab protocol, but has been used with a high success rate among some dealers. It is only an indicator to be used as a "rule of thumb" rather than an absolute. This test will help you determine if the amount of tannins in the water is low enough in relation to the oxygen potential of a MetalEase™ bed for the MetalEase to work without the use of additional oxidants in the water supply. You're going to do this by adding "colored oxygen" to your water sample. The theory is based on the simple assumption that the more tannins existing in a water supply, the greater the amount of free oxygen (dioxide) that must be made available from the water treatment system. The test is simple, and low cost to perform:

Mix: 0.75 oz of potassium permanganate crystals with 1.75 oz of water.

Take: Two drops of this concoction, and add it to 1 quart of the subject water. The water will turn pink.

Stir Briefly: If the pink color remains, you should be able to use MetalEase without using additional oxidation.

If the water sample turns clear (permanganate is reduced to a clear state), you will have to add additional oxidation, or remove the organic with an organic resin such as ProSelect™ Tannin installed as either a stand alone unit, or using it as the top layer in a mixed bed softener.

The following are common methods of oxidation (from most concentrated to least concentrated):
Peroxide, Potassium Permanganate, Chlorine, Ozone, Metal Ease, Air Injection.

— Rusty

If you have an unscientific idea that you would like to share with your fellow water quality improvement professionals, by all means let us hear it so we can pass the information along. Design by experience and evolution can be more reliable than what the eggheads can do in the lab or on a computer. We here at SWT believe that knowledge is meant to be shared. We do not presume to know more than our customers, and we really enjoy the exchange of ideas.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM FN03
EFFECTIVE
APRIL 2001

Field Notes By Rusty Waters

"Unscientific wisdom from a collection of the greatest minds in water quality improvement"

(We ain't passin' judgement,…we're passin' ideas!)



"How much carbon makes a consumer happy?"

"How long will this cartridge last?" I've been asked. They say there are no fool questions, only fools that ask them! (or something like that), but I swear this question always puts a bind in my shorts anyway. So, we have developed our own fool answer: "I dunno! What's in the water?" (Unless we're talking to somebody with an MBA in marketing, or a CPA. Then we answer: "I cannot give a categorical response to a hypothetical situation." That usually freezes them for a second.)

Look you young'ens, how can I possibly give you an answer to that question if you have no idea what every single element in your water supply is, and how much of it is there ? What's your flow rate per minute? How much water are you going to use per day? Per week? What's the temperature, of the water? pH level?

Have you noticed that filter media manufacturers will not guarantee the performance of their media. They will only guarantee that each batch is consistent to a physical specification. That one batch will generally be the same as the next one. That is because they have no idea where their media is going, or on to what kind of water, or if the person installing it knows how to install it properly.

Let's use carbon as an example. One manufacturer's carbon gets filled into another manufacturer's cartridge, which gets put into another manufacturer's system, which can get sent to any corner of the world. How long will that carbon cartridge last? As a manufacturer, I know that every cartridge will last exactly the same, if every carbon batch and cartridge size is identical. Now, my only problem is to find two identical applications, and I'm in heaven. While this can be done in a tightly controlled lab by a bunch of eggheads, you and I both know that this cannot be done out in the field.

That is why the most reputable of companies will not make a lot of claims as to their cartridges' performance, and be leery of manufacturer's that do.

Fact 1: Most GAC manufacturers recommend a service flow rate of 2 gpm per cubic foot of carbon.

Fact 2: One cubic foot of carbon fills about 44 standard 10 inch GAC cartridges.

Question 1: How fast then, should water flow through a standard cartridge to stay within a carbon manufacturer's guidelines?

Hint: *What is 2 gpm divided by 44?*

Answer: 5.82 ounces of water per minute. (That's less than would fill a cup of coffee.)

Question 2: Then why do most carbon cartridge manufacturers recommend a flow rate of 1 gpm through their cartridges?

Answer: I dunno! What's in the water?

Or a better question is: What are you really trying to remove? It just so happens that of all the bad things carbon is good at removing, chlorine is one of the fastest in terms of reaction time with carbon, as opposed to something like radon (yes, carbon has been shown to reduce radon levels), which may require an even slower flow rate than 2 gpm per cubic foot. This is one reason that carbon cartridges are not typically used for radon removal.

(Continued on next page)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM FN04
EFFECTIVE
JUNE 2001

SAFE WATER TECHNOLOGIES, INC.

Here are some good rules of thumb to remember about carbon. (Remember that these are not absolute truths.)

— Typically, one cubic foot of 12 x 40 mesh coal based carbon at a flow rate of 5 gpm can remove 1 ppm of chlorine for 1,000,000 gallons of water. (This is about three years in an average household.) 8 x 30 mesh carbon will remove about half that amount at a slower flow rate. 20 x 50 mesh carbon will remove about 50% more chlorine, at a slightly faster flow rate.

- 8 x 30 mesh is used in commercial applications.
- 12 x 40 mesh is used in whole house residential.
- 20 x 50 mesh is used in most GAC cartridges.

— Carbon blocks will perform even better in the right applications with up to 5 times the active area of a GAC cartridge. Generally, the smaller the mesh size of carbon, the better the performance, and the better the mechanical (sediment) filtration capabilities, but the greater the pressure drop and cost.

— For chemical reduction using carbon, the slower the flow rate, the better. This means less than 2 gpm per cubic foot in a household application, unless the manufacturer has supplied specific, contrary information.

— Generally, when comparing carbons, a couple of quick things should be looked at:

- Iodine Number — The higher the better. 650 for a low grade, 950+ for a high grade.
- Molasses Number — This is a quasi indicator of color removal capabilities. The higher the better.
- Ash Content — The lower the better. Acid washed carbons are generally low in ash content.
- Hardness — You don't want the carbon to break up in the backwash cycle, but this is not as critical a concern in cartridges. Softer carbons with more ash will be a lot dustier when filling or rebedding tanks.
- What is the carbon made of? Coal, wood, coconut shell? I prefer coal based for most applications. It has been proven to me that it's the most balanced of the carbons when it comes to removing chemicals, taste, odor, chlorine. But there are a few people that like coconut based carbon for color removal, or ozone reduction. Coconut is also harder.

— Carbon can become coated easily with iron and/or hydrogen sulfide, which will drastically reduce its performance and life.

Yep, it's a lot to absorb (no pun intended). By now your thinkin' the only way to know for sure when it is time to change a cartridge is to do a water analysis. I guess I didn't make y'er life any easier. The day-to-day reality of it though, is that not many people are going to shell out $200.00 for laboratory water analysis to install a $10.00 cartridge. But at least you have something to tell a homeowner next time he asks "How long will my carbon cartridge last?" Just say "I dunno! What's in your water?" or do what I do...

Tell 'em "Change it every 6 months, or sooner if the water starts tasting bad or stops coming out."

— Rusty

If you have an unscientific idea that you would like to share with your fellow water quality improvement professionals, by all means let us hear it so we can pass the information along. Design by experience and evolution can be more reliable than what the eggheads can do in the lab or on a computer. We here at SWT believe that knowledge is meant to be shared. We do not presume to know more than our customers, and we really enjoy the exchange of ideas.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM FN04
EFFECTIVE
JUNE 2001

Section 1

Ultraviolet Equipment

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

ULTRAVIOLET SYSTEMS

SPECTRUM PLUS™ SERIES
CHEMICAL & BACTERIA TREATMENT SYSTEMS



This Whole House Water Treatment System is the first affordable water treatment system to treat all of the home's drinking, cooking, and bath water. Spectrum Plus will remove or significantly reduce over 50 carcinogenic chemicals as listed by the EPA, and also disinfect the entire home's water supply against harmful pathogenic bacteria such as: E. Coli, baccilary dysentery, typhoid, cholera, and others. Constant improvements in water treatment technology have allowed this system to be manufactured on a scale that for the first time is both affordable and easy to maintain. This system is capable of not just treating 10 or 20 gallons of water per day for drinking, but is capable of actually filtering hundreds of gallons per day. It will treat all the water for every sink, faucet, shower, and bathtub throughout the home.

Specifications

Model	Spectrum 10 Plus
Capacity @ 10 mic. Clear Water	10 gpm (38 lpm)
Connection Size	1 inch FPT
Working Pressure	150 psi (10 atmos)
Lamp Hours	9,000
Maximum Current	0.56 amp
Maximum Watts	64
Shipping Dimensions	44 x 15 x 11 inch (112 x 38 x 28 cm)
Shipping Weight	55 lbs (25 kg)

Note

Spectrum Plus systems deliver a minimum 30,000 µw sec/cm^2 at 10 gpm.

Spectrum Plus will remove completely, or reduce significantly, the following contaminants from water:

FIRST STAGE
Adipates(diethylhexyl)
Alachlor
Aldicarb
Aldicarb sulfone
Aldicarb sulfoxide
Atrazine
Benz (a) anthracine (PAH)
Benzene
Benzo (a) pyrene (PAH)
Benzo (b) floranthene (PAH)
Benzo (k) floranthene (PAH)
Beryllium
Butyl benzyl phthalate (PAE)
Cadmium
Carbofuran
Carbon tetrachloride
Chlordane
Chlorine
Chromium (+3)
Chrysene (PAH)
Dalapon
Di (2-ethylhexl) adipate
Dibenz (a,h) antracene
Dibromochloropropane
Dichlorobenzene (meta-)
Dichlorobenzene (ortho)
Dichlorobenzene (para-)
Dichloroethane (1,2-)
Dichloroethylene (1,1-)
Dichloroethylene (cis-1,2-)
Dichloroethylene (trans-1,2)
Dichloropropane
Diethylhexyl phthalate (PAE)
Dinoseb
Diquat
Endothall
Endrin
Ethylbenzene
Ethylene dibromide(EDB)
Glyphosate
Heptachlor
Heptachlor epoxide
Hextachlorobenzene
Hextachlorocyclopentadiene
Indo (1,2,3-c,d) pyrene (PAH)
Lidane
Mercury (organic complexes)
Methoxychlor
Monochlorobenzene
Organic color
Organics
Oxymal
Pentachlorophenal
Picloram
PCB's
Sediment
Simazine
Styrene
3,7,8-TCDD (dioxin)
2,4-D
2,4,5-TP (silvex)
TCB's
TCE's
Tetrachloroethylene
Thallium
THM's
Toluene
Toxaphene
Vinyl chloride
Xylenes

SECOND STAGE
Bacillus anthraces
Bacteria
Coliform bacteria
Corynebacterium diphtheria
Dysentery
E. Coli
Hepatitis virus
Influenza virus
Polio virus
Salmonella
S. typhosa
Shigella dysenteriae
Spirillum rubrum
Staphlyl ococcus albus
Streptococcus hemolyticus
Vibrio cholerate
Viruses

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 0150
EFFECTIVE
JULY 2008

ULTRAVIOLET SYSTEMS

Safe Water Technologies' Biolyte™ Series *sterilizers provide the most preferred method of anaerobic bacteria control available. The Spectrum Plus™ Series allows the additional benefit of adding carbon to the system in one self-contained unit. These high quality UVs are designed to provide homes and offices with bacteriological control, chemical reduction, and taste and odor improvement in a single system.*

- Stainless steel chambers
- All international voltages
- 30,000 µw sec/cm²
- Heavy duty quartz sleeve
- 9000 hour lamps
- Flow rates up to 10 gpm

Ultraviolet Systems

Part Number	Description	GPM	Connection Size	Weight Lb
SWT00500A	Ultra Biolyte™ Countertop	0.5	Diverter	6
SWT00700	Polisher™ Inline — Post-RO Only	0.75	1/4 inch Tube	3
SWT10000S/1	Spectrum 10 Biolyte™ without Carbon, 9 x 40 FRP Tank	10	1 inch FPT*	30
SWT10000C/1	Spectrum 10 Plus™ with 1 cu.ft. of Carbon, 9 x 40 FRP Tank	10	1 inch FPT*	55
SWT10000SC/1	Spectrum 10 Plus™ with 1 cu.ft. of SuperCat™, 9 x 40 FRP Tank	10	1 inch FPT*	55
SWT10000C/1-1248	Spectrum 10 Plus™ with 2 cu.ft. of Carbon, 12 x 48 FRP Tank	10	1 inch FPT*	90
SWT10000SC/1-1248	Spectrum 10 Plus™ with 2 cu.ft. of SuperCat™, 12 x 48 FRP Tank	10	1 inch FPT*	90

* Spectrum 10 models available with 3/4 inch FPT connections upon request.
International voltages available at additional cost. Contact your SWT representative for details.

Replacement Parts

Part Number	Description	GPM	Weight Lb
Ballast			
SWT15010E	Ballast (Electronic) for Polisher	—	1
SWT10003EF	Ballast (Electronic) for Spectrum 10 Series	—	3
Ultraviolet Lamps			
SWT13003A	Ultraviolet Lamp for Ultra Biolyte	0.5	1
SWT15001	Ultraviolet Lamp for Polisher	0.7	1
IL10001	Ultraviolet Lamp for Spectrum 10 Series	10.0	3
Quartz Sleeves			
SWT13004	Quartz Sleeve for Ultra Biolyte	—	1
IL30002	Quartz Sleeve for Polisher — Requires Special Tool	—	1
IL30001	Quartz Sleeve for Spectrum 10 Series	—	3
Carbon			
SWT13010	Carbon Block Cartridge, 1.50 inch Core, for Ultra Biolyte	0.5	2
IT50003C	ProActive™ Coconut Shell Carbon, 20 x 50 mesh, for Spectrum 10 Series	—	55
IT50003SC	ProActive™ SuperCat™ Coconut Shell Carbon, 20 x 50, for Spectrum 10 Series	—	56
Chlorastick™ Pipe Sanitizing Kit			
APS-CSRA-1-9	Chlorastick Inline Module for Spectrum 10 Plus, 1 inch Union Connection	—	2

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 0150
EFFECTIVE
JULY 2008

BETTERLIFE™

Quality Drinking Water for the Entire Home!

Safe Water Technologies' BetterLife Water Treatment System is designed to spoil our customers by providing safer, clearer, softer, better-tasting, drinking quality water to every faucet in the home.



- Safeguards against bacteria, viruses, and microorganisms
- Coffee, tea, juice, soups, and steamed vegetables taste better
- Use less soap, shampoo, and laundry detergents
- Computerized controller, self adjusts for actual water usage and cost efficiency
- Flow rates up to 10 gallons per minute

The patented ultraviolet design and use of the finest water filtration materials provides water quality that previously was only available in store-bought water, or single-faucet drinking water systems.

Computer metered BetterLife systems eliminate the worry of bacteriological contamination as they provide a safety net for your home's water supply. **Now the water that you drink, cook with, shower in, brush your teeth with, and wash your clothes in, is both UV purified against microorganisms, and fully conditioned for clarity, taste, and hardness.** BetterLife removes hardness (calcium and magnesium) for energy and detergent cost savings. In addition to having peace of mind regarding water borne bacteria, viruses, and other microorganisms, you will also have cleaner, better looking glassware, clothes, and your hair and skin will look and feel their best.

Eliminate scaling and minor rust staining with the advanced resin formula. Scale and iron can ruin pipes, water heaters, bathroom, and sink fixtures. No more embarrassment or complaining about your water when friends and relatives visit.

Save money on bottled water, cleaning supplies, plumbing system maintenance, and groceries! Invest in a Safe Water Technologies' BetterLife Drinking Water System for yourself, your family, and your entire home.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 0101
EFFECTIVE
NOVEMBER 2006





How the systems work:

BetterLife System 1

Stage 1: The water enters into a compacted bed of steam activated carbon. This removes or reduces sediment, unpleasant taste, odors, chlorine, pesticides, THM's, PCB's, and other common chemicals that have been found in water supplies and have been defined as carcinogenic by the EPA.

Stage 2: The water enters a #304 stainless steel disinfecting chamber which bombards bacteria, viruses, and other harmful microorganisms with high levels of germicidal ultraviolet light and renders them harmless. This process of purification works without chemicals and leaves no residual in the water. Ultraviolet irradiation is accepted by both the EPA and FDA as a safe, effective method of sterilization.

BetterLife System 2

Stage 1: The water enters into a computerized, demand regeneration water treatment system that removes hardness, lead, iron, radium, and filters sediment.

Stage 2: The water enters an upgraded electropolished, #316L stainless steel disinfecting chamber which bombards bacteria, viruses, and harmful microorganisms with high levels of germicidal ultraviolet light and renders them harmless.

BetterLife Ultima System 3

Stage 1: Combines both the carbon filtration of **BetterLife System 1** and the water conditioning ability of **BetterLife System 2**.

Stage 2: The water enters an electropolished, #316L stainless steel disinfecting chamber which bombards bacteria, viruses, and harmful microorganisms.

Stage 3: In addition, this system adds an advanced polymer, one-micron partical trap, capable of removing 99.98% of Cryptosporidium and Giardia Cysts from the water stream.

All Systems come with Chloristick™ Pipe Santizing System.

SPECIFICATIONS	BetterLife System 1	BetterLife System 2	BetterLife Ultima
UV Dosage @ 5 gpm (µw sec/cm²)*	60,000 †	60,000 †	60,000 †
UV Dosage @ 10 gpm (µw sec/cm²)*	30,000 †	30,000 †	30,000 †
Hardness Capacity per Regeneration as $CaCO_3$ (ppm)	N/A	564,000	564,000
Total Chlorine Removal Capacity (gallons @ 1 ppm)**	1,000,000	N/A	750,000
Lead Reduction	No	Yes	Yes
Maximum Service Flow Rate	10 gpm	10 gpm	10 gpm
Average Sediment Filtration	20 micron	N/A	1 micron
Regenerant Storage Capacity	N/A	250 lbs.	250 lbs.

* Most common water borne bacteria are rendered harmless with a UV dosage greater than 10,000 mw sec/cm².
** Most municipal water supplies contain 0.5 to 1.5 ppm of free chlorine.
† End of 1 year operation.

WARNING AND DISCLAIMER: Ultraviolet treatment, chlorination, or any other form of contaminated water sanitation, is never 100% guaranteed for bacteriological free water, but are EPA approved methods of water sanitation which add greatly to the protection against waterborne pathogens. Proper ultraviolet sterilization is an instantaneous process which destroys 99.97% of pathogens and leaves no UV residual in the water. Periodic monitoring of the water supply and of the downstream piping system sanitation is recommended to help guard against downstream contamination or accidental contaminated water bypass. Ultraviolet sterilization and/or chlorine is ***not recommended and should not be used*** for cyst treatment.

ULTRAVIOLET SYSTEMS

BETTERLIFE™ SYSTEM 1
CARBON WITH UV STERILIZATION



Safe Water Technologies' patented BetterLife system is the flagship of the SWT product line. There is no other water treatment system available for the whole house that compares. A computerized controller meters the water flow for optimal cost savings. The chemical/taste reduction portion of the system utilizes ProActive™ GAC carbon as the primary layer. These carbon units are designed to remove chlorine, taste, odor, and many chemical contaminants from the water stream. The ultraviolet design adds bacteriological safeguards to your water supply.

BetterLife System 1 Includes:

- ProActive GAC carbon system
- 10 gpm stainless steel ultraviolet chamber
- 30,000 µw sec/cm² UV dosage (after 1 year of operation)
- Computer controlled and metered valve
- Manual bypass valve
- Chlorastick™ pipe sanitizing kit with chlorine test strips
- Corrosion-free system

BetterLife System 1 with UV Sterilization

Part Number	Tank Size Inches	Service Flow Rate			Backwash 40% Exp. @ 50°F	Standard Connection Size *
		Chlorine, Taste & Odor	VOC Reduction	Peak		
BL1L-100	10 x 47	5 gpm	2 gpm	10 gpm	4.1 gpm	3/4" Copper Swet
BL1L-175	12 x 48	10 gpm	4 gpm	10 gpm	4.8 gpm	3/4" Copper Swet

International voltages available at additional cost. (Includes electronic ballast upgrade.)

* 1 inch connections and threaded adapters are available. (See Residential Control Valve Adapter Kit price list for availability.)

Options and Upgrades

Part Number	Description
BLS-P	1 Micron Absolute Postfilter Assembly For Cryptosporidium and Giardia Cyst Removal
BLS-R	10 Micron Prefilter with 20 inch Clear Bypass Housing ***(Highly Recommended For Rural Applications)***
BLS-E	Instant Start Electronic Ballast, 110 Volt/50-60 Hz
BLS-A	Controller Board with Lamp Status LED, Audible Alarm, and Solenoid Valve Hookup
BLS-S	Solenoid Valve Assembly — Requires Electronic Ballast and Controller Board Upgrades

Other media substitutions are available. Call for additional information.

WARNING AND DISCLAIMER: Ultraviolet treatment, chlorinating, or any other form of sanitation of contaminated water, are never 100% guaranteed for bacteriological-free water, but are EPA approved methods of water sanitation which add greatly to protection against waterborne pathogens. Proper ultraviolet sterilization is an instantaneous process which destroys 99.97% of pathogens and leaves no UV residual in the water. Periodic monitoring of the water supply and of the downstream piping system sanitation is recommended to help guard against downstream contamination or accidentally contaminated water bypass. Ultraviolet sterilization and/or chlorine, is ***not recommended and should not be used*** for cyst treatment.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

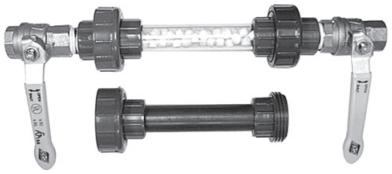
FORM 1172
EFFECTIVE
FEBRUARY 2011

Ultraviolet Systems

BETTERLIFE™ SYSTEM 1
CARBON WITH UV STERILIZATION

Replacement Parts

Part Number	Description
IL10001	Ultraviolet Lamp
CF73210	10 Micron Pleated Sediment Cartridge (2.5 x 20 inch Prefilter)
AH-PPBB201	1 Micron Absolute Pleated Cartridge for Cryptosporidium and Giardia Cysts (4.5 x 20 inch Postfilter)
APS-CSRA	Replacement Chlorastick™ Pipe Sanitizing Module
IT50003	ProActive™ Carbon (20 x 50 Mesh)
IL30001	Quartz Sleeve
UL-118RS	Red Silicone O-Ring for Quartz Sleeve
EC-LL68	Safety Spring



Chlorastick™ Pipe Sanitizing Kit (Included)

Contains:

- Lever Action, Brass Ball Valves
- Quick Release, Union Fittings with O-Ring Seals
- Disposable Chlorine Chamber
- Sch 80 PVC Replacement Pipe



Prefilter Assembly (Optional)

Contains:

- 20 inch Clear Housing with Built-in Bypass and 3/4 inch NPT
- 2.5 x 20 inch Pleated Cartridge with 10 Micron Filtration
- Spanner Wrench
- Wall Mount Bracket



Postfilter Assembly (Optional)

Contains:

- 20 inch Big Blue Sump with Pressure Relief and 3/4 inch NPT
- 4.5 x 20 inch Pleated Cartridge with 1 Micron Filtration for Giardia Cysts
- Spanner Wrench
- Wall Mount Bracket

Additional Specifications — BetterLife System 1

Shipping Dimensions (Inches):

BL1L-100: 17 x 13 x 58 @ 80 lb **BL1L-175:** 17 x 13 x 59 @ 115 lb

Operating Pressure: 20 to 125 psi

Operating Temperature: 36 to 120°F (2 to 48.9°C)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1172
EFFECTIVE
FEBRUARY 2011

ULTRAVIOLET SYSTEMS

BETTERLIFE™ SYSTEM 2

SOFTENING RESIN WITH UV STERILIZATION



Safe Water Technologies' patented BetterLife system is the flagship of the SWT product line. There is no other water treatment system available for the whole house that compares. A computerized controller meters the water flow for optimal cost savings. The ion exchange portion of the system utilizes ProSoft™ Resin as the primary layer. These cation exchange units are designed to remove calcium and magnesium (hardness) and a host of other cations from the water stream. The ultraviolet design adds bacteriological safeguards to your water supply.

BetterLife System 2 Includes:

- ProSoft Premium cation exchange resin
- 10 gpm stainless steel ultraviolet chamber
- 30,000 µw sec/cm² UV dosage
- Computer controlled and metered valve
- Chlorastick™ pipe sanitizing kit
- Corrosion-free system

BetterLife System 2 with UV Sterilization

Part Number	Tank Size Inches	Softening Capacity		Service Flow Rate		Backwash 50% Exp. @ 50°F	Standard Connection Size *
		10 lb Salt/Cu.Ft.	15 lb Salt/Cu.Ft.	Standard	Peak		
BL2L-100	10 x 47	29,000 gr.	33,000 gr.	5 gpm	10 gpm	2.0 gpm	3/4" Copper Swet
BL2L-175	12 x 48	51,000 gr.	57,000 gr.	8 gpm	10 gpm	3.7 gpm	3/4" Copper Swet

High Sediment & Rural Applications (Sysytem Includes Option BLS-R)

BL2L-100R	10 x 47	29,000 gr.	33,000 gr.	5 gpm	10 gpm	2.0 gpm	3/4" Copper Swet
BL2L-175R	12 x 48	51,000 gr.	57,000 gr.	8 gpm	10 gpm	3.7 gpm	3/4" Copper Swet

International voltages available at additional cost.

* 1 inch connections and threaded adapters available on request.

Options and Upgrades

Part Number	Description
BLS-R	10 Micron Pleated Prefilter with 20 inch Clear Bypass Housing ***(Highly Recommended For Rural Applications)***
BLS-C	Whole House Carbon Cartridge Assembly Includes 20 inch Big Blue Housing, Big Blue GAC Cartridge, and Bracket
BLS-P	1 Micron Absolute Postfilter Assembly for Cryptosporidium and Giardia Cyst Removal
BLS-E	Instant Start Electronic Ballast (Autodetects 50/60 Hz)
BLS-A	Controller Board with Lamp Status LED, Audible Alarm, and Solenoid Valve Hookup
BLS-S	Solenoid Valve Assembly — Requires Upgraded Electronic Ballast

Resin substitutions are available: Nitrate, Tannin, etc.

WARNING AND DISCLAIMER: Ultraviolet treatment, chlorinating, or any other form of sanitation of contaminated water, are never 100% guaranteed for bacteriological-free water, but are EPA approved methods of water sanitation which add greatly to protection against waterborne pathogens. Proper ultraviolet sterilization is an instantaneous process which destroys 99.97% of pathogens and leaves no UV residual in the water. Periodic monitoring of the water supply and of the downstream piping system sanitation is recommended to help guard against downstream contamination or accidentally contaminated water bypass. Ultraviolet sterilization and/or chlorine, is ***not recommended and should not be used*** for cyst treatment.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1174
EFFECTIVE
FEBRUARY 2011

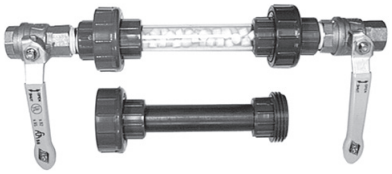
Ultraviolet Systems

BETTERLIFE™ SYSTEM 2

SOFTENING RESIN WITH UV STERILIZATION

Replacement Parts

Part Number	Description
IL10001	Ultraviolet Lamp
CF73210	10 Micron Pleated Sediment Cartridge (2.5 x 20 inch Prefilter)
AH-PPBB201	1 Micron Absolute Pleated Cartridge for Cryptosporidium and Giardia Cysts (4.5 x 20 inch Postfilter)
APS-CSRA	Replacement Chlorastick™ Pipe Sanitizing Module
IL30001	Quartz Sleeve
UL-118RS	Red Silicone O-Ring for Quartz Sleeve
EC-LL68	Safety Spring
MA-15515343	Granular Activated Carbon Cartridge for Big Blue Housing (4.5 x 20 inch)



Chlorastick Pipe Sanitizing Kit (Included)

Contains:

- Lever Action, Brass Ball Valves
- Quick Release, Union Fittings with O-Ring Seals
- Disposable Chlorine Chamber
- Sch 80 PVC Replacement Pipe



Prefilter Assembly (Optional)

Contains:

- 20 inch Clear Housing with Built-in Bypass and 3/4 inch NPT
- 2.5 x 20 inch Pleated Cartridge with 10 Micron Filtration
- Spanner Wrench
- Wall Mount Bracket



Postfilter Assembly (Optional)

Contains:

- 20 inch Big Blue Sump with Pressure Relief and 3/4 inch NPT
- 4.5 x 20 inch Pleated Cartridge with 1 Micron Filtration for Giardia Cysts
- Spanner Wrench
- Wall Mount Bracket

Additional Specifications — BetterLife System 2

Shipping Dimensions (Inches):

BL2L-100: 17 x 13 x 58 @ 95 lb / Brine Tank: 18 x 16 x 37 @ 30 lb
BL2L-175: 17 x 13 x 59 @ 145 lb / Brine Tank: 18 x 16 x 37 @ 30 lb

Operating Pressure: 20 to 125 psi

Operating Temperature: 36 to 120°F (2 to 48.9°C)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1174
EFFECTIVE
FEBRUARY 2011

ULTRAVIOLET SYSTEMS

BETTERLIFE ULTIMA™ SYSTEM 3

SOFTENING RESIN AND CARBON WITH UV STERILIZATION



Safe Water Technologies' patented BetterLife Ultima system is the flagship of the SWT product line. There is no other water treatment system available for the whole house that compares. A computerized controller meters the water flow for optimal cost savings. A precise blend of ProSoft™ cation resin and ProActive™ granular activated carbon is designed to remove calcium and magnesium (hardness), chlorine, taste, odor, and many other cations and chemical contaminants from the water stream. The ultraviolet design adds bacteriological safeguards to your water supply. The final stage has an advanced polymer, one micron sediment trap, capable of removing 99.98% of Cryptosporidium and Giardia Cysts from the water stream.

BetterLife Ultima System 3 Includes:

- ProSoft Premium cation exchange resin
- ProActive GAC carbon system
- 10 gpm stainless steel ultraviolet chamber
- 30,000 µw sec/cm² UV dosage
- 20 inch Big Blue® housing with 1 micron giardia filter
- Computer controlled and metered valve
- Chlorastick™ pipe sanitizing kit
- Corrosion-free system

BetterLife Ultima System 3 with UV Sterilization

Part Number	Tank Size Inches	Softening Capacity		Service Flow Rate			Backwash 50% Exp. @ 50°F	Standard Connection Size *
		10 lb Salt/Regen.	15 lb Salt/Regen.	Chlorine, Taste & Odor	VOC Reduction	Peak		
BL3L-175	12 x 48	29,000 gr.	33,000 gr.	5 gpm	2 gpm	10 gpm	2.5 gpm	3/4" Copper Swet

High Sediment & Rural Applications (Sysytem Includes Option BLS-R)

BL3L-175R	12 x 48	29,000 gr.	33,000 gr.	5 gpm	2 gpm	10 gpm	2.5 gpm	3/4" Copper Swet

International voltages available at additional cost.
* 1 inch connections and threaded adapters available on request.

Options

Part Number	Description
BLS-R	10 Micron Pleated Prefilter with 20 inch Clear Bypass Housing ***(Highly Recommended For Rural Applications)***
BLS-E	Instant Start Electronic Ballast (Autodetects 50/60 Hz)
BLS-A	Controller Board with Lamp Status LED, Audible Alarm, and Solenoid Valve Hookup
BLS-S	Solenoid Valve Assembly — Requires Upgraded Electronic Ballast

Other media and resin combinations are available. Call for details.

WARNING AND DISCLAIMER: Ultraviolet treatment, chlorinating, or any other form of sanitation of contaminated water, are never 100% guaranteed for bacteriological-free water, but are EPA approved methods of water sanitation which add greatly to protection against waterborne pathogens. Proper ultraviolet sterilization is an instantaneous process which destroys 99.97% of pathogens and leaves no UV residual in the water. Periodic monitoring of the water supply and of the downstream piping system sanitation is recommended to help guard against downstream contamination or accidentally contaminated water bypass. Ultraviolet sterilization and/or chlorine, is ***not recommended and should not be used*** for cyst treatment.

Big Blue® is a registered trademark of Ametek, Inc.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1175
EFFECTIVE
FEBRUARY 2011

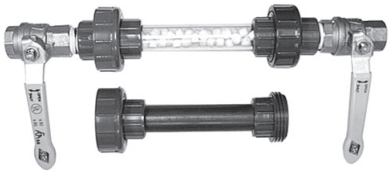
ULTRAVIOLET SYSTEMS

BETTERLIFE ULTIMA™ SYSTEM 3

SOFTENING RESIN AND CARBON WITH UV STERILIZATION

Replacement Parts

Part Number	Description
IL10001	Ultraviolet Lamp
CF73210	10 Micron Pleated Sediment Cartridge (2.5 x 20 inch Prefilter)
AH-PPBB201	1 Micron Absolute Pleated Cartridge for Cryptosporidium and Giardia Cysts (4.5 x 20 inch Postfilter)
APS-CSRA	Replacement Chlorastick™ Pipe Sanitizing Module
IT50003	ProActive™ Carbon (20 x 50 Mesh)
IL30001	Quartz Sleeve
UL-118RS	Red Silicone O-Ring for Quartz Sleeve
EC-LL68	Safety Spring
MA-15515343	Granular Activated Carbon Cartridge for Big Blue Housing (4.5 x 20 inch)



Chlorastick Pipe Sanitizing Kit (Included)

Contains:

- Lever Action, Brass Ball Valves
- Quick Release, Union Fittings with O-Ring Seals
- Disposable Chlorine Chamber
- Sch 80 PVC Replacement Pipe



Prefilter Assembly (Optional)

Contains:

- 20 inch Clear Housing with Built-in Bypass and 3/4 inch NPT
- 2.5 x 20 inch Pleated Cartridge with 10 Micron Filtration
- Spanner Wrench
- Wall Mount Bracket



Postfilter Assembly (Optional)

Contains:

- 20 inch Big Blue Sump with Pressure Relief and 3/4 inch NPT
- 4.5 x 20 inch Pleated Cartridge with 1 Micron Filtration for Giardia Cysts
- Spanner Wrench
- Wall Mount Bracket

Additional Specifications — BetterLife Ultima System 3

Shipping Dimensions (Inches):

BL3L-175: 17 x 13 x 58 @ 130 lb / Brine Tank: 18 x 16 x 37 @ 35 lb

Operating Pressure: 20 to 125 psi

Operating Temperature: 36 to 120°F (2 to 48.9°C)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1175
EFFECTIVE
FEBRUARY 2011

PIPE SANITIZING SYSTEM

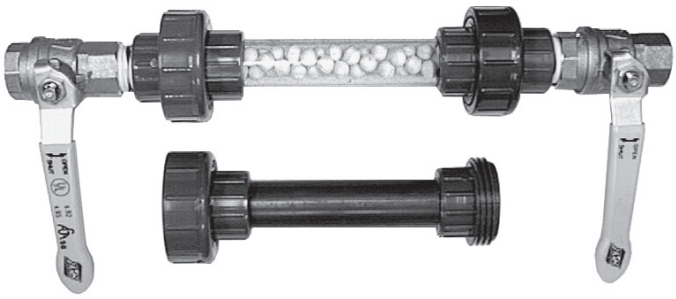
CHLORASTICK™ PIPE SANITIZING SYSTEM

Safe Water Technologies has just made pipe sanitation easy with the new Chlorastick Pipe Sanitizing System! The quick-release pipe sanitizer is installed directly inline with the pipes for easy installation and reuse.

To get rid of downstream contamination, most UV manufacturers recommend that water treatment professionals sanitize the pipes prior to installing a UV system. Now, Safe Water Technologies provides the solution to complete this job simply, safely, and effectively, with no mess, no liquid chemicals, and no chemical handling.

The Chlorastick easily connects inline. The disposable, clear, chlorine pellet chamber attaches quickly with union connectors. The clear chamber provides visual access to monitor the release of the chlorine tablets. When the tablets have dissolved, the disposable, clear chamber is simply removed and replaced with the included Schedule 80 PVC pipe.

The Chlorastick system makes repeat sanitation easy too. Most UV systems require annual servicing for bulb replacement. Whenever it's time to change a UV lamp or service a unit, the pipes can again be quickly, efficiently, and *profitably* resanitized just by dropping in a replacement chlorine module.



Here is what the system includes:

- Lever action, brass ball valves
- Quick release, union fittings with o-ring seals
- Disposable, clear chlorine pellet chamber
- Sch 80 PVC replacement pipe

Every time you maintain or install any piece of equipment (such as a new water softener, carbon filter, ultraviolet system, or iron filter), you can now earn your dealership extra income and stay ahead of the competition by offering a value-added service with the Chlorastick. Maybe it's even time to set up an annual service route...

Chlorastick Pipe Sanitizing System

Part Number	Description	Connection Size
APS-CSA	3/4 inch Chlorastick Pipe Sanitizing System (Includes One Chlorine Module)	3/4" FNPT
APS-CSRA	3/4 inch Chlorastick Replacement Chlorine Module	3/4" Union
APS-CSA-1	1 inch Chlorastick Pipe Sanitizing System (Includes One Chlorine Module)	1" FNPT
APS-CSRA-1	1 inch Chlorastick Replacement Chlorine Module	1" Union

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1176
EFFECTIVE
JUNE 2007

ULTRAVIOLET SYSTEMS

UVQ SERIES ULTRAVIOLET SYSTEMS
RESIDENTIAL / COMMERCIAL / INDUSTRIAL



SWT's UVQ Series Ultraviolet Systems provide a compact, fully customizable design for use with low flow rate applications. These units can be configured to treat 1, 2, 3, or 4 separate water streams at the same time.

Water passes through as many as four quartz disinfection chambers located in close proximity to a single ultraviolet lamp. This insures maximum ultraviolet output. The system is fan cooled to mitigate water heating.

The ultraviolet disinfection chamber quartz sleeves are inserted through CPVC threaded nipples and held in place with removable gland nuts and o-rings. Chambers can be added at any time from either end. The inlet/outlet connections are 3/4 inch FNPT and allow for water flow in either direction.

The UVQ Series enclosure is powder-coated, galvanized steel with a removable top panel. The top panel has a UV lamp view port and a safety switch to turn the lamp off when the top panel is removed. The electronics are situated on a removable tray located inside the enclosure, designed for quick removal/replacement for repair by field personnel.

Units can be installed vertically or horizontally. Made in the USA.

APPLICATIONS: Reverse Osmosis, Water Vending, Laboratories, Medical

FEATURES

- Quartz treatment chambers reduce water heating
- Multi-pass flexibility, field expandability
- Standard or high output models available
- Unique cooling design
- Removable electronics tray for quick access
- Horizontal or vertical mounting
- Quartz sleeve can be removed from either end
- White powder-coated, galvanized steel enclosure

UVQ SERIES FLOW RATES*

Dosage (Per Pass)	Standard Lamp	High Output Lamp
16K µw sec/cm²	4 gpm	5 gpm
30K µw sec/cm²	2 gpm	2.5 gpm
40K µw sec/cm²	1.5 gpm	2 gpm

* Based on 99% UVT

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1333
EFFECTIVE
APRIL 2017

UVQ SERIES ULTRAVIOLET SYSTEMS
RESIDENTIAL / COMMERCIAL / INDUSTRIAL

UVQ Series Ultraviolet Systems — Standard Output

Part Number	Inlet/Outlet Size	Number of Quartz Sleeves	Flow Rate for UV Dosage at End of Lamp Life *		
			16 mJ/cm²	30 mJ/cm²	40 mJ/cm²
UVQ-1S-5	1/2 inch FNPT	1	4 gpm	2 gpm	1.5 gpm
UVQ-1S-7	3/4 inch FNPT				
UVQ-2S-5	1/2 inch FNPT	2	8 gpm	4 gpm	3 gpm
UVQ-2S-7	3/4 inch FNPT				
UVQ-3S-5	1/2 inch FNPT	3	12 gpm	6 gpm	4.5 gpm
UVQ-3S-7	3/4 inch FNPT				
UVQ-4S-5	1/2 inch FNPT	4	16 gpm	8 gpm	6 gpm
UVQ-4S-7	3/4 inch FNPT				

* Based on 99% UVT

UVQ Series Ultraviolet Systems — High Output

Part Number	Inlet/Outlet Size	Number of Quartz Sleeves	Flow Rate for UV Dosage at End of Lamp Life *		
			16 mJ/cm²	30 mJ/cm²	40 mJ/cm²
UVQ-1H-5	1/2 inch FNPT	1	5 gpm	2.5 gpm	2 gpm
UVQ-1H-7	3/4 inch FNPT				
UVQ-2H-5	1/2 inch FNPT	2	10 gpm	5 gpm	4 gpm
UVQ-2H-7	3/4 inch FNPT				
UVQ-3H-5	1/2 inch FNPT	3	15 gpm	7.5 gpm	6 gpm
UVQ-3H-7	3/4 inch FNPT				
UVQ-4H-5	1/2 inch FNPT	4	20 gpm	10 gpm	8 gpm
UVQ-4H-7	3/4 inch FNPT				

* Based on 99% UVT

REQUIREMENTS

Location
The unit is designed to be installed vertically or horizontally with a clearance at one end at least equal to the overall length of the chamber plus 4 inches for removal of the quartz sleeve.

UVQ Overall Dimensions (Inches) 32" L x 5.8" W x 5" H

Operating Pressure
Operating pressure should not exceed 125 psi. A water hammer may cause o-ring failure. If the UV system is subject to water hammer conditions, installation of a water surge suppressor is recommended.

Temperature
Inlet water temperature should not exceed 100°F.
Ambient temperatures in the area surrounding the UV unit should be between 25 and 90°F.

Water Characteristics
Be sure transmission of water meets acceptable standards.

Turbidity 5 NTU maximum
Suspended Solids 10 mg/L maximum
Color None
Hardness 7 grains maximum
Iron 0.3 ppm maximum
Manganese 0.05 mg/L maximum
pH 6.5 to 9.5 maximum

Flow Rate
Flow rate must not exceed rated capacity. Use of SWT Flow Controls is recommended (see Form 1318 – Flow Controls).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1333
EFFECTIVE
APRIL 2017

ULTRAVIOLET SYSTEMS

UVR SERIES ULTRAVIOLET SYSTEMS
RESIDENTIAL / LIGHT COMMERCIAL

EASY TO INSTALL AND MAINTAIN ULTRAVIOLET STERILIZATION AT ITS BEST

SWT's UVR Series is built to provide years of reliable and effective ultraviolet water treatment to the whole house or office. The UVR Series includes five standard models capable of treating flows from 2 to 16 gpm. Simple in design, the UVR Series does the job without a lot of costly frills and expensive replacement parts, making it the smart choice.



Standard Features

- Simple straight forward design
- Effective microbiological protection
- 304 stainless steel disinfection chamber
- High efficiency electronic ballast
- LED lamp status indicator
- Audible alarm upon lamp failure
- Horizontal or vertical mounting

Available Configurations

Standard Models—includes stainless steel chamber with (2) mounting clips, quartz sleeve, lamp, ballast with mounting clip, sight glass, (2) compression nuts, (2) o-rings

Timer (-T) Models—includes standard model plus countdown timer and timer holder

Monitor (-M) Models—includes timer model plus UV monitor and sensor assembly

UV-C energy inactivates pathogens without adding anything to water—no aftertaste, no chemicals, and no harmful by-products, helping protect not only your health, but also the environment.



Countdown Timer and Timer Holder



UV Monitor and Sensor Assembly

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1285
EFFECTIVE
APRIL 2018

ULTRAVIOLET SYSTEMS

UVR SERIES ULTRAVIOLET SYSTEMS
RESIDENTIAL / LIGHT COMMERCIAL

UVR Series Ultraviolet Systems

Part Number	Inlet/Outlet Size	Flow Rate for UV Dosage at End of Lamp Life			Dimensions Inches (L x W x H)	Operating Voltage
		40 mJ/cm²	30 mJ/cm²	16 mJ/cm²		
UVR04	1/2 inch MNPT	2 gpm	2.5 gpm	4 gpm	16.40 x 2.5 x 4.25	120V 60Hz
UVR04-T						
UVR04-2	1/2 inch MNPT	2 gpm	2.5 gpm	4 gpm	16.40 x 2.5 x 4.25	230V 50/60Hz
UVR04-T-2						
UVR07	3/4 inch MNPT	3.5 gpm	5 gpm	7 gpm	23.25 x 2.5 x 4.25	120V 60Hz
UVR07-T						
UVR07U	3/4 inch MNPT	3.5 gpm	5 gpm	7 gpm	23.25 x 2.5 x 4.25	100-240V 50/60Hz
UVR07U-T						
UVR10	3/4 inch MNPT	5 gpm	8 gpm	12 gpm	29.00 x 2.5 x 4.25	100-240V 50/60Hz
UVR10-T						
UVR10-M						
UVR15	1 inch MNPT	8 gpm	11 gpm	16 gpm	38.05 x 2.5 x 4.30	100-240V 50/60Hz
UVR15-T						
UVR15-M						

UVR Replacement Parts

Description	UVR04	UVR07	UVR07U	UVR10	UVR15
Lamp	DI-LMPUVR04	DI-LMPUVR07		DI-LMP42053	DI-LMPUVR15
Quartz Sleeve	IL-UVR04Q	IL-UVR07Q		IL-UVR10Q	IL-UVR15Q
Ballast	UVR-BALS		UVR-BALM		
Compression Nut	UVR-CN				
O-Ring EPDM	DI-ORNG0009				
Sight Glass	UVR-SG				
Mounting Bracket	UVR-MB				

UVR Optional Add-ons

Part Number	Description	Body Material	For use with
UVR-SV07N	Solenoid Valve* — 3/4 inch, normally closed valve, 120V	Noryl	UVR10-M
UVR-SV07B	Solenoid Valve* — 3/4 inch, normally closed valve, 120V	Brass	UVR10-M
UVR-SV10N	Solenoid Valve* — 1 inch, normally closed valve, 120V	Noryl	UVR15-M
UVR-SV10B	Solenoid Valve* — 1 inch, normally closed valve, 120V	Brass	UVR15-M

* The Solenoid Valve plugs into the UV Monitor. If UV intensity drops too low, or electricity goes out, or the lamp burns out, etc., the solenoid closes and the water is shut off.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

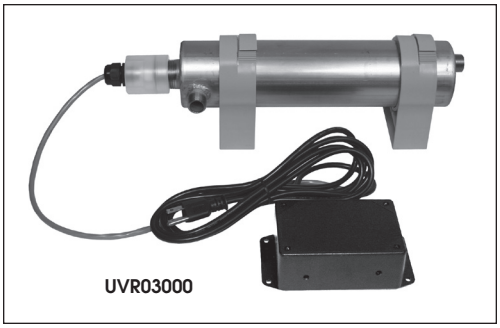
FORM 1285
EFFECTIVE
APRIL 2018

ULTRAVIOLET SYSTEMS

UVR BASIC SERIES ULTRAVIOLET SYSTEMS
RESIDENTIAL / LIGHT COMMERCIAL



Left to right: UVR20000, UVR10000, UVR06000



UVR03000

BASIC ULTRAVIOLET STERILIZATION AT ITS BEST

SWT's UVR Basic Series Systems are designed for point-of-use and point-of-entry applications requiring the sterilization of bacteria, viruses, and other microorganisms commonly found in some water supplies.

UVR Basic Systems provide an extra level of protection in homes and businesses. Use as post-treatment for carbon filters, water softeners, iron filters and more. UV purification does not alter the taste or leave any residual in the water.

Specifications

Output	30K µw sec/cm²
Wavelength	254 nanometers
Lamp Life	9000 hours
Temperature	35 to 100°F
Max Operating Pressure	125 PSI
Power Source	120V/60Hz
Water Source	Clear and filtered to 5 microns
Installation Location	Final stage as close to point-of-use as possible

Standard Features

- Heavy Duty 304 stainless steel disinfection chamber construction with plasma welding
- Quartz sleeve for maximum UV exposure
- Easy lamp replacement without having to shut off the water supply
- UV-Glow™ gland nut design provides easy removal of quartz sleeve for cleaning and illuminates when UV lamp is on
- Low power consumption
- Remote mounted, state-of-the-art electronic ballast
- Wall-mounting bracket included
- Available in all international voltages

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1285B
EFFECTIVE
OCTOBER 2016

ULTRAVIOLET SYSTEMS

UVR BASIC SERIES ULTRAVIOLET SYSTEMS
RESIDENTIAL / LIGHT COMMERCIAL

UVR Basic Series Ultraviolet Systems

Part Number	Inlet / Outlet NPT Size Inches	Flow Rate Clear, Fresh Water	Voltage	Lamp Watts	Power Supply Amps	Chamber Dimensions Inches (L x W x H)	Shipping Weight Lbs.
UVR03000	0.50	3 gpm	120V/50-60Hz	14	0.500	3 x 4 x 15	11
UVR03000-2	0.50	3 gpm	230V/50-60Hz	14	0.500	3 x 4 x 15	11
UVR06000	0.75	6 gpm	120V/50-60Hz	17	0.500	6 x 8 x 16	14
UVR06000-2	0.75	6 gpm	230V/50-60Hz	17	0.500	6 x 8 x 16	14
UVR10000	0.75	10 gpm	120V/50-60Hz	24	0.500	6 x 8 x 22	15
UVR10000-2	0.75	10 gpm	230V/50-60Hz	24	0.500	6 x 8 x 22	15
UVR20000/1	1.00	20 gpm	120V/50-60Hz	38	0.500	6 x 8 x 37	21
UVR20000/1-2	1.00	20 gpm	230V/50-60Hz	38	0.500	6 x 8 x 37	21

UVR Basic Series Replacement Parts

Part Number	Description
DI-LMP42002	Ultraviolet Lamp for UVR03000 & UVR03000-2 Systems
DI-LMP41004	Ultraviolet Lamp for UVR06000 & UVR06000-2 Systems
DI-LMP42005	Ultraviolet Lamp for UVR10000 & UVR10000-2 Systems
IL10001	Ultraviolet Lamp for UVR20000, UVR20000-2, UVR20000/1, & UVR20000/1-2 Systems
DI-QTZD004	Quartz Sleeve for UVR03000 & UVR03000-2 Systems
DI-QTZD005	Quartz Sleeve for UVR06000 & UVR06000-2 Systems
DI-QTZD007	Quartz Sleeve for UVR10000 & UVR10000-2 Systems
DI-QTZD009	Quartz Sleeve for UVR20000, UVR20000-2, UVR20000/1, & UVR20000/1-2 Systems
SWT10018EF	Ballast for UVR03000 & UVR06000 — 120V/50-60Hz
SWT10018EF-2	Ballast for UVR03000-2 & UVR06000-2 — 230V/50-60Hz
SWT10019	Ballast for UVR10000 — 120V/50-60Hz
SWT10019-2	Ballast for UVR10000-2 — 230V/50-60Hz
SWT10020	Ballast for UVR20000 & UVR20000/1 — 120V/50-60Hz
SWT10020-2	Ballast for UVR20000-2 & UVR20000/1-2 — 230V/50-60Hz
UL-213E	O-Ring for Quartz Sleeve (All UVR Series Systems)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1285B
EFFECTIVE
OCTOBER 2016

ULTRAVIOLET SYSTEMS

UVCR SERIES COMMERCIAL SYSTEMS

SWT's Commercial Ultraviolet Water Disinfection Equipment offers greater flexibility for all of your UV applications. With smaller space requirements and remote electrical boxes, these units are easier to install than any of our competitors' units. Plus, the UVCR Series offers a wide range of options to satisfy your individual application needs — from the economically simple to the most demanding of installations.



Standard units feature 254 nm wavelength dosing.
Optional 185 nm wavelength systems are available.

Standard Features

- 304 electropolished stainless UV chamber
- Closed vessel design to minimize seals and chances for potential leaks
- Low pressure ultraviolet lamp with standard 4-pin connections
- Remote electrical enclosure
- Ultraviolet dosage of 30 mJ/cm² @ 254nm
- 9000 hour lamp life (approx. 1 year)
- All international votages available

Part Number	Inlet/Outlet NPT Size Inches	Flow Rate Clear, Fresh Water	Flow Rate DI, RO Water	Flow Rate Waste Water	Number of Lamps	Shipping Dimensions Inches (L x W x H)	Shipping Weight lb (kg)
UVCR-1S	1	15 gpm	18 gpm	10 gpm	1	39 x 9 x 9	26 (10)
UVCR-1SHO	1	20 gpm	24 gpm	12 gpm	1 (High Output)	39 x 9 x 9	26 (10)
UVCR-2S	1.5	30 gpm	35 gpm	20 gpm	2	39 x 9 x 9	28 (11)
UVCR-2SHO-1.5	1.5	50 gpm	60 gpm	30 gpm	2 (High Output)	43 x 16 x 16	36 (14)
UVCR-2SHO-2	2	50 gpm	60 gpm	30 gpm	2 (High Output)	43 x 16 x 16	45 (17)

Options

Part Number	Description
UVCR-NBUM	Ultraviolet Monitor with 0 to 100% Display
UVCR-NBUM-AA	Ultraviolet Monitor with 0 to 100% Display and Audible Alarm
UVCR-ERTM	Elapsed Running Time Meter
UVCR-MWS1	Manual Wiper System for 1 Lamp Unit
UVCR-MWS2	Manual Wiper System for 2 Lamp Unit
UVCR-RHD	Removable Head Design, One End

Optional manual or automatic wiping mechanisms are available. Contact your SWT representative for pricing and details.
Standard systems are designed for 120 V/60 Hz/1-Phase applications. Optional international voltages are available.

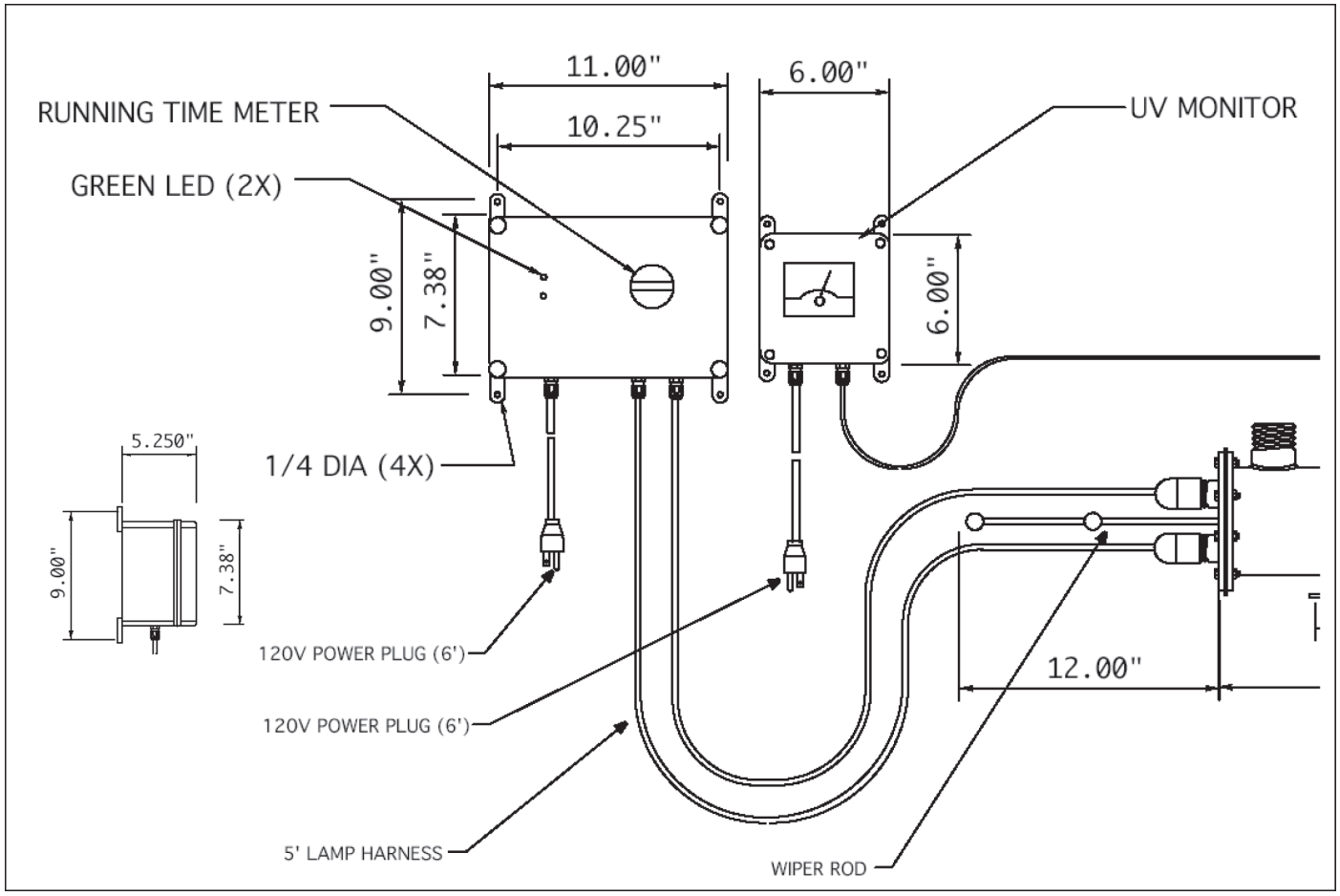
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1284
EFFECTIVE
FEBRUARY 2008

UVCR SERIES PARTS

Part Number	Description
IL-UVCR-LP	Lamp for UVCR-1S & 2S
IL-UVCR-LPHO	Lamp for UVCR-2SHO
IL-UVCR-QTZ	Quartz Sleeve for UVCR Series
UL-213E	O-Ring for UVCR Series (2 Required)



SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1284
EFFECTIVE
FEBRUARY 2008

ULTRAVIOLET SYSTEMS

UVME SERIES ULTRAVIOLET SYSTEMS
COMMERCIAL / INDUSTRIAL

SWT's UVME Series UV Systems *are built for simple, dependable, economy. These vertical mount UV systems with threaded in/out connections offer a small footprint and easy installation. Models are available with one to four lamps in either standard or high output to process up to 170 gpm for clear, fresh water. UVME systems provide effective disinfection for use in a variety of commercial and industrial applications.*





UV Monitor (Optional)

Made in USA

Standard Features

- 304 stainless steel treatment chamber
- 150 psi maximum operating pressure
- Powder coated power enclosure with view port
- Elapsed running time meter
- LED UV lamp status indicators
- 254nm standard or high output UV lamps with 10,000 hour lamp life
- Manual quartz sleeve wiper system
- Vertical mounting
- Electronic power supply
- 120V 60Hz

Options

- Ultraviolet monitor with 0–100% UV intensity display
- High heat shutoff
- 220V/240V

UVME Series Ultraviolet Systems

Part Number	Inlet/Outlet Connections	Number of Lamps	Lamp Type	Flow Rate * Clear, Fresh Water	Dimensions Inches (H x W x D)
UVME-1S	2 inch MNPT	1	Standard	19 gpm	47.43 x 9.38 x 11.24
UVME-1H			High Output	35 gpm	
UVME-2H	2 inch MNPT	2	High Output	60 gpm	47.43 x 9.38 x 11.24
UVME-3S	2 inch MNPT	3	Standard	80 gpm	47.43 x 9.38 x 11.24
UVME-3H	3 inch MNPT		High Output	135 gpm	
UVME-4S	2 inch MNPT	4	Standard	100 gpm	47.43 x 9.38 x 11.24
UVME-4H	3 inch MNPT		High Output	170 gpm	

* Flow rates are based on 95% UVT for clear fresh water and EOL dosage of 30 mJ/cm².

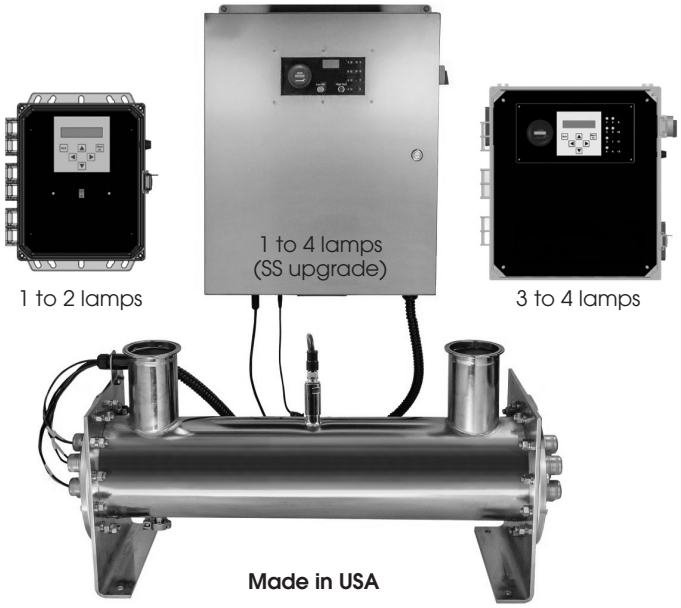
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1454
EFFECTIVE
APRIL 2017

ULTRAVIOLET SYSTEMS

UVL SERIES ULTRAVIOLET SYSTEMS
COMMERCIAL / INDUSTRIAL

SWT's UVL Series Ultraviolet Systems *provide proven and guaranteed performance in ultraviolet water treatment for a wide range of commercial and industrial applications. These systems are specifically intended for applications requiring low flows to high flows for disinfection, ozone destruction, and TOC reduction. Each system is engineered to provide optimized flow and retention time to reduce bacteria by up to 99.9%. With dosage levels of 30 mJ/cm² or higher at rated flow, these units assure effective UV treatment.*

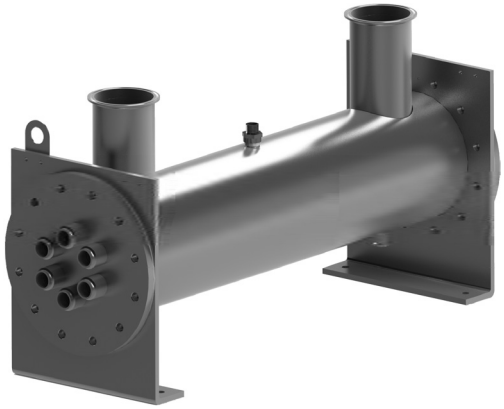


Features

- Disinfection, ozone destruction, or TOC reduction
- Processes up to 1600 gpm for clear fresh water and DI/RO water
- 316L stainless steel treatment chamber—electropolished and passivated interior/exterior
- 150 psi maximum operating pressure
- Remote power enclosure with viewing window—polycarbonate or 304 stainless steel
- Monitoring port, sample port, drain port
- Elapsed run time meter
- 2, 3, 4, 6, or 8 inch flange inlet/outlet connections (model dependent)
- Low pressure, high output or amalgam UV lamp with 10,000 hour lamp life—254nm or 185nm
- UV dosage of 30 mJ/cm² or higher at rated flow
- Horizontal or vertical mounting (model dependent)
- Custom systems and features are available to meet specific specifications and industry requirements.

Options

- Monitoring station with UV intensity, 4-20mA linear output, and high heat shutoff
- Monitor 0-100% UV intensity display, 4-20mA linear output
- High heat shutoff
- Sanitary inlet/outlet connections
- Manual quartz sleeve wiper system (model dependent)
- Lamp out alert
- Hands off auto (HOA) switch
- 220V/240V 50-60Hz



SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1456
EFFECTIVE
DECEMBER 2023

ULTRAVIOLET SYSTEMS

UVL SERIES ULTRAVIOLET SYSTEMS
COMMERCIAL / INDUSTRIAL

Part Number	Inlet/Outlet Connections	Number of Lamps	Total Lamp Watts	UV Dosage* mJ/cm²		Flow Rate		Chamber Diameter
				Clear, Fresh Water	RO/DI Water	Clear, Fresh Water	RO/DI Water	
UVL High Output Series Ultraviolet Systems (30 inch Short Systems)								
UVL1S-2F	2 inch Flange	1	80 W	30 @ 95% UVT	30 @ 99% UVT	35 gpm	40 gpm	6 inch
UVL1S-2S	2 inch Sanitary							
UVL2S-2F	2 inch Flange	2	160 W	30 @ 95% UVT	30 @ 99% UVT	70 gpm	84 gpm	6 inch
UVL2S-2S	2 inch Sanitary							
UVL3S-3F	3 inch Flange	3	240 W	30 @ 95% UVT	30 @ 99% UVT	115 gpm	135 gpm	6 inch
UVL3S-3S	3 inch Sanitary							
UVL4S-3F	3 inch Flange	4	320 W	30 @ 95% UVT	30 @ 99% UVT	150 gpm	180 gpm	6 inch
UVL4S-3S	3 inch Sanitary							
UVL High Output Series Ultraviolet Systems (60 inch Long Systems)								
UVL4L-4F	4 inch Flange	4	540 W	40 @ 95% UVT	40 @ 99% UVT	275 gpm	320 gpm	6 inch
UVL4L-4S	4 inch Sanitary							
UVL4L-6F	6 inch Flange	4	540 W	40 @ 95% UVT	40 @ 99% UVT	400 gpm	480 gpm	8 inch
UVL4L-6S	6 inch Sanitary							
UVL5L-4F	4 inch Flange	5	675 W	40 @ 95% UVT	40 @ 99% UVT	350 gpm	400 gpm	6 inch
UVL5L-4S	4 inch Sanitary							
UVL5L-6F	6 inch Flange	5	675 W	40 @ 95% UVT	40 @ 99% UVT	500 gpm	600 gpm	8 inch
UVL5L-6S	6 inch Sanitary							
UVL6L-6F	6 inch Flange	6	810 W	40 @ 95% UVT	40 @ 99% UVT	600 gpm	720 gpm	8 inch
UVL6L-6S	6 inch Sanitary							

* NOTE: 30 mJ/cm² = 30,000 µJ/cm² (30 millijoules per square centimeter = 30,000 microjoules per square centimeter)
40 mJ/cm² = 40,000 µJ/cm² (40 millijoules per square centimeter = 40,000 microjoules per square centimeter)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1456
EFFECTIVE
DECEMBER 2023

ULTRAVIOLET SYSTEMS

UVL SERIES ULTRAVIOLET SYSTEMS
COMMERCIAL / INDUSTRIAL

Part Number	Inlet/Outlet Connections	Number of Lamps	Total Lamp Watts	UV Dosage* mJ/cm²		Flow Rate		Chamber Diameter
				Clear, Fresh Water	RO/DI Water	Clear, Fresh Water	RO/DI Water	
UVL Amalgam Series Ultraviolet Systems (30 inch Short Systems)								
UVL1SA-2F	2 inch Flange	1	135 W	30 @ 95% UVT	30 @ 99% UVT	75 gpm	85 gpm	6 inch
UVL1SA-2S	2 inch Sanitary							
UVL2SA-2F	2 inch Flange	2	270 W	30 @ 95% UVT	30 @ 99% UVT	130 gpm	145 gpm	6 inch
UVL2SA-2S	2 inch Sanitary							
UVL3SA-3F	3 inch Flange	3	405 W	30 @ 95% UVT	30 @ 99% UVT	225 gpm	225 gpm	6 inch
UVL3SA-3S	3 inch Sanitary							
UVL3SA-4F	4 inch Flange	3	405 W	30 @ 95% UVT	30 @ 99% UVT	300 gpm	365 gpm	8 inch
UVL3SA-4S	4 inch Sanitary							
UVL4SA-3F	3 inch Flange	4	540 W	40/30 @ 95% UVT	40/30 @ 99% UVT	225 gpm	225 gpm	6 inch
UVL4SA-3S	3 inch Sanitary							
UVL4SA-6F	6 inch Flange	4	540 W	40/30 @ 95% UVT	40/30 @ 99% UVT	450 gpm	525 gpm	8 inch
UVL4SA-6S	6 inch Sanitary							
UVL5SA-6F	6 inch Flange	5	675 W	30 @ 95% UVT	30 @ 99% UVT	600 gpm	720 gpm	8 inch
UVL5SA-6S	6 inch Sanitary							
UVL Amalgam Series Ultraviolet Systems (60 inch Long Systems)								
UVL4LA-6F	6 inch Flange	4	1280 W	30 @ 95% UVT	40 @ 99% UVT	750 gpm	900 gpm	8 inch
UVL4LA-6S	6 inch Sanitary							
UVL4LA-8F	8 inch Flange	4	1280 W	30 @ 95% UVT	40 @ 99% UVT	1200 gpm	1400 gpm	10 inch
UVL4LA-8S	8 inch Sanitary							
UVL5LA-6F	6 inch Flange	5	1600 W	30 @ 95% UVT	30 @ 99% UVT	875 gpm	1025 gpm	8 inch
UVL5LA-6S	6 inch Sanitary							
UVL5LA-8F	8 inch Flange	5	1600 W	30 @ 95% UVT	40 @ 99% UVT	1600 gpm	1600 gpm	10 inch
UVL5LA-8S	8 inch Sanitary							
UVL6LA-6F	6 inch Flange	6	1920 W	30 @ 95% UVT	30 @ 99% UVT	1050 gpm	1050 gpm	8 inch
UVL6LA-6S	6 inch Sanitary							

* NOTE: 30 mJ/cm² = 30,000 µJ/cm² (30 millijoules per square centimeter = 30,000 microjoules per square centimeter)
40 mJ/cm² = 40,000 µJ/cm² (40 millijoules per square centimeter = 40,000 microjoules per square centimeter)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1456
EFFECTIVE
DECEMBER 2023

ULTRAVIOLET SYSTEMS

ULTRAVIOLET DOSAGE REQUIRED FOR 99.9% DESTRUCTION OF VARIOUS ORGANISMS

(µW-sec/cm² @ 254 nm)

µW/cm² = milliwatts per square centimeter

mJ/cm² = microjoules per square centimeter

Bacteria	µW/cm²	mJ/cm²
Agrobacterium lumefaciens	8,500	8.5
Bacillus anthracis (vegatative)	8,700	8.7
Bacillus anthracis Spores (spores)	46,200	46.2
Bacillus enteritidis	7,600	7.6
Bacillus Megatherium sp. (vegatative)	2,500	2.5
Bacillus Megatherium sp. (spores)	52,000	52
Bacillus paratyphosus	6,100	6.1
Bacillus subtilis (vegatative)	11,000	11
Bacillus subtilis (spores)	58,000	58
Clostridium botulinum	11,200	11.2
Clostridium tetani	23,100	23.1
Corynebacterium diphtheria	6,500	6.5
Dysentery bacilli	4,200	4.2
Eberthella typhosa	4,100	4.1
Escherichia coli	7,000	7
Legionella bozemanii	3,500	3.5
Legionella dumoffi II	5,500	5.5
Legionella gormanil	4,900	4.9
Legionella micdadei	3,100	3.1
Legionella longbeachae	2,900	2.9
Legionella pneumophila(Legionnaire's Disease)	12,300	12.3
Leptospira canicola-Infectious Jaundice	6,000	6
Leptospira interrogans	6,000	6
Micrococcus candidus	12,300	12.3
Micrococcus sphaeroides	15,400	15.4
Mycobacterium tuberculosis	10,000	10
Neisseria catarrhalis	8,500	8.5
Phytomonas tumefaciens	8,500	8.5
Proteus vulgaris	6,600	6.6
Pseudomonas aeruginosa (Environ.Strain)	10,500	10.5
Pseudomonas aeruginosa (Lab. Strain)	3,900	3.9
Pseudomonas fluorescens	6,600	6.6
Rhodospirillum rubrum	6,200	6.2
Salmonella enteritidis	7,600	7.6
Salmonella paratyphi (Enteric Fever)	6,100	6.1
Salmonella Species	15,200	15.2
Salmonella typhimurium	15,200	15.2

Bacteria (continued)	µW/cm²	mJ/cm²
Salmonella typhosa (Typhoid Fever)	7,000	7
Salmonella	10,500	10.5
Sarcina lutea	26,400	26.4
Serratia marcescens	6,200	6.2
Shigella dysenteriae (Dysentery)	4,200	4.2
Shigella fl exneri - Dysentery	3,400	3.4
Shigella paradysenteriae	3,400	3.4
Shigella sonnei	7,000	7
Spirillum rubrum	6,160	6.16
Staphylococcus albus	5,720	5.72
Staphylococcus aureus	6,600	6.6
Staphylococcus epidermidis	5,800	5.8
Streptococcus faecaila	10,000	10
Streptococcus hemolyticus	5,500	5.5
Streptococcus lactis	8,800	8.8
Streptococcus pyrogenes	4,200	4.2
Streptococcus salivarius	4,200	4.2
Streptococcus viridans	3,800	3.8
Vibrio comma (Cholera)	6,500	6.5
Vibrio cholerae	6,500	6.5

Mold Spores	µW/cm²	mJ/cm²
Aspergillus amstelodami	77,000	77
Aspergillus flavus	99,000	99
Aspergillus glaucus	88,000	88
Aspergillus niger	330,000	330
Mucor mucedo	77,000	77
Mucor racemosus A	35,200	35.2
Mucor racemosus B	35,200	35.2
Oospora lactis	11,000	11
Penicillium chrysogenum	56,000	56
Penicillium digitatum	88,000	88
Penicillium expansum	22,000	22
Penicillium roqueforti	26,400	26.4
Rhizopus nigricans	220,000	220

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

ULTRAVIOLET DOSAGE REQUIRED FOR 99.9% DESTRUCTION OF VARIOUS ORGANISMS

(μW-sec/cm² @ 254 nm)

μW/cm² = milliwatts per square centimeter

mJ/cm² = microjoules per square centimeter

Algae / Protozoa	μW/cm²	mJ/cm²
Chlorella vulgaris (algae)	22,000	22
Blue-green Algae	420,000	420
E. hystolytica	84,000	84
Giardia lamblia (cysts)	100,000	100
Nematode Eggs	40,000	40
Paramecium	200,000	200

Virus	μW/cm²	mJ/cm²
Adeno Virus Type III	4,500	4.5
Bacteriophage (E. coli)	6,600	6.6
Coxsackie	6,300	6.3
Hepatitis virus	8,000	8
Influenza virus	6,600	6.6
Polio virus	6,000	6
Rotavirus	24,000	24
Tobacco mosaic	440,000	440

Yeast	μW/cm²	mJ/cm²
Baker's yeast	8,800	8.8
Brewer's yeast (common)	6,600	6.6
Common yeast cake	13,200	13.2
Saccharomyces cerevisiae	13,200	13.2
Saccharomyces cerevisiae	13,200	13.2
Saccharomyces ellipsoideus	13,200	13.2
Saccharomyces sp.	17,600	17.6

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

Section 2

Drinking Water Filtration Systems

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FILTRATION SYSTEMS

SWT DRINKING WATER FILTRATION SYSTEMS

FOR CHEMICALS, HEAVY METALS, BACTERIA, SEDIMENT, TASTE AND ODOR



Series 200 filter systems provide an assortment of point of use filtration methods designed to fit the varying needs of individual water supplies. SWT prides itself in providing simple, easy to service, filter systems that are both tailored to individual budgets, and effective in treating specific problems in drinking water.



Series 200-UV filter systems are further enhanced by the addition of a state of the art **stainless steel ultraviolet sterilization chamber**. This chemical free method of treating bacteria, viruses, and other microorganisms is now available at an affordable cost. Drinking water can be protected from E. coli, shigella dysenteriae, salmonella, and other outbreaks that occur from time to time in both municipal and well water supplies.

Series 300-UV More and more stories are appearing concerning the aging of our water treatment plants and the decline of the safety of our water supplies. For added protection, ultraviolet sterilization is currently one of the fastest growing water treatment technologies on the market. SWT has added a **stainless steel ultraviolet chamber**, as an option, to our Series 300 filters. Sterilized water has many uses including: formula for infants; water in dentists offices; treating a contaminated well; medical problems, etc.



All SWT Series 200 and Series 300 drinking water filter systems come with everything needed for quick and easy installation including; bracket, housings, cartridges, long reach faucet, tubing, angle stop adapter valve, quick disconnect fittings, hardware, and installation & operation instructions.



Series 300 filters are an expanded version of the 200 Series filters. By adding an extra cartridge and housing, a broader treatment to a larger number of problems can be applied. For example, if sediment is a large concern, the addition of an extra sediment filter can be used to help extend the time between cartridge replacements. If a variety of contaminants is an issue, the extra cartridge can be used to solve the additional problems that the Series 200 filters could not.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1100
EFFECTIVE
DECEMBER 2015

FILTRATION SYSTEMS

SWT DRINKING WATER FILTRATION SYSTEMS

FOR CHEMICALS, HEAVY METALS, BACTERIA, SEDIMENT, TASTE AND ODOR

REMOVE THESE CONTAMINANTS	. . . WITH THESE SWT DRINKING WATER FILTRATION SYSTEMS															
	210	210-UV	220	220-UV	230	230-UV	240	240-UV	310	310-UV	320	320-UV	330	330-UV	340	340-UV
Visible Particulate	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
10 Micron Particulate	S	S	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Sub Micron Particulate			S	S	B	B	B	B			S	S	B	B	A	A
Taste & Odor	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
Chlorine	G	G	C	C	B	B	A	A	G	G	B	B	A	A	A	A
Pesticides & Chemicals	S	S	S	S	G	G	G	G	S	S	G	G	G	G	G	G
Lead & Heavy Metals					C	C	C	C					C	C	C	C
Cysts & Spores (GIARDIA & CRYPTOSPORIDIUM)					A	A	A	A					A	A	A	A
Bacteria & Viruses		G		A		A		A		A		A		A		A

Removal Ratings:

G = Greatly effective
S = Some benefit

A = Greater than 99.97% removal @ 3,000 gallons
B = Greater than 95% removal @ 3,000 gallons
C = Greater than 90% removal @ 3,000 gallons

Warning:

Systems without ultraviolet disinfection should only be used on microbiologically safe water. Activated carbon filters are not designed to kill or remove bacteria or viruses.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1100
EFFECTIVE
DECEMBER 2015

FILTRATION SYSTEMS

SWT DRINKING WATER FILTRATION SYSTEMS



SWT's filter systems provide an assortment of point-of-use filtration methods designed to fit the varying needs of individual water supplies. SWT prides itself in providing simple, easy to service, filter systems that are both tailored to individual budgets, and effective in treating specific problems in drinking water. The optional ultraviolet sterilization chamber is an ideal, chemical free way of treating bacteria, viruses, and other microorganisms.

- Optional 30,000 µw sec/cm^2 UV
- Installation hardware included
- No storage tank
- Multiple filtration options
- Long reach faucet
- 1 gpm flow rate

SWT Drinking Water Filtration Systems

Model Number	Description	Faucet	Weight Lbs.
210	Filter 1: 10 Micron String Wound Sediment Cartridge Filter 2: Granular Activated Carbon Cartridge	Long Reach	12
210-UV	Same as above with Ultraviolet Chamber	Long Reach	14
220	Filter 1: 5 Micron Sediment Cartridge Depth Filtration Filter 2: 10 Micron Carbon Block Cartridge	Long Reach	12
220-UV	Same as above with Ultraviolet Chamber	Long Reach	14
230	Filter 1: 5 Micron Sediment Cartridge Depth Filtration Filter 2: 1 Micron Heavy Metal/Cyst Reduction Carbon Block Cartridge	Long Reach	12
230-UV	Same as above with Ultraviolet Chamber	Long Reach	14
240	Filter 1: 10 Micron Carbon Block Cartridge Filter 2: 1 Micron Heavy Metal/Cyst Reduction Carbon Block Cartridge	Long Reach	12
240-UV	Same as above with Ultraviolet Chamber	Long Reach	14
310	Filter 1: 25 Micron String Wound Cartridge Filter 2: 5 Micron Sediment Cartridge Depth Filtration Filter 3: Granular Activated Carbon Cartridge	Long Reach	15
310-UV	Same as above with Ultraviolet Chamber	Long Reach	18
320	Filter 1: 25 Micron String Wound Cartridge Filter 2: 5 Micron Carbon Soft Block Cartridge Filter 3: 1 Micron Heavy Metal/Cyst Reduction Carbon Block Cartridge	Long Reach	15
320-UV	Same as above with Ultraviolet Chamber	Long Reach	18
330	Filter 1: 5 Micron Sediment Cartridge Depth Filtration Filter 2: 5 Micron Carbon Block Cartridge Filter 3: 1 Micron Heavy Metal/Cyst Reduction Carbon Block Cartridge	Long Reach	15
330-UV	Same as above with Ultraviolet Chamber	Long Reach	18
340	Filter 1: 5 Micron Sediment Cartridge Depth Filtration Filter 2: 1 Micron Heavy Metal/Cyst Reduction Carbon Block Cartridge Filter 3: 0.5 Micron Absolute Rated Cleanable Carbon Block Cartridge	Long Reach	15
340-UV	Same as above with Ultraviolet Chamber	Long Reach	18

International voltages available at additional cost. Contact your SWT representative for details.
Additional cartridges available for custom systems. Contact your SWT representative for details.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1101
EFFECTIVE
DECEMBER 2015

SWT DRINKING WATER FILTRATION SYSTEMS

Replacement Parts

Part Number	Description	Quantity per Case
All Models		
YH10042	Long Reach Faucet: Brushed Nickle Finish, Ceramic Valve Design	—
GJ-PPASV121208	Angle Stop Adapter Valve: 3/8 Male Compression x 3/8 Female Compression x 1/4 Tube	—
GJ-CI3208U7S	Faucet Connector: 1/4 Tube x 7/16-24 UNS	—
GJ-PP480822W	Fixed Elbow: 1/4 Tube x 1/4 Thread NPTF	—
UV Models		
SWT15001	Ultraviolet Lamp	—
210 Models		
NU61110	Filter 1: 10 Micron String Wound Sediment Cartridge	30
FH66001	Filter 2: Granular Activated Carbon Cartridge	25
220 Models		
SO60005	Pre-Filter: 5 Micron Sediment Cartridge Depth Filtration	40
CB67010	Filter 2: 10 Micron Carbon Block Cartridge	12
230 Models		
SO60005	Pre-Filter: 5 Micron Sediment Cartridge Depth Filtration	40
LU90010	Filter 2: 1 Micron Heavy Metal/Cyst Reduction Carbon Block Cartridge	12
240 Models		
CB67010	Filter 1: 10 Micron Carbon Block Cartridge	12
LU90010	Filter 2: 1 Micron Heavy Metal/Cyst Reduction Carbon Block Cartridge	12
310 Models		
NU61125	Filter 1: 25 Micron String Wound Cartridge	30
SO60005	Pre-Filter: 5 Micron Sediment Cartridge Depth Filtration	40
FH66001	Filter 3: Granular Activated Carbon Cartridge	25
320 Models		
NU61125	Filter 1: 25 Micron String Wound Cartridge	30
CB67005	Filter 2: 5 Micron Carbon Block Cartridge	12
LU90010	Filter 3: 1 Micron Heavy Metal/Cyst Reduction Carbon Block Cartridge	12
330 Models		
SO60005	Pre-Filter: 5 Micron Sediment Cartridge Depth Filtration	40
CB67005	Filter 2: 5 Micron Carbon Block Cartridge	12
LU90010	Filter 3: 1 Micron Heavy Metal/Cyst Reduction Carbon Block Cartridge	12
340 Models		
SO60005	Pre-Filter: 5 Micron Sediment Cartridge Depth Filtration	40
LU90010	Filter 2: 1 Micron Heavy Metal/Cyst Reduction Carbon Block Cartridge	12
XK78003	Filter 3: 0.5 Micron Absolute Rated Cleanable Carbon Block Cartridge	20

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1101
EFFECTIVE
DECEMBER 2015

FILTRATION SYSTEMS

SWT HIGH FLOW WATER FILTRATION & ULTRAVIOLET PURIFICATION SYSTEM



***Series 200* High Flow Drinking Water Systems** *provide 3 or 6 gpm of carbon filtered and UV protected water. A two-stage cartridge filtration process removes sediment, treats for taste & odor improvement, and is capable of eliminating high levels of chlorine.*

An optional 3rd stage 304 stainless steel ultraviolet treatment chamber purifies the water—effectively rendering waterborne bacteria, viruses, and microorganisms harmless.

- Perfect for seasonal and lake homes
- Drinking water for boats and yachts
- Simple slide-out/slide-in ultraviolet lamp replacement
- Housing wrench provided
- Customizing available
- All international voltages available

Series 200 HF Drinking Water Systems

Part Number	Description	Micron (Nominal)	Chlorine Capacity *	Connection	Flow Rate GPM	Ship. Wt. Lbs.	Ship. Dimension Inches
H225HF	Drinking Water System	5	12,000 gal	3/4" FNPT	—	23	20 x 20 x 12
H225HF-3UV	Drinking Water System w/ UV	5	12,000 gal	3/4" FNPT	3	28	20 x 20 x 12
H225HF-6UV	Drinking Water System w/ UV	5	12,000 gal	3/4" FNPT	6	30	24 x 20 x 12

Unit comes with a 5 micron pleated filter cartridge and a 5 micron carbon block cartridge as standard equipment.
A wide variety of cartridge choices (for removal of silt, iron, lead, giardia, cyst, etc.) and substitutions are available.

Specifications:

Standard Voltage:	*120V/60 Hz (other voltages available)*
Maximum Temperature:	*125°F*
Maximum Pressure:	*125 PSI*
UV Dosage:	*30,000 microwatt sec/cm² at end of effective lamp life*
Effective Lamp Life:	*9,000 hours*

Series 200 HF Replacement Parts

Part Number	Description	Micron (Nominal)	Max. GPM	Size Inches	Case Quantity	Case Wt. Lbs.	Case Volume Cu. Ft.
CB87005	Carbon Block Cartridge	5	3 to 7 *	4.5 x 9.75	4	12.5	0.62
CF83205	Pleated Poly Cartridge	5	25	4.5 x 9.75	8	8	1.23
DI-LMP42002	Ultraviolet Lamp	—	3	—	1	—	—
DI-LMP41004	Ultraviolet Lamp	—	6	—	1	—	—

International voltages are no additional charge.
Cartridges, housings, tubing,and fittings are NSF listed.
Ballast is UL approved.

All materials are FDA compliant.
Recommended filter changes every 6 months to one year.
Replace lamp annually.

* Free available chlorine capacity rated @ 3 gpm flow rate with 2 ppm feed.

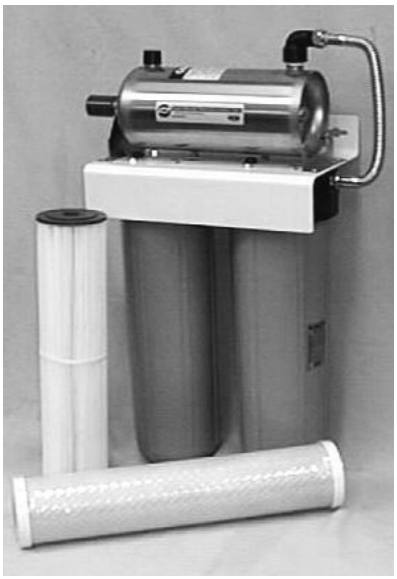
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1239
EFFECTIVE
NOVEMBER 2022

FILTRATION SYSTEMS

SWT HIGH FLOW WATER FILTRATION & ULTRAVIOLET PURIFICATION SYSTEM



The Series 200 Big Blue High Flow Drinking Water System provides 6 gpm of carbon filtered and UV protected water. A two-stage cartridge filtration process removes sediment, improves taste & odor, and is capable of eliminating high levels of chlorine. The large 20 inch Big Blue housings provide extra filtration capacity.

An optional 3rd stage 304 stainless steel ultraviolet chamber purifies the water—effectively rendering waterborne bacteria, viruses, and microorganisms harmless.

- Perfect for seasonal and lake homes
- Drinking water for boats and yachts
- Individual utility rooms and high flow stations
- All international voltages available
- Simple slide-out/slide-in ultraviolet lamp replacement
- Housing wrench provided
- Customizing available
- Optional cartridges available for silt, iron, lead, giardia, and cyst removal

Series 200 BB HF Drinking Water Systems

Part Number	Description	Micron (Nominal)	Chlorine Capacity *	Connection	Flow Rate GPM	Ship. Wt. Lbs.	Ship. Dimension Inches
H225HF20	Drinking Water System	5	24,000 gal	3/4" FNPT	—	34	28 x 16 x 12
H225HF20-6UV	Drinking Water System w/ UV	5	24,000 gal	3/4" FNPT	6	38	36 x 24 x 14

Unit comes with a 5 micron pleated filter cartridge and a 5 micron carbon block cartridge as standard equipment.
A wide variety of cartridge choices and substitutions are available.

Specifications:

Standard Voltage:	120V/60 Hz (other voltages available)
Maximum Temperature:	125°F
Maximum Pressure:	125 PSI
UV Dosage:	30,000 microwatt sec/cm^2 at end of effective lamp life
Effective Lamp Life:	9,000 hours

Series 200 BB HF Replacement Parts

Part Number	Description	Micron (Nominal)	Max. GPM	Size Inches	Case Quantity	Case Wt. Lbs.	Case Volume Cu. Ft.
CB97010	Carbon Block Cartridge	10	7 *	4.5 x 20	4	28	1.36
CF84205	Pleated Poly Cartridge	5	40	4.5 x 20	6	10	2.14
DI-LMP41004	Ultraviolet Lamp	—	6	—	1	—	—

International voltages are no additional charge.
Cartridges, housings, tubing,and fittings are NSF listed.
Ballast is UL approved.

All materials are FDA compliant.
Recommended filter changes every 6 months to one year.
Replace lamp annually.

* Free available chlorine capacity rated @ 3 gpm flow rate with 2 ppm feed.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1239
EFFECTIVE
NOVEMBER 2022

FILTRATION SYSTEMS

GEMINI™ DRINKING WATER FILTRATION SYSTEMS



Gemini Drinking Water Filtration Systems *are versatile two-stage, three-stage, and even four-stage, "bracketless" filter systems that are perfect for homes and offices everywhere. The simple mix-and-match design allows for a variety of system designs to fit your marketplace and local water characteristics. The system comes complete with long reach faucet, tubing, and saddle valve.*

- Attractive wall mount shell
- Self-standing for countertop, or under the sink
- Fits inside most standard water coolers
- Space for enclosed inline filters or ultraviolet chamber
- Extra ultraviolet chamber can be mounted on the side or bottom
- No bypass, double o-ring seals on cartridges
- Additional specialty inline cartridges available to custom design systems
- Long reach faucet, tubing, and saddle valve included

Part Number	Description	Micron (Nominal)	Reduces . . .			
			Chlorine @ 2 PPM Influent	Sediment	Taste & Odor	Bacteria
Gemini Drinking Water Filtration Systems						
GE0001	Sediment & Carbon	5	5,000 Gal.	Yes	Yes	No
GE0002	Dual Carbon	10	10,000 Gal.	Yes	Yes	No
GE0004	Sediment, Carbon, & Ultraviolet Sterilization	5	5,000 Gal.	Yes	Yes	Yes
Components and Replacement Parts						
GE10005	Spun Polypropylene Cartridge	5	—	Yes	No	No
GE20010	Carbon Block Cartridge	10	5,000 Gal.	Yes	Yes	No
FH-GS6RO-J	Inline, 6 inch Coconut Shell GAC Cartridge with 1/4 inch JG Swivel	5	1,000 Gal.	Yes	Yes	No
FH-GS10RO-J	Inline, 10 inch Coconut Shell GAC Cartridge with 1/4 inch JG Swivel	5	1,250 Gal.	Yes	Yes	No
SWT00700	Polisher™ Inline Ultraviolet Chamber	—	—	No	No	Yes
SWT15001	Ultraviolet Lamp (120 Volt)	—	—	No	No	Yes
SWT15013	Ultraviolet Lamp (220 Volt)	—	—	No	No	Yes

International voltages are available.

Custom cartridges are available in larger volumes. Contact your SWT representative for details.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1170
EFFECTIVE
MARCH 2010

FILTRATION SYSTEMS

COUNTERTOP WATER FILTRATION UNITS



SWT's Countertop Filtration Unit (P/N CT-10) is designed to conveniently and economically provide fresh, filtered water directly from your own tap. It comes with a special diverter valve to replace the aerator currently on your faucet. When filtered water is desired (for drinking, cooking, etc.), simply turn on your faucet and pull the diverter valve's piston knob to the "on" position. This will divert your regular, unfiltered tap water through the filter unit. From the unit's spout you will then receive clean, filtered water. Its proven design allows you to effortlessly switch between filtered and unfiltered water at any time.

The unit houses a 10 inch disposable water filtration cartridge. Cartridges are available to filter chlorine, bad taste and odor, chemical contaminants, and more. Put an end to the constant refilling of slow, small water filter pitchers and/or stocking up on expensive bottled water. The Countertop Filtration Unit makes unlimited, instant, filtered water available from your own sink.

Housing, cartridge, and fittings are tested and Certified by NSF International against NSF/ANSI Standard 42 for materials and structural integrity requirements only.

Specifications

Property	Operating Limits	
	Maximum	Minimum
Water Pressure	125 psi (8.5 bar)	25 psi (1.7 bar)
Water Temperature	100°F (38°C)	35°F (1.7°C)
pH	10.0	5.0
Turbidity	10 NTU	0 NTU
Bacterial Quality	—	Potable *

Long reach faucets available.

* Also available with an ultraviolet chamber — see Ultra Biolyte™ (Part Number SWT00500A).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 0115
EFFECTIVE
DECEMBER 2015

FILTRATION SYSTEMS

COUNTERTOP CARTRIDGES

SWT Countertop Cartridges *effectively and economically filter the contaminants from your household water supply. These cartridges solve problems that were previously unsolvable without expensive and complex water treatment systems. Whether it is chlorine, taste & odor, or various heavy metals in your tap water, these disposable replacement cartridges ensure a healthy and satisfying solution.*



Carbon Impregnated Paper Cartridge for chlorine, taste, and odor removal

CF65005
Average Life:
1 to 6 months



Carbon Block Cartridge for chlorine, taste & odor, chemical contaminants, and fine filtration

CB67000
Average Life:
5000 gallons



Carbon Block Cartridge with Lead Reduction for chlorine, taste & odor, chemical contaminants, & fine filtration

LU90010
Average Life:
6000 gallons



Granular Activated Carbon Cartridge for chlorine, taste & odor, and chemical contaminant reduction

FH66001
Average Life:
700 gallons



Coconut Carbon Block Cartridge for chlorine, taste & odor, chemical contaminants, and fine filtration

CB67010-C
Average Life:
1200 gallons



Special Media Cartridge for heavy metal removal

METAL-AS-10
Average Life:
1000 gallons

Use these cartridges		...to remove these elements							
Part Number	Description	Sediment	Taste & Odor	Chlorine	Chemicals	Metals [1]	Bacteria	Fine Filtration [2]	Cysts & Spores [3]
CF65005	Carbon Impregnated Paper Cartridge, 5 micron	R	A	A					
FH66001	Granular Activated Carbon Cartridge	A	R	R	A				
CB67000	Carbon Block Cartridge, 0.5 micron		R	R	R			A	R
CB67010-C	Coconut Carbon Block Cartridge, 10 micron		R	R	R				
LU90010	Carbon Block Cartridge with Lead Reduction, 0.5 micron		R	R	R	R		A	
Metal-AS-10	Specialty Media Cartridge	A	R	R	R	R		R	
SWT13010 *	UV-10 Cartridge *		R	R	A		R	A	

R = Recommended A = Acceptable (Some Filtration Benefits)

These cartridges should only be used on drinkable water. Do not use these cartridges on water that is microbiologically unsafe.

1 Includes lead, copper, iron, sulfides, and other metals.

2 Less than 5 microns in size.

3 Includes giardia cysts and cryptosporidium.

* UV-10 cartridge is for use with Safe Water Ultra Biolyte™ filter systems.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 0115
EFFECTIVE
DECEMBER 2015

Section 3

Reverse Osmosis Systems & Components

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

Reverse Osmosis

SWT Reverse Osmosis Systems

SWT's Reverse Osmosis Systems contain the most advanced technologies available in RO system design. With advanced features such as carbon block technology, heavy metal reduction prefilters, dry membranes, and optional ultraviolet bacteriological chambers, these high quality RO's are designed to provide homes and offices with laboratory grade water and membranes that provide years of service between changes.



▲ **SWT BioMaster™:** This 5 stage RO system is the top-of-the-line in drinking water protection. The unit features a built-in ultraviolet purifier strategically placed as the final stage before the faucet. Airborne bacteria can't get in, and waterborne bacteria can't get out. The unit also comes with a 5 micron spun polypro pre-filter, 1 micron heavy metal/carbon block pre-filter, 50 gpd TFC membrane, 4.5 gallon RO tank, and a 10 micron post-filter. Also standard, for extra protection, is a deluxe air gap faucet. A water saving auto shut-off valve, angle stop adapter valve, and drain line check valve are also included.

Substitutions and add-ons are allowed. Available options include: UV purifiers, additional pre-and post-filters, air gap faucets, CTA membranes, larger RO storage tanks, larger TFC membranes, RO pumps, gauges, etc.



◀ **SWT MetalsMaster™:** Our 4 stage RO is designed with an emphasis on heavy metals removal. It features a 200 psi gauge to monitor pressure drop across the membrane, so your customers will know when it's time to replace the membrane. The unit comes with a 5 micron polypro pre-filter, 1 micron heavy metal/carbon block pre-filter, 50 gpd TFC membrane, 4.5 gallon RO tank, and a 10 micron carbon block post-filter. A deluxe long reach faucet, auto shut-off valve, angle stop adapter valve, and drain line check valve are also included.



▲ **SWT Premium™:** This 3 stage system features a 5 micron carbon block pre-filter, 50 gpd TFC membrane, 4.5 gallon RO tank, and a 10 micron carbon block post-filter. Each unit includes a deluxe long reach faucet, angle stop adapter valve, water saving auto shut-off valve, and drain line check valve.



SWT Premium System Shown

▲ **Included:** Each unit comes complete with everything needed for a quick installation including: filter housings and cartridges, RO membrane and housing, RO storage tank, mounting bracket and clips, angle stop adapter valve, auto shut-off valve, drain line check valve, housing wrench, tubing, fittings, hardware, and instructions.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 0121
EFFECTIVE
JUNE 2009

Reverse Osmosis

SWT Line Pressure RO Systems

RO Product Water Rate Chart

(For estimation purposes only)*

INCOMING WATER PSI	Total TDS	GPD @ 40° F	GPD @ 50° F	GPD @ 60° F	GPD @ 70° F	GPD @ 80° F
40	100	10.8	13.0	15.8	19.4	23.8
40	500	8.6	9.7	12.2	15.1	18.0
40	1,000	5.4	6.5	7.9	9.7	12.2
50	100	14.4	17.3	21.2	25.7	29.9
50	500	11.5	14.4	17.6	21.6	26.3
50	1,000	8.6	10.4	13.0	15.5	19.4
60	100	18.0	22.3	27.4	33.5	41.0
60	500	15.8	19.4	22.0	28.8	33.1
60	1,000	13.0	15.8	19.4	22.0	28.8
70	100	22.7	27.4	33.5	41.0	50.0
70	500	19.1	24.5	29.9	36.7	45.0
70	1,000	17.3	20.9	25.4	31.3	37.8
80	100	25.6	31.7	38.0	46.8	57.6
80	500	23.8	28.8	33.5	43.6	52.9
80	1,000	20.9	25.2	30.1	37.8	46.1

TFC membrane TDS rejection rate: 96 to 98%
TFC membrane nitrate rejection rate: 85 to 90%

CTA membrane TDS rejection rate: 90 to 92%
CTA membrane nitrate rejection rate: 40 to 50%

Above information are averages based on RO units with a 36 gpd membrane. Individual membranes vary.
50 gpd membranes will average 40% higher product water rates than above chart.
16 gpd membranes will average 55% lower product water rates than above chart.

Maximum Operating Conditions	TFC	CTA
Operating PSI Range	35 to 125	35 to 125
TDS Level	1800	1000
Temperature Range	40 to 95° F	40 to 80° F
Allowable Chlorine Level	Less than 0.1 ppm	Less than 2.0 ppm
pH Range	4.0 to 9.0	4.0 to 9.0

* Above information is for estimation purposes only. Due to uncontrollable variances in water sources, installation procedures, or component manufacturing, no warranty, or guarantee, of performance is implied.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 0121
EFFECTIVE
JUNE 2009

SWT PREMIUM™

REVERSE OSMOSIS SYSTEM

SWT's Premium Reverse Osmosis System provides up to 50 gallons per day of high quality water. Reverse Osmosis technology allows the homeowner to enjoy bottled water quality from the tap at a fraction of the cost and with none of the aggravation.



RO systems can be serviced and maintained in less than 1/2 hour per year. You receive clear, refreshing water that is not only healthy to drink, but is good for appliances such as ice makers, steam irons, humidifiers, and car batteries. It's better for your pet's drinking water too.

FEATURES INCLUDE:

- The first stage utilizes a finely porous carbon block. This carbon block removes sediment such as silt, sand, grit, and sludge which may be present in the water supply. The carbon matrix adsorbs chlorine, taste, odor, color, pesticides, and an extensive list of chemical compounds that have been found in water supplies and are deemed health risks by the EPA.
- The water is then hyperfiltrated through a reverse osmosis element that treats the water down to the molecular level. It will reject 93% to 99+% of contaminants such as salt, nitrates, lead, fluoride, iron, copper, mercury, and arsenic. It also filters out larger organisms such as giardia cysts and cryptosporidium.
- The final stage is a second carbon filter which is used to polish the RO water as it comes out of the storage tank just prior to the faucet.
- Deluxe long reach faucet
- Large water reservoir
- All hardware necessary for installation

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 0117
EFFECTIVE
JUNE 2009

SWT PREMIUM PERFORMANCE SPECIFICATIONS

With proper installation and maintenance the RO membrane module in the SWT Premium Reverse Osmosis System will reject the following substances from tap water:

Arsenic	94-96%
Barium	96-98%
Bicarbonate	95-96%
Boron	60-70%
Bromide	93-96%
Cadmium	96-98%
Calcium	94-97%
Chloride	87-95%
Copper	98-99%
Cyanide	86-95%
Fluoride	94-96%
Hardness	95-98%
Iron	95-98%
Lead	96-98%
Magnesium	96-98%
Manganese	98-99%
Mercury	96-98%
Nickel	98-99%
Nitrate	90-96%
Phosphate	96-99%
Potassium	87-97%
Pyrogen	98-99%
Selenium	96-98%
Silica	85-90%
Silicate	95-97%
Silver	95-97%
Sodium	87-98%
Strontium	96-98%
Sulfate	98-99%
Zinc	98-99%

...plus more. The RO membrane module will also aid in the removal of color, asbestos, and cysts such as giardia and cryptosporidium.

Contact your SWT representative for more details.

The SWT Premium Reverse Osmosis System has two carbon filtration modules which will remove, or significantly reduce, over 50 chemical substances that the EPA has deemed potential carcinogens. They include:

Adipates(diethylhexyl)	Chromium (+3)	Endrin	PCB's
Alachlor	Chrysene (PAH)	Ethylbenzene	Sediment
Aldicarb	Dalapon	Ethylene dibromide(EDB)	Simazine
Aldicarb sulfone	Di (2-ethylhexl) adipate	Glyphosate	Styrene
Aldicarb sulfoxide	Dibenz (a,h) antracene	Heptachlor	3,7,8-TCDD (dioxin)
Atrazine	Dibromochloropropane	Heptachlor epoxide	2,4-D
Benz (a) anthracine (PAH)	Dichlorobenzene (meta-)	Hextachlorobenzene	2,4,5-TP (silvex)
Benzene	Dichlorobenzene (ortho)	Hextachlorocyclopentadiene	TCB's
Benzo (a) pyrene (PAH)	Dichlorobenzene (para-)	Indo (1,2,3-c,d) pyrene (PAH)	TCE's
Benzo (b) floranthene (PAH)	Dichloroethane (1,2-)	Lidane	Tetrachloroethylene
Benzo (k) floranthene (PAH)	Dichloroethylene (1,1-)	Mercury (organic complexes)	Thallium
Beryllium	Dichloroethylene (cis-1,2-)	Methoxychlor	THM's
Butyl benzyl phthalate (PAE)	Dichloroethylene (trans-1,2)	Monochlorobenzene	Toluene
Cadmium	Dichloropropane	Organic color	Toxaphene
Carbofuran	Diethylhexyl phthalate (PAE)	Organics	Vinyl chloride
Carbon tetrachloride	Dinoseb	Oxymal	Xylenes
Chlordane	Diquat	Pentachlorophenal	
Chlorine	Endothall	Picloram	

The above chemicals usually come from pesticides, farm and industrial run-off, and chemicals permeating through soil into ground water, aquifers, or rivers. Most municipal water supplies in the US constantly monitor for these substances and advise their customers accordingly. For further information, check with your local water supplier, the EPA, and your local water treatment professional.

GENERAL INSTALLATION AND SERVICE PARAMETERS

The SWT Premium RO System will work at peak efficiency on either municipal or ground water supplies that do not exceed the following:

Maximum psi . . . . . 125 lbs
TDS . . . . . 1800 ppm
Iron . . . . . 0.4 ppm
Hardness. . . . . 17 gr/gal
H2SO. . . . . 0.05 ppm
Manganese . . . . . 0.1 ppm

The SWT Premium has been designed to give many years of trouble free service. To keep the system operating in peak efficiency, it is recommended that the unit be inspected every 6 months for possible pre-filter sediment clogging (especially if there is a lot of sediment in your water supply). Manufacturer recommends that the system be serviced on an annual basis to replace the carbon filtration modules and the RO membrane module.*

* The RO membrane module may last for a much longer period of time on relatively good water. Check with your water treatment professional for local water characteristics and testing.

All Safe Water Technologies' components and systems are made in the USA. All housings, cartridges, membranes, faucets, and tubing used in SWT reverse osmosis systems are NSF listed. No consumer water supply that has known contamination should be assumed *safe* simply with the addition of water treatment equipment. Although RO technology has proven to be effective in almost all instances, SWT strongly urges that water samples be re-tested after installation to assure proper installation and performance of the water treatment equipment.

MEMBER Water Quality Association

FORM 0117
EFFECTIVE
JUNE 2009

SWT MetalsMaster™

REVERSE OSMOSIS SYSTEM

SWT's MetalsMaster Reverse Osmosis System is specially designed for areas with water supplies contaminated by heavy metals and high TDS. It combines reverse osmosis technology with oxidation/carbon filtration to bring up to 50 gallons per day of bottled water quality to the faucet at a fraction of the cost.



The MetalsMaster provides up to 50 gallons of clear, refreshing water that is not only healthy to drink, but good for cooking and for use in appliances such as steam irons, humidifiers, ice makers, and car batteries.

FEATURES INCLUDE:

- A 5 micron sediment trap to remove particulate matter such as silt, sand, turbidity, and sludge from water.
- A specially designed carbon block pre-filter that has been blended with an oxidation media to trap particulates of metals such as lead and copper. It also removes, or greatly reduces, most of the chemical compounds that the EPA has deemed as health hazards in drinking water. This stage greatly extends the life of the membrane on high TDS water.
- A reverse osmosis membrane which treats the pre-filtered water on a molecular level, filtering out 93% to 99+% of dissolved solids such as salt, nitrates, lead, fluoride, and arsenic. It also filters out organisms such as cryptosporidium and giardia.
- A second carbon filter is used to polish the RO water just prior to the faucet.
- Deluxe long reach faucet
- Large water reservoir
- All hardware necessary for installation

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 0126
EFFECTIVE
JUNE 2009

METALSMASTER PERFORMANCE SPECIFICATIONS

With proper installation and maintenance the RO membrane module in the SWT MetalsMaster Reverse Osmosis System will reject the following substances from tap water:

Arsenic	94-96%
Barium	96-98%
Bicarbonate	95-96%
Boron	60-70%
Bromide	93-96%
Cadmium	96-98%
Calcium	94-97%
Chloride	87-95%
Copper	98-99%
Cyanide	86-95%
Fluoride	94-96%
Hardness	95-98%
Iron	95-98%
Lead	96-98%
Magnesium	96-98%
Manganese	98-99%
Mercury	96-98%
Nickel	98-99%
Nitrate	90-96%
Phosphate	96-99%
Potassium	87-97%
Pyrogen	98-99%
Selenium	96-98%
Silica	85-90%
Silicate	95-97%
Silver	95-97%
Sodium	87-98%
Strontium	96-98%
Sulfate	98-99%
Zinc	98-99%

...plus more. The RO membrane module will also aid in the removal of color, asbestos, and cysts such as giardia and cryptosporidium.

Contact your SWT representative for more details.

The MetalsMaster Reverse Osmosis System features a special 1 micron metal reduction pre-filter. By adding a special heavy metal reduction filter cartridge to our RO systems, and pre-filtering the water to 1 micron, SWT is able to reduce the amount of contaminates that reach the RO membrane. This allows the membrane to stay cleaner, be more effective, and last longer, especially when treating water with lead, iron, or other dissolved metals.

Carbon filtration has long been recognized by the EPA as the best method for removing over 50 substances from water that have been deemed potential carcinogens (see list below). SWT's RO Systems feature the newest in carbon block technology, allowing 5 times more carbon area contact than standard GAC cartridges.

Adipates(diethylhexyl)	Chromium (+3)	Endrin	PCB's
Alachlor	Chrysene (PAH)	Ethylbenzene	Sediment
Aldicarb	Dalapon	Ethylene dibromide(EDB)	Simazine
Aldicarb sulfone	Di (2-ethylhexl) adipate	Glyphosate	Styrene
Aldicarb sulfoxide	Dibenz (a,h) antracene	Heptachlor	3,7,8-TCDD (dioxin)
Atrazine	Dibromochloropropane	Heptachlor epoxide	2,4-D
Benz (a) anthracine (PAH)	Dichlorobenzene (meta-)	Hextachlorobenzene	2,4,5-TP (silvex)
Benzene	Dichlorobenzene (ortho)	Hextachlorocyclopentadiene	TCB's
Benzo (a) pyrene (PAH)	Dichlorobenzene (para-)	Indo (1,2,3-c,d) pyrene (PAH)	TCE's
Benzo (b) floranthene (PAH)	Dichloroethane (1,2-)	Lidane	Tetrachloroethylene
Benzo (k) floranthene (PAH)	Dichloroethylene (1,1-)	Mercury (organic complexes)	Thallium
Beryllium	Dichloroethylene (cis-1,2-)	Methoxychlor	THM's
Butyl benzyl phthalate (PAE)	Dichloroethylene (trans-1,2)	Monochlorobenzene	Toluene
Cadmium	Dichloropropane	Organic color	Toxaphene
Carbofuran	Diethylhexyl phthalate (PAE)	Organics	Vinyl chloride
Carbon tetrachloride	Dinoseb	Oxymal	Xylenes
Chlordane	Diquat	Pentachlorophenal	
Chlorine	Endothall	Picloram	

The above chemicals usually come from pesticides, farm and industrial run-off, and chemicals permeating through soil into ground water, aquifers, or rivers. Most municipal water supplies in the US constantly monitor for these substances and advise their customers accordingly. For further information, check with your local water supplier, the EPA, and your local water treatment professional.

GENERAL INSTALLATION AND SERVICE PARAMETERS

The SWT MetalsMaster RO System will work at peak efficiency on either municipal or ground water supplies that do not exceed the following:

Maximum psi . . . . . 125 lbs
TDS . . . . . 1800 ppm
Iron . . . . . 0.4 ppm
Hardness. . . . . 17 gr/gal
H2SO. . . . . 0.05 ppm
Manganese . . . . . 0.1 ppm

The MetalsMaster has been designed to give many years of trouble free service. To keep the system operating in peak efficiency, it is recommended that the unit be inspected every 6 months for possible pre-filter sediment clogging (especially if there is a lot of sediment in your water supply). Manufacturer recommends that the system be serviced on an annual basis to replace the carbon filtration modules and the RO membrane module.*

* The RO membrane module may last for a much longer period of time on relatively good water. Check with your water treatment professional for local water characteristics and testing.

All Safe Water Technologies' components and systems are made in the USA. All housings, cartridges, membranes, faucets, and tubing used in SWT reverse osmosis systems are NSF listed. No consumer water supply that has known contamination should be assumed *safe* simply with the addition of water treatment equipment. Although RO technology has proven to be effective in almost all instances, SWT strongly urges that water samples be re-tested after installation to assure proper installation and performance of the water treatment equipment.

MEMBER Water Quality ASSOCIATION

FORM 0126
EFFECTIVE
JUNE 2009

SWT BioMaster™

REVERSE OSMOSIS SYSTEM

SWT's BioMaster Reverse Osmosis System provides quality RO filtered water as well as bacteria and virus sterilization for the most complete, affordable, high purity drinking water treatment available to the homeowner. For pennies a day, the BioMaster will deliver better than bottled water quality.



A maintained BioMaster Drinking Water System means you will never have to worry again about the quality of your water supply.

FEATURES INCLUDE:

- Sediment filtration to remove particulate matter (grit, sand, sludge, silt, etc.).
- A special heavy metal pre-filter cartridge designed to extend the life of the RO membrane (a unique Safe Water Technologies design feature).
- Heavy metal filtration (lead, iron, zinc, etc.).
- Carbon pre-filter and carbon post-filter for the removal of chlorine, taste, odor, color, pesticides, and a whole list of chemical compounds deemed unhealthy by the EPA.
- A reverse osmosis membrane for ultra-fine (molecular) filtration. Primary agents filtered are sodium, nitrates, lead, fluoride, copper, iron, mercury, cryptosporidium, cysts, and arsenic. The RO element in the BioMaster System will remove 93% to 99+% of these and other compounds.
- An ultraviolet disinfecting chamber that sterilizes viruses, bacteria, mold, algae, and other harmful microorganisms.
- Deluxe long reach air gap faucet
- Large water reservoir
- All hardware necessary for installation

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 0116
EFFECTIVE
JUNE 2009

BIOMASTER PERFORMANCE SPECIFICATIONS

With proper installation and maintenance, the RO membrane module in the SWT BioMaster Reverse Osmosis System will reject the following substances from tap water:

Arsenic	94-96%
Barium	96-98%
Bicarbonate	95-96%
Boron	60-70%
Bromide	93-96%
Cadmium	96-98%
Calcium	94-97%
Chloride	87-95%
Copper	98-99%
Cyanide	86-95%
Fluoride	94-96%
Hardness	95-98%
Iron	95-98%
Lead	96-98%
Magnesium	96-98%
Manganese	98-99%
Mercury	96-98%
Nickel	98-99%
Nitrate	90-96%
Phosphate	96-99%
Potassium	87-97%
Pyrogen	98-99%
Selenium	96-98%
Silica	85-90%
Silicate	95-97%
Silver	95-97%
Sodium	87-98%
Strontium	96-98%
Sulfate	98-99%
Zinc	98-99%

...plus more. The RO membrane module will also aid in the removal of color, asbestos, and cysts such as giardia and cryptosporidium.

Contact your SWT representative for more details.

The SWT BioMaster Reverse Osmosis System is much more than an RO system. It has been designed to work on water that has chemical and bacteriological contamination also. The carbon filtration modules will remove, or significantly reduce, over 50 chemical substances that the EPA has deemed potential carcinogens. They include:

Adipates(diethylhexyl)	Chromium (+3)	Endrin	PCB's
Alachlor	Chrysene (PAH)	Ethylbenzene	Sediment
Aldicarb	Dalapon	Ethylene dibromide(EDB)	Simazine
Aldicarb sulfone	Di (2-ethylhexl) adipate	Glyphosate	Styrene
Aldicarb sulfoxide	Dibenz (a,h) antracene	Heptachlor	3,7,8-TCDD (dioxin)
Atrazine	Dibromochloropropane	Heptachlor epoxide	2,4-D
Benz (a) anthracine (PAH)	Dichlorobenzene (meta-)	Hextachlorobenzene	2,4,5-TP (silvex)
Benzene	Dichlorobenzene (ortho)	Hextachlorocyclopentadiene	TCB's
Benzo (a) pyrene (PAH)	Dichlorobenzene (para-)	Indo (1,2,3-c,d) pyrene (PAH)	TCE's
Benzo (b) floranthene (PAH)	Dichloroethane (1,2-)	Lidane	Tetrachloroethylene
Benzo (k) floranthene (PAH)	Dichloroethylene (1,1-)	Mercury (organic complexes)	Thallium
Beryllium	Dichloroethylene (cis-1,2-)	Methoxychlor	THM's
Butyl benzyl phthalate (PAE)	Dichloroethylene (trans-1,2)	Monochlorobenzene	Toluene
Cadmium	Dichloropropane	Organic color	Toxaphene
Carbofuran	Diethylhexyl phthalate (PAE)	Organics	Vinyl chloride
Carbon tetrachloride	Dinoseb	Oxymal	Xylenes
Chlordane	Diquat	Pentachlorophenal	
Chlorine	Endothall	Picloram	

After the water has been filtered down to the sub-micron level, the water then enters an ultraviolet sterilization chamber where any viruses, bacteria, mold, and other living microorganisms are bombarded with special, intense light of a specific wave length. The UV light penetrates the wall of the organism and attacks DNA structure leaving the organism unable to reproduce (or "dead"). UV technology is recognized by the EPA as one of four approved methods of sterilizing water, and is preferable over the other three methods (chlorine, iodine, and distillation) due to cost of treatment and the effectiveness of UV (UV works almost instantaneously, leaving no residuals or chemicals in the water). The replaceable UV lamp operates for a full year at ≥ 30,000 microwatt sec/cm². As a point of reference, the following table (right) is a list of common bacteria and viruses, and the dosage required to render them harmless.

BACTERIA		Shigella dysenteriae	4,200
Bacillus anthraces	8,700	Shigella paradysenteriae	3,400
B. Megatherium sp (veg.)	2,500	Spirillum rubrum	6,160
B. Megatherium sp. (spores)	5,200	Staphylococcus albus	5,720
B. paratyphosus	6,100	Staphylococcus aureus	6,600
B. subtilis	11,000	Streptococcus hemolyticus	5,500
B. subtilis spores	22,000	Streptococcus viridans	3,800
Clostridium tetani	22,000	Vibrio cholerae	6,500
Corynebacterium diphtheria	6,500	**MOLD SPORES**	
Dysentery baccili	4,200	Mucor racemosus A	35,200
Eberthella typhosa	4,100	Mucor racemosus B	35,200
Escherichia coli	6,600	Oospora lactis	11,000
Leptospira	6,000	Penicillium expansum	22,000
Micrococcus candidus	12,300	**PROTOZOA**	
Micrococcus spheroids	15,400	Chlorella vulgaris (algae)	22,000
Mycobacterium tuberculosis	10,000	**VIRUS**	
Neisseria catarrhalis	8,500	Bacteriophage (E. coli)	6,600
Phytomonas tumefaciens	8,500	Hepatitis virus	8,000
Proteus vulgaris	6,600	Influenza virus	6,600
Pseudomonas aeruginosa	10,500	Polio virus	6,000
Pseudomonas fluorescens	6,600	**YEAST**	
Salmonella	10,000	Bakers' yeast	8,800
S. enteritidis	7,600	Brewers' yeast	6,600
S. typhimurium	15,200	Common yeast cake	13,200
S. typhosa	4,100	Saccharomyces cerevisiase	13,200
Sarcina lutea	26,400	Saccharomyces ellipsoideus	13,200
Serratia marcesens	6,160	Saccharomyces sp.	17,600

GENERAL INSTALLATION AND SERVICE PARAMETERS

The BioMaster will work at peak efficiency on either municipal or ground water supplies that do not exceed the following:

Maximum psi	125 lbs
TDS	1800 ppm
Iron	0.4 ppm
Hardness	17 gr/gal
H2SO	0.05 ppm
Manganese	0.1 ppm

The SWT BioMaster has been designed to give many years of trouble free service. To keep the system operating in peak efficiency, it is recommended that the unit be inspected every 6 months for possible pre-filter sediment clogging (especially if there is a lot of sediment in your water supply). Manufacturer recommends that the system be serviced on an annual basis to replace the carbon filtration modules and the RO membrane module.*

* The RO membrane module will last for a much longer period of time on relatively good water. Check with your Water Treatment Professional for local water characteristics and testing.

MEMBER Water Quality ASSOCIATION

FORM 0116
EFFECTIVE
JUNE 2009

Reverse Osmosis

SWT REVERSE OSMOSIS SYSTEMS



Premium™



MetalsMaster™



BioMaster™

SWT's Reverse Osmosis Systems *contain the most advanced technologies available in RO system design. With advanced features such as carbon block technology, heavy metal reduction prefilters, dry membranes, and optional ultraviolet bacteriological chambers, these high quality RO systems are designed to provide homes and offices with laboratory grade water and membranes that provide years of service between changes.*

- High output, dry membranes
- High flow from tank to faucet
- 30 to 125 psi operating pressure
- Optional ultraviolet filter
- Lead-free, long reach faucets
- 4.5 gallon storage tanks
- Post RO tank carbon filtration

SWT RO Systems Features:



3/8" Angle Stop Adapter Valve (Shown Installed)



Premium Brushed Nickel Faucet



Premium Brushed Nickel Air Gap Faucet

Reverse Osmosis Systems

Part Number	Description	Inlet Inches	Outlet Inches	Membrane Type* (Dry)	Auto Shut-Off	Weight Lb
RO23802-50	Premium 3-stage with angle stop adapter valve, premium long reach faucet, etc.	1/4	3/8	50 GPD TFC	YES	23
RO33802-50	MetalsMaster 4-stage with angle stop adapter valve, premium long reach faucet, etc.	1/4	3/8	50 GPD TFC	YES	26
RO33802-90N	MetalsMaster Nano 4-stage with angle stop adapter valve, premium long reach faucet, etc.	1/4	3/8	90 GPD TFC	YES	26
RO43802-50**	BioMaster 5-stage with UV, angle stop adapter valve, premium long reach air gap faucet, etc.	3/8	3/8	50 GPD TFC	YES	28

* Other GPD membranes are available upon request (see reverse side).

** International voltages available at additional cost.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1094
EFFECTIVE
NOVEMBER 2013

SWT REVERSE OSMOSIS SYSTEMS

Replacement Parts

Part Number	Description	Qty/Case	Wt. Lb
Premium			
CB67005	Prefilter: 5 Micron Carbon Block Cartridge — Taste & Odor Reduction	20	22
CB67010	Postfilter: 10 Micron Bituminous Carbon Block Cartridge — Taste & Odor Reduction	20	22
ED20250	RO Membrane: 50 GPD TFC Dry — 98.6% Typical Rejection	N/A	N/A
MetalsMaster			
S062005	Prefilter 1: 5 Micron Sediment Cartridge — System-Guard™ Spun PP	25	9
LU90010	Prefilter 2: 0.5 Micron Carbon Block Cartridge — Cyst, VOC, Heavy Metal Reduction	20	22
CB67010	Postfilter: 10 Micron Bituminous Carbon Block Cartridge — Taste & Odor Reduction	20	22
ED20250	RO Membrane: 50 GPD TFC Dry — 98.6% Typical Rejection	N/A	N/A
BioMaster			
S062005	Prefilter 1: 5 Micron Sediment Cartridge — System-Guard™ Spun PP	25	9
LU90010	Prefilter 2: 0.5 Micron Carbon Block Cartridge — Cyst, VOC, Heavy Metal Reduction	20	22
CB67010	Postfilter: 10 Micron Bituminous Carbon Block Cartridge — Taste & Odor Reduction	20	22
ED20250	RO Membrane: 50 GPD TFC Dry — 98.6% Typical Rejection	N/A	N/A
SWT15001	Ultraviolet Lamp: 0.75 GPM Bacteriological Control	N/A	N/A

Add-Ons and Substitutions*

Part Number	Description
ED20236	RO Membrane: 36 GPD TFC Dry — 98.6% Typical Rejection
ED202100	RO Membrane: 100 GPD TFC Dry — 98.6% Typical Rejection
ED20290N	Nano Filtration Membrane: 90 GPD — 80% Typical Rejection
YH10041	Premium Polished Chrome Faucet: Long Reach Spout, Rotary Style Handle, Lead-Free
YH10042	Premium Brushed Nickel Faucet: Long Reach Spout, Rotary Style Handle, Lead-Free
YH10043	Premium Oil Rubbed Bronze Faucet: Long Reach Spout, Rotary Style Handle, Lead-Free
YH10044	Premium Polished Brass Faucet: Long Reach Spout, Rotary Style Handle, Lead-Free
YH10045	Premium All-White Faucet: Long Reach Spout, Rotary Style Handle, Lead-Free
YH10047	Premium All-Black Faucet: Long Reach Spout, Rotary Style Handle, Lead-Free
YH10048	Premium Oil Rubbed Copper Faucet: Long Reach Spout, Rotary Style Handle, Lead-Free
YH10051	Premium Polished Chrome Air Gap Faucet: Long Reach Spout, Rotary Style Handle, Lead-Free
YH10052	Premium Brushed Nickel Air Gap Faucet: Long Reach Spout, Rotary Style Handle, Lead-Free
GJ-PPASV121212	Angle Stop Adapter Valve: 3/8" Male Compression x 3/8" Female Compression x 3/8" Tube, 145 PSI at 68°F, 58 PSI at 140°F
EW10010	RO Storage Tank: 10 Gallon / 7.6 Gallon, White
EW10014	RO Storage Tank: 14 Gallon / 10.3 Gallon, White

* SWT is happy to add on to your system, or substitute different types of faucets, membranes, or storage tanks. The price will be adjusted, up or down accordingly, at the time of ordering. Not all substitutions are instantly available.

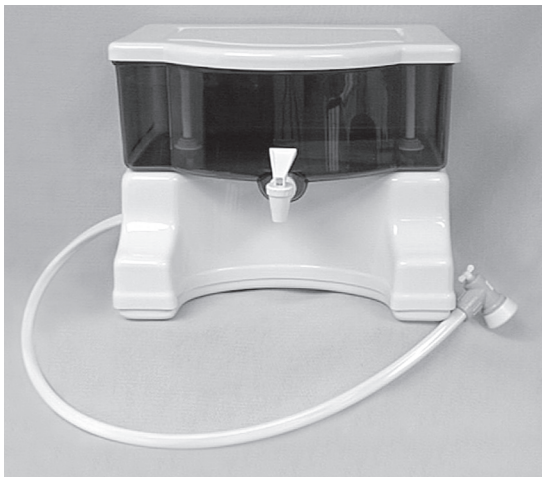
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1094
EFFECTIVE
NOVEMBER 2013

REVERSE OSMOSIS SYSTEMS

COUNTERTOP RO SYSTEM



SWT's Countertop Reverse Osmosis System has one of the fastest recovery times available—producing nearly a gallon of drinking water per hour with its advanced 24 gpd membrane design.

This elegant and spacious two gallon (7.5 liter) storage tank is constructed from FDA approved Lexan material. The smooth white base and smoke-colored reservoir is a visually appealing addition for any countertop.

Our standard design is a four-stage RO/filtration process with sediment filtration, both pre- and post-carbon filters, and a state-of-the-art, low pressure, polyamide RO membrane. Typical contaminant rejection is 95% to 99% depending on influent water quality. An alternative version includes a stainless steel UV chamber as an option.

The universal quick connect faucet adapter insures easy connection to any faucet worldwide with no special tools required.

This unit has been specifically designed to reduce drinking water contamination down to the molecular and single cell level. Filtered contaminates include volatile organic chemicals, chlorine, lead, copper and other heavy metals, TDS (Total Dissolved Solids), and microbiological organisms.

System Features

- 24 Gallons Per Day System
- 2 Gallon Storage Tank
- Quick Connect Fittings
- 95 to 99% TDS Rejection
- Polyamide Membrane
- Membrane Flush System Included
- Fully Assembled
- Made in the USA

Operating Parameters

- Maximum TDS: 2000
- pH Range: 3 to 11
- Inlet Water Pressure: 30 to 90 psi (2 to 5 bar)
- Water Temperature Range: 40 to 95°F (5 to 35°C)
- Maximum Hardness: 15 grains
- Maximum Iron: 1 ppm
- Maximum Chlorine Feed: 2.0 ppm
  (Most municipalities have less than 1.5 ppm chlorine.)

Countertop RO Systems

Part Number	GPD	Unit Dimensions Inches (W x D x H)	Shipping Dimensions Inches (W x D x H)	Shipping Weight Lb (kg)
CTRO24	24	14.5 x 10 x 12	17 x 13 x 15	13 (6)
CTRO24-UV	24	14.5 x 10 x 12	17 x 13 x 15	13 (6)

For international voltages, add $25.00 to list price.

Replacement Parts

Part Number	Description
SWT15001	Ultraviolet Lamp with Plug, 120V
FH-GS10SED-J	Inline 5 Micron Sediment Filter
FH-GS10RO-J	Inline Carbon Filter (2 required per unit)
ED20224	24 GPD Reverse Osmosis Membrane

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1218
EFFECTIVE
SEPTEMBER 2002

REVERSE OSMOSIS

GEMINI™ REVERSE OSMOSIS SYSTEMS



SWT's Gemini Reverse Osmosis System *represents a leap forward in both RO miniaturization and membrane technology. The Gemini RO System is a low pressure, fast production, three or four stage RO system, designed specifically for small businesses, water coolers, and homes. Gemini is capable of producing one gallon of RO product water every twelve minutes (140 gpd). Yet it is compact enough to sit inside a standard water cooler—and smaller than most residential RO systems. The simple mix and match design allows for a variety of system designs to fit your marketplace and local water characteristics. In areas where bacteria is a concern, Safe Water Technologies offers an optional stainless steel ultraviolet purifier.*

- 140 gpd production @ 60 psi
- Up to 125 psi working pressure
- Attractive wall mount/self standing cabinet
- No mounting brackets needed
- Fits inside most standard water coolers
- No-bypass, double o-ring seals on cartridges and membranes
- Standard 4.6 gallon storage tank and long reach faucet
- All hardware included

Part Number	Description	Micron (Nominal)	Reduces...				
			Chlorine @ 2 PPM Influent	Sediment	Lead	Cysts	Bacteria
Gemini Reverse Osmosis Systems							
GEROCC-FP	RO System, 140 gpd with 4 gallon Storage Tank & Faucet	—	5,000 gal.	Yes	Yes	Yes	No
GEROCC-FPU	RO System, 140 gpd with 4 gallon Storage Tank, Faucet, & Ultraviolet Sterilization	—	5,000 gal.	Yes	Yes	Yes	Yes
GEROCC	RO System, 140 gpd without Storage Tank & Faucet	—	5,000 gal.	Yes	Yes	Yes	No
GEROCC-P	RO System, 140 gpd with 4 gallon Storage Tank, without Faucet	—	5,000 gal.	Yes	Yes	Yes	No
Components and Replacement Parts							
GE10005	Spun Polypropylene Cartridge	5	—	Yes	No	No	No
GE20010	Carbon Block Cartridge	10	5,000 gal.	Yes	No	No	No
FH-GS6RO-J	Inline 6 inch Coconut Shell GAC Cartridge with 1/4 inch JG Swivel	5	1,000 gal.	Yes	No	No	No
SWT15001	Ultraviolet Lamp (120 Volt)	—	—	No	No	No	Yes
SWT15013	Ultraviolet Lamp (220 Volt)	—	—	No	No	No	Yes
GERO140	RO Membrane, 140 gpd, TFC	—	—	Yes	Yes	Yes	No

Custom cartridges are available in larger volumes. Contact your SWT representative for details.
For international voltages, add $25.00 to list price.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

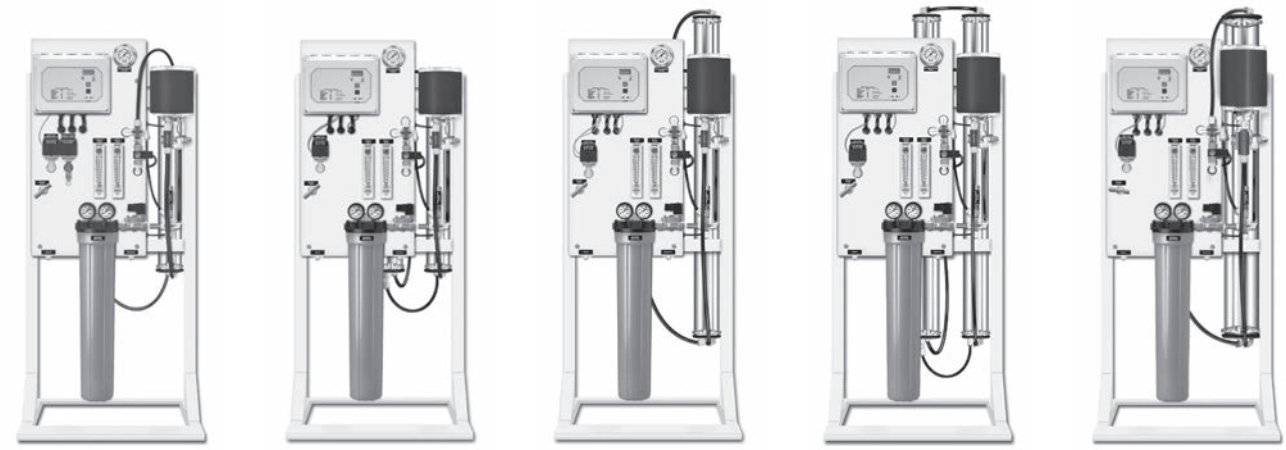
MEMBER Water Quality ASSOCIATION

FORM 1179
EFFECTIVE
DECEMBER 1999

Reverse Osmosis

BLS SERIES, 400 TO 2400 GPD COMMERCIAL RO SYSTEMS

BLS Series RO Systems *are engineered to economically produce high purity water while providing the flexibility to choose system features to meet your application specifications. BLS systems are manufactured using the highest quality components and materials for exceptional performance and reliable operation.*



BLS 400 **BLS 800** **BLS 950** **BLS 1900** **BLS 2400**

BLS 400, 800, 950, 1900, 2400 Features

- 5 micron Sediment Pre-Filtration
- Pentek® 20-inch Slim Line Housing
- Low Feed Water Pressure Safety Switch
- Storage Tank Float Control Connection
- Pretreatment Lockout Connection
- On/Off Standby Switch
- Water Saving Recirculation Loop
- Pre- and Post-Filter Pressure Gauges
- Operating Pressure Gauge
- Feed Water Solenoid Valve
- Fluid-O-Tech™ Rotary Vane Pump
- High Efficiency Carbonator Motor
- Product Water Check Valve
- John Guest® Safety Locking Clips
- 115V, 60Hz, 1-Phase Electrical
- Powder Coated Frame
- Factory Tested for Quality
- Assembled in the USA
- One Year Limited Warranty

Econo Models Include

- Minitrol RO Controller
- Fixed Rejection (50%)
- Manual Membrane Flush

Standard Models Include

- Minitrol RO Controller
- Adjustable Rejection Valve
- Manual Membrane Flush
- Product/Reject Flow Meters

Optimum Models Include

- S-100 RO Controller
- Adjustable Rejection Valve
- Automatic Membrane Flush
- Product & Reject Flow Meters
- Digital TDS Display

Optional Features Include

- 20 inch, 10 micron, Carbon Pre-Filter
- Stainless Steel Pump
- Product Pressure Switch & Relief Valve *
- 220V, 50Hz, 1-Phase
- Export/Domestic Highly Secured Crating
- TDS Digital Monitor

* NOTE: When ordering a BLS Series RO System, the customer must choose between a product water pressure switch (for water storage in a pressurized tank) or a water level float kit (for water storage in an atmospheric tank). See BLS Series Parts List (Form 1259).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1296
EFFECTIVE
AUGUST 2019

REVERSE OSMOSIS

BLS SERIES, 400 TO 2400 GPD
COMMERCIAL RO SYSTEM SPECIFICATIONS

	BLS 400	BLS 800	BLS 950	BLS 1900	BLS 2400
Operating Specifications					
Flow Capacity, GPD *	400	800	950	1,900	2,400
Flow Capacity, GPM *	0.28	0.56	0.66	1.32	1.67
Flow Capacity, LPD *	1,514	3,028	3,596	7,192	9,085
Flow Capacity, LPM *	1.05	2.10	2.50	4.99	6.31
Typical Recovery	50%	50%	50%	50%	50%
Design Rejection Rate	98 to 99%	98 to 99%	98 to 99%	98 to 99%	98 to 99%
Typical Operating Pressure	165 PSI (11.3 Bar)	165 PSI (11.3 Bar)	165 PSI (11.3 Bar)	165 PSI (11.3 Bar)	100 PSI (6.8 Bar)
Nominal Feed Water Flow During Operation	0.56 GPM	1.12 GPM	1.32 GPM	2.64 GPM	3.33 GPM
Nominal Feed Water Flow During System Flush	2.10 GPM	2.10 GPM	4.33 GPM	4.33 GPM	5.33 GPM
Maximum Product Water Back Pressure	50 PSI (3.4 Bar)	50 PSI (3.4 Bar)	50 PSI (3.4 Bar)	50 PSI (3.4 Bar)	50 PSI (3.4 Bar)
Feed Water Parameters					
Temperature Range, °F	40 to 90°F	40 to 90°F	40 to 90°F	40 to 90°F	40 to 90°F
Temperature Range, °C	5 to 30°C	5 to 30°C	5 to 30°C	5 to 30°C	5 to 30°C
Minimum Pressure	20 PSI (1.3 Bar)	20 PSI (1.3 Bar)	20 PSI (1.3 Bar)	20 PSI (1.3 Bar)	20 PSI (1.3 Bar)
Maximum Pressure	85 PSI (5.8 Bar)	85 PSI (5.8 Bar)	85 PSI (5.8 Bar)	85 PSI (5.8 Bar)	85 PSI (5.8 Bar)
Maximum TDS	2,000 PPM	2,000 PPM	2,000 PPM	2,000 PPM	2,000 PPM
Maximum Chlorine Tolerance	0.1 PPM	0.1 PPM	0.1 PPM	0.1 PPM	0.1 PPM
Maximum Hardness	10 GPG (171 PPM)	10 GPG (171 PPM)	10 GPG (171 PPM)	10 GPG (171 PPM)	10 GPG (171 PPM)
Maximum Iron, Dissolved	0.5 PPM	0.5 PPM	0.5 PPM	0.5 PPM	0.5 PPM
Maximum Oil Tolerance	0.0 mg/l	0.0 mg/l	0.0 mg/l	0.0 mg/l	0.0 mg/l
Maximum Silt Index	5	5	5	5	5
Maximum Turbidity	1 NTU	1 NTU	1 NTU	1 NTU	1 NTU
pH Range	3 to 10	3 to 10	3 to 10	3 to 10	3 to 10
Minimum Pre-Filtration	5 Micron	5 Micron	5 Micron	5 Micron	5 Micron
Design Specifications					
Dimensions, Inches	35H x 17W x 14D	35H x 17W x 14D	60H x 18W x 18D	60H x 18W x 18D	60H x 18W x 18D
Weight, Lb	80	90	100	110	110
Feed Water Inlet Connection	3/8" FNPT	3/8" FNPT	1/2" FNPT	1/2" FNPT	1/2" FNPT
Reject Water to Drain Connection	3/8" Tube	3/8" Tube	1/2" Tube	1/2" Tube	1/2" Tube
Product Water to Storage Connection	3/8" Tube	3/8" Tube	1/2" Tube	1/2" Tube	1/2" Tube
Filter Housing, Inches	(1) 20" Slimline	(1) 20" Slimline	(1) 20" Slimline	(1) 20" Slimline	(1) 20" Slimline
Membrane Housings, Inches	(1) 2.5 x 21 SS	(1) 2.5 x 21 SS	(1) 2.5 x 40 SS	(1) 2.5 x 40 SS	(1) 4 x 40 SS
Membrane Elements, Inches	(1) 2.5 x 21 XLE	(1) 2.5 x 21 XLE	(1) 2.5 x 40 XLE	(1) 2.5 x 40 XLE	(1) 4 x 40 XLE
Pump, 60 Hz	Rotary Vane	Rotary Vane	Rotary Vane	Rotary Vane	Rotary Vane
Pump, 50 Hz	Rotary Vane	Rotary Vane	Rotary Vane	Rotary Vane	N/A
Motor, 60 Hz	1/3 HP, 1 Phase	1/3 HP, 1 Phase	3/4 HP, 1 Phase	3/4 HP, 1 Phase	3/4 HP, 1 Phase
Motor, 50 Hz	1/3 HP, 1 Phase	1/3 HP, 1 Phase	3/4 HP, 1 Phase	3/4 HP, 1 Phase	N/A

* System production may vary depending upon incoming water temperature and chemistry. Based on feed water with 500 mg/L NaCl and temperature of 77°F (25°C).

NOTE: If the RO system is used with chlorinated water, a carbon filter is required. BLS systems are designed for use on potable water sources only.

Low Feed Water Pressure Switch: System shuts down at 15 PSI (1.0 Bar) decreasing pressure.
Product Water Pressure Switch: System shuts down at 45 PSI (3.1 Bar) and starts at 25 PSI (1.7 Bar).
Max. System Operating Pressure: 175 PSI (12.1 Bar)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1296
EFFECTIVE
AUGUST 2019

Reverse Osmosis

BLS SERIES, 3,000 TO 9,000 GPD COMMERCIAL RO SYSTEMS

BLS Series RO Systems *are engineered to economically produce high purity water while providing the flexibility to choose system features to meet your application specifications. BLS systems are manufactured using the highest quality components and materials for exceptional performance and reliable operation.*



BLS 3000



BLS 6000



BLS 9000

BLS 3000, 6000, 9000 Features

- 5 micron Sediment Pre-Filtration
- Pentek® 20-inch Slim Line Housing
- Low Feed Water Pressure Safety Switch
- Storage Tank Float Control Connection
- Pretreatment Lockout Connection
- On/Off Standby Switch
- Water Saving Recirculation Loop
- Pre- and Post-Filter Pressure Gauges
- Operating Pressure Gauge
- Feed Water Solenoid Valve
- Sta-Rite® High Pressure Booster Pump
- Product Water Check Valve
- John Guest® Safety Locking Clips
- 230V, 60Hz, 1-Phase Electrical
- Powder Coated Frame
- Factory Tested for Quality
- Assembled in the USA
- One Year Limited Warranty

Econo Models Include

- Minitrol RO Controller
- Fixed Rejection (50%)
- Manual Membrane Flush

Standard Models Include

- S-150 RO Controller
- Adjustable Rejection Valve
- Manual Membrane Flush
- In/Out Pre-Filter Gauges
- Product/Reject Flow Meters
- Digital TDS Display

Optimum Models Include

- S-150 RO Controller
- Adjustable Rejection Valve
- Automatic Membrane Flush
- In/Out Pre-Filter Gauges
- Product/Reject Flow Meters
- Digital TDS Display

Optional Features Include

- 20 inch, 10 micron, Carbon Pre-Filter
- Stainless Steel Pump
- Expanded S-150 RO Controller
- Product Pressure Switch & Relief Valve *
- Export/Domestic Highly Secured Crating
- TDS Digital Monitor
- 220V, 50Hz, 1-Phase
- 120V, 60Hz, 1-Phase
- 460V, 60Hz, 3-Phase

* NOTE: When ordering a BLS Series RO System, the customer must choose between a product water pressure switch (for water storage in a pressurized tank) or a water level float kit (for water storage in an atmospheric tank). See BLS Series Parts List (Form 1259).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1298
EFFECTIVE
AUGUST 2019

REVERSE OSMOSIS

BLS SERIES, 3,000 TO 9,000 GPD
COMMERCIAL RO SYSTEM SPECIFICATIONS

	BLS 3000	BLS 6000	BLS 9000
Operating Specifications			
Flow Capacity, GPD *	3,000	6,000	9,000
Flow Capacity, GPM *	2.08	4.17	6.25
Flow Capacity, LPD *	11,356	22,712	34,068
Flow Capacity, LPM *	7.8	15.8	23.7
Typical Recovery	70%	70%	70%
Design Rejection Rate	98 to 99%	98 to 99%	98 to 99%
Typical Operating Pressure	165 PSI (11.3 Bar)	165 PSI (11.3 Bar)	165 PSI (11.3 Bar)
Nominal Feed Water Flow During Operation	3.15 GPM (11.9 LPM)	6.30 GPM (23.8 LPM)	9.45 GPM (35.7 LPM)
Nominal Feed Water Flow During System Flush	10 GPM (37.8 LPM)	13 GPM (49.2 LPM)	16 GPM (60.5 LPM)
Maximum Product Water Back Pressure	50 PSI (3.4 Bar)	50 PSI (3.4 Bar)	50 PSI (3.4 Bar)
Feed Water Parameters			
Temperature Range, °F	40 to 90°F	40 to 90°F	40 to 90°F
Temperature Range, °C	5 to 30°C	5 to 30°C	5 to 30°C
Minimum Pressure	20 PSI @ 10 GPM	20 PSI @ 10 GPM	35 PSI @ 16 GPM
Maximum Pressure	85 PSI (5.8 Bar)	85 PSI (5.8 Bar)	85 PSI (5.8 Bar)
Maximum TDS	2,000 PPM	2,000 PPM	2,000 PPM
Maximum Chlorine Tolerance	0.1 PPM	0.1 PPM	0.1 PPM
Maximum Hardness	10 GPG (171 PPM)	10 GPG (171 PPM)	10 GPG (171 PPM)
Maximum Iron, Dissolved	0.5 PPM	0.5 PPM	0.5 PPM
Maximum Oil Tolerance	0.0 mg/l	0.0 mg/l	0.0 mg/l
Maximum Silt Index	5	5	5
Maximum Turbidity	1 NTU	1 NTU	1 NTU
pH Range	3 to 10	3 to 10	3 to 10
Minimum Pre-Filtration	5 Micron	5 Micron	5 Micron
Design Specifications			
Dimensions, Inches	61H x 25W x 21D	61H x 25W x 21D	61H x 25W x 21D
Weight, Lb	200	250	300
Feed Water Inlet Connection	3/4" FNPT	3/4" FNPT	3/4" FNPT
Reject Water to Drain Connection	1/2" Tube	1/2" Tube	1/2" Tube
Product Water to Storage Connection	1/2" Tube	1/2" Tube	1/2" Tube
Filter Housing, Inches	(1) 20" Big BLue	(1) 20" Big Blue	(1) 20" Big BLue
Membrane Housings, Inches	(1) 4 x 40 SS	(2) 4 x 40 SS	(3) 4 x 40 SS
Membrane Elements, Inches	(1) 4 x 40 XLE	(2) 4 x 40 XLE	(3) 4 x 40 XLE
Pump, 60 Hz	High Pressure Booster	High Pressure Booster	High Pressure Booster
Pump, 50 Hz	High Pressure Booster	High Pressure Booster	High Pressure Booster
Motor, 60 Hz	3/4 HP, 1 Phase	1 HP, 1 Phase	1.5 HP, 1 Phase
Motor, 50 Hz	1.5 HP, 1 Phase	2 HP, 1 Phase	2 HP, 1 Phase

* System production may vary depending upon incoming water temperature and chemistry. Based on feed water with 500 mg/L NaCl and temperature of 77°F (25°C).

NOTE: If the RO system is used with chlorinated water, a carbon filter is required. BLS systems are designed for use on potable water sources only.

Low Feed Water Pressure Switch: System shuts down at 15 PSI (1.0 Bar) decreasing pressure.
Product Water Pressure Switch: System shuts down at 45 PSI (3.1 Bar) and starts at 25 PSI (1.7 Bar).
Max. System Operating Pressure: 175 PSI (12.1 Bar)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1298
EFFECTIVE
AUGUST 2019

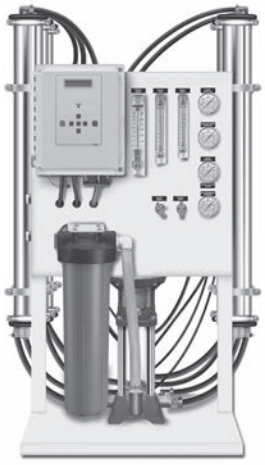
REVERSE OSMOSIS

BLS SERIES, 12,000 TO 18,000 GPD COMMERCIAL RO SYSTEMS

BLS Series RO Systems *are engineered to economically produce high purity water while providing the flexibility to choose system features to meet your application specifications. Units are available as skid mounted, pre-wired, and pre-piped with pre-treatment and post-treatment equipment for a complete water purification package. Skid mounted systems provide maximum efficiency of floor space and reduced installation time and costs.*



BLS 12000



BLS 15000



BLS 18000

BLS 12000, 15000, 18000 Features

- 5 micron Sediment Pre-Filtration
- Pentek® 20-inch Slim Line Housing
- Low Feed Water Pressure Safety Switch
- Storage Tank Float Control Connection
- Pretreatment Lockout Connection
- Digital TDS Monitor
- On/Off Standby Switch
- Product Water Flow Meter
- Reject Water Flow Meter
- Water Recirculation Flow Meter
- Adjustable Reject Water Needle Valve
- Adjustable Water Saving Recirculation Loop
- Pre- and Post-Filter Pressure Gauges
- Operating Pressure Gauge
- Feed Water Solenoid Valve
- Sta-Rite® High Pressure Booster Pump
- Product Water Check Valve
- John Guest® Safety Locking Clips
- 230V, 60Hz, 1-Phase Electrical
- Powder Coated Frame
- Factory Tested for Quality
- Assembled in the USA
- One Year Limited Warranty

Standard Models Include

- S-150 RO Controller
- Manual Membrane Flush

Optimum Models Include

- S-150 RO Controller
- Automatic Membrane Flush
- Post-Membrane Pressure Gauge

Optional Features Include

- Product Pressure Switch & Relief Valve *
- Stainless Steel Pump
- Expanded S-150 RO Controller
- 230V, 60Hz, 1-Phase
- 230V, 60Hz, 3-Phase
- TDS Digital Monitor
- 460V, 60Hz, 3-Phase
- 380V, 50Hz, 3-Phase

* NOTE: When ordering a BLS Series RO System, the customer must choose between a product water pressure switch (for water storage in a pressurized tank) or a water level float kit (for water storage in an atmospheric tank). See BLS Series Parts List (Form 1259).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1299
EFFECTIVE
AUGUST 2019

REVERSE OSMOSIS

BLS SERIES, 12,000 TO 18,000 GPD
COMMERCIAL RO SYSTEM SPECIFICATIONS

	BLS 12000	BLS 15000	BLS 18000
Operating Specifications			
Flow Capacity, GPD *	12,000	15,000	18,000
Flow Capacity, GPM *	8.33	10.42	12.50
Flow Capacity, LPD *	45,425	56,781	68,137
Flow Capacity, LPM *	31.5	39.4	43.3
Typical Recovery	75%	75%	75%
Design Rejection Rate	98 to 99%	98 to 99%	98 to 99%
Typical Operating Pressure	165 PSI (11.3 Bar)	165 PSI (11.3 Bar)	165 PSI (11.3 Bar)
Nominal Feed Water Flow During Operation	11 GPM (41.6 LPM)	14 GPM (52.9 LPM)	17 GPM (64.3 LPM)
Nominal Feed Water Flow During System Flush	18 GPM (68.1 LPM)	32 GPM (121.1 LPM)	36 GPM (136.2 LPM)
Maximum Product Water Back Pressure	50 PSI (3.4 Bar)	50 PSI (3.4 Bar)	50 PSI (3.4 Bar)
Feed Water Parameters			
Temperature Range, °F	40 to 90°F	40 to 90°F	40 to 90°F
Temperature Range, °C	5 to 30°C	5 to 30°C	5 to 30°C
Minimum Pressure	35 PSI @ 18 GPM	35 PSI @ 32 GPM	35 PSI @ 36 GPM
Maximum Pressure	85 PSI (5.8 Bar)	85 PSI (5.8 Bar)	85 PSI (5.8 Bar)
Maximum TDS	2,000 PPM	2,000 PPM	2,000 PPM
Maximum Chlorine Tolerance	0.1 PPM	0.1 PPM	0.1 PPM
Maximum Hardness	10 GPG (171 PPM)	10 GPG (171 PPM)	10 GPG (171 PPM)
Maximum Iron, Dissolved	0.5 PPM	0.5 PPM	0.5 PPM
Maximum Oil Tolerance	0.0 mg/l	0.0 mg/l	0.0 mg/l
Maximum Silt Index	5	5	5
Maximum Turbidity	1 NTU	1 NTU	1 NTU
pH Range	3 to 10	3 to 10	3 to 10
Minimum Pre-Filtration	5 Micron	5 Micron	5 Micron
Design Specifications			
Dimensions, Inches	60H x 24W x 30D	60H x 24W x 30D	60H x 24W x 30D
Weight, Lb	450	525	600
Feed Water Inlet Connection	1" FNPT	1" FNPT	1" FNPT
Reject Water to Drain Connection	3/4" FNPT	3/4" FNPT	3/4" FNPT
Product Water to Storage Connection	3/4" FNPT	3/4" FNPT	3/4" FNPT
Filter Housing, Inches	(1) 20" Big Blue	(1) 20" Big Blue	(1) 20" Big Blue
Membrane Housings, Inches	(4) 4 x 40 SS	(5) 4 x 40 SS	(6) 4 x 40 SS
Membrane Elements, Inches	(4) 4 x 40 XLE	(5) 4 x 40 XLE	(6) 4 x 40 XLE
Standard Pump, 60 Hz	High Pressure Booster	High Pressure Booster	High Pressure Booster
Optimum Pump, 60 Hz	Vertical Centrifugal	Vertical Centrifugal	Vertical Centrifugal
Standard Pump, 50 Hz	Vertical Centrifugal	Vertical Centrifugal	Vertical Centrifugal
Optimum Pump, 50 Hz	Vertical Centrifugal	Vertical Centrifugal	Vertical Centrifugal
Standard Motor, 60 Hz	1.5 HP, 1 Phase	2 HP, 1 Phase	3 HP, 1 Phase
Optimum Motor, 60 Hz	3 HP, 3 Phase	3 HP, 3 Phase	3 HP, 3 Phase
Standard Motor, 50 Hz	3 HP, 3 Phase	4 HP, 3 Phase	4 HP, 3 Phase
Optimum Motor, 50 Hz	3 HP, 3 Phase	4 HP, 3 Phase	4 HP, 3 Phase

* System production may vary depending upon incoming water temperature and chemistry. Based on feed water with 500 mg/L NaCl and temperature of 77°F (25°C).

NOTE: If the RO system is used with chlorinated water, a carbon filter is required. BLS systems are designed for use on potable water sources only.

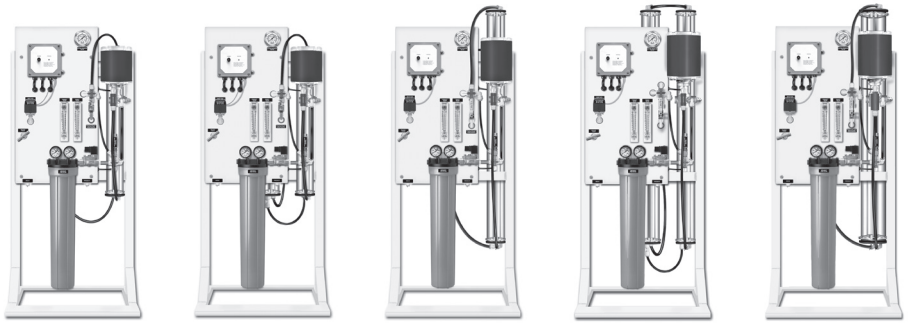
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1299
EFFECTIVE
AUGUST 2019

REVERSE OSMOSIS

BLS SERIES 400 TO 2,400 GPD COMMERCIAL RO SYSTEMS



BLS 400 | BLS 800 | BLS 950 | BLS 1900 | BLS 2400

BLS 400 – 2400 Systems — Must choose Product Water Pressure Switch or Water Level Float Kit (See next page).

Part Number	Model	Flow Capacity *		Electrical Requirement		
		GPD	LPD	Voltage	Hertz	Phase
RG-939004000	BLS 400 Econo	400	1,514	115 V	60 Hz	1 Ph
RG-939004006	BLS 400 Standard	400	1,514	115 V	60 Hz	1 Ph
RG-939004007	BLS 400 Optimum	400	1,514	115 V	60 Hz	1 Ph
RG-939004001	BLS 400 Econo	400	1,514	220 V	50 Hz	1 Ph
RG-939004005	BLS 400 Standard	400	1,514	220 V	50 Hz	1 Ph
RG-939004008	BLS 400 Optimum	400	1,514	220 V	50 Hz	1 Ph
RG-939008000	BLS 800 Econo	800	3,028	115 V	60 Hz	1 Ph
RG-939008006	BLS 800 Standard	800	3,028	115 V	60 Hz	1 Ph
RG-939008007	BLS 800 Optimum	800	3,028	115 V	60 Hz	1 Ph
RG-939008001	BLS 800 Econo	800	3,028	220 V	50 Hz	1 Ph
RG-939008005	BLS 800 Standard	800	3,028	220 V	50 Hz	1 Ph
RG-939008008	BLS 800 Optimum	800	3,028	220 V	50 Hz	1 Ph
RG-939009500	BLS 950 Econo	950	3,596	115 V	60 Hz	1 Ph
RG-939009506	BLS 950 Standard	950	3,596	115 V	60 Hz	1 Ph
RG-939009507	BLS 950 Optimum	950	3,596	115 V	60 Hz	1 Ph
RG-939009501	BLS 950 Econo	950	3,596	220 V	50 Hz	1 Ph
RG-939009505	BLS 950 Standard	950	3,596	220 V	50 Hz	1 Ph
RG-939009508	BLS 950 Optimum	950	3,596	220 V	50 Hz	1 Ph
RG-939019000	BLS 1900 Econo	1,900	7,192	115 V	60 Hz	1 Ph
RG-939019006	BLS 1900 Standard	1,900	7,192	115 V	60 Hz	1 Ph
RG-939019007	BLS 1900 Optimum	1,900	7,192	115 V	60 Hz	1 Ph
RG-939019001	BLS 1900 Econo	1,900	7,192	220 V	50 Hz	1 Ph
RG-939019005	BLS 1900 Standard	1,900	7,192	220 V	50 Hz	1 Ph
RG-939019008	BLS 1900 Optimum	1,900	7,192	220 V	50 Hz	1 Ph
RG-939024006	BLS 2400 Standard	2,400	9,085	115 V	60 Hz	1 Ph
RG-939024007	BLS 2400 Optimum	2,400	9,085	115 V	60 Hz	1 Ph

* Based on feed water with 500 mg/L NaCl and temperature of 25°C (77°F). Minimum membrane element salt rejection is 95% to 99%.

To properly function, all BLS Series RO Systems require either: A) a product water pressure switch (for pressurized storage tanks), or B) a water level float kit (for atmospheric water tanks).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1259
EFFECTIVE
AUGUST 2019

BLS SERIES 400 TO 2,400 GPD COMMERCIAL RO SYSTEMS

BLS 400 – 2400 Product Water Pressure Switch & Water Level Float Kits — Must choose from the following when ordering.

Description	Part Number				
	BLS 400	BLS 800	BLS 950	BLS 1900	BLS 2400
Product Water Pressure Switch with Relief Valve for Pressure Tanks	RG-93919-4	RG-93919-8	RG-93919-9	RG-93919-19	RG-93919-24
Water Level Float Kit for Atmospheric Tanks — 60 Hz Units *	RG-0050207	RG-0050207	RG-0050209	RG-0050209	RG-0050209
Water Level Float Kit for Atmospheric Tanks — 50 Hz Units *	RG-0050207	RG-0050207	RG-0050207	RG-0050207	N/A

* FDA Approved Floats.

BLS 400 – 2400 Optional Features & Accessories

Description	Part Number				
	BLS 400	BLS 800	BLS 950	BLS 1900	BLS 2400
Carbon Pre-filter, 20 inch Housing with 10 Micron Carbon Block	RG-93901	RG-93901	RG-93902	RG-93902	RG-93902
TDS In-line Monitor with Red & Green Light	RG-075019	RG-075019	RG-075019	RG-075019	RG-075019
Stainless Steel Pump — 60 Hz Units	RG-93912-4	RG-93912-8	RG-93912-9	RG-93912-19	RG-93912-24
Stainless Steel Pump — 50 Hz Units	RG-93913-4	RG-93913-8	RG-93913-9	RG-93913-19	N/A
Stainless Steel Frame	RG-93915-4	RG-93915-8	RG-93915-9	RG-93915-19	RG-93915-24
Domestic/Export Crating	RG-93914-4	RG-93914-8	RG-93914-9	RG-93914-19	RG-93914-24

A variety of ultraviolet/carbon post-filters are available. Contact your SWT representative for more details and options.

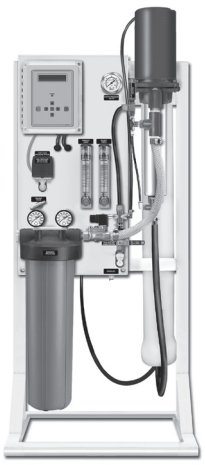
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1259
EFFECTIVE
AUGUST 2019

REVERSE OSMOSIS

BLS SERIES 3,000 TO 9,000 GPD COMMERCIAL RO SYSTEMS



BLS 3000



BLS 6000



BLS 9000

BLS 3000 – 9000 Systems — Must choose Product Water Pressure Switch or Water Level Float Kit (See next page).

Part Number	Model	Flow Capacity *		Electrical Requirement		
		GPD	LPD	Voltage	Hertz	Phase
RG-939030000	BLS 3000 Econo	3,000	11,356	230 V	60 Hz	1 Ph
RG-939030006	BLS 3000 Standard	3,000	11,356	230 V	60 Hz	1 Ph
RG-939030007	BLS 3000 Optimum	3,000	11,356	230 V	60 Hz	1 Ph
RG-939030009	BLS 3000 Optimum	3,000	11,356	460 V	60 Hz	3 Ph
RG-939030001	BLS 3000 Econo	3,000	11,356	220 V	50 Hz	1 Ph
RG-939030005	BLS 3000 Standard	3,000	11,356	220 V	50 Hz	1 Ph
RG-939030008	BLS 3000 Optimum	3,000	11,356	220 V	50 Hz	1 Ph
RG-939060000	BLS 6000 Econo	6,000	22,712	230 V	60 Hz	1 Ph
RG-939060006	BLS 6000 Standard	6,000	22,712	230 V	60 Hz	1 Ph
RG-939060007	BLS 6000 Optimum	6,000	22,712	230 V	60 Hz	1 Ph
RG-939060009	BLS 6000 Optimum	6,000	22,712	460 V	60 Hz	3 Ph
RG-939060001	BLS 6000 Econo	6,000	22,712	220 V	50 Hz	1 Ph
RG-939060005	BLS 6000 Standard	6,000	22,712	220 V	50 Hz	1 Ph
RG-939060008	BLS 6000 Optimum	6,000	22,712	220 V	50 Hz	1 Ph
RG-939090000	BLS 9000 Econo	9,000	34,068	230 V	60 Hz	1 Ph
RG-939090006	BLS 9000 Standard	9,000	34,068	230 V	60 Hz	1 Ph
RG-939090007	BLS 9000 Optimum	9,000	34,068	230 V	60 Hz	1 Ph
RG-939090009	BLS 9000 Optimum	9,000	34,068	460 V	60 Hz	3 Ph
RG-939090001	BLS 9000 Econo	9,000	34,068	220 V	50 Hz	1 Ph
RG-939090005	BLS 9000 Standard	9,000	34,068	220 V	50 Hz	1 Ph
RG-939090008	BLS 9000 Optimum	9,000	34,068	220 V	50 Hz	1 Ph

* Based on feed water with 500 mg/L NaCl and temperature of 25°C (77°F). Minimum membrane element salt rejection is 95% to 99%.

To properly function, all BLS Series RO Systems require either: A) a product water pressure switch (for pressurized storage tanks), or B) a water level float kit (for atmospheric water tanks).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1260
EFFECTIVE
AUGUST 2019

BLS SERIES 3,000 TO 9,000 GPD COMMERCIAL RO SYSTEMS

BLS 3000 – 9000 Product Water Pressure Switch & Water Level Float Kits — Must choose from the following when ordering.

Description	Part Number		
	BLS 3000	BLS 6000	BLS 9000
Product Water Pressure Switch with Relief Valve for Pressure Tanks	RG-93919-30	RG-93919-60	RG-93919-90
Water Level Float Kit for Atmospheric Tanks — 60 Hz Units *	RG-0050207	RG-0050207	RG-0050209
Water Level Float Kit for Atmospheric Tanks — 50 Hz Units *	RG-0050209	RG-0050209	RG-0050209

* FDA Approved Floats.

BLS 3000 – 9000 Optional Features & Accessories

Description	Part Number		
	BLS 3000	BLS 6000	BLS 9000
Clean-In-Place (CIP) Port Connections	RG-93920-30	RG-93920-60	RG-93920-90
Stainless Steel Pump — 60 Hz Units	RG-93912-30	RG-93912-60	RG-93912-90
Stainless Steel Pump — 50 Hz Units	RG-93913-30	RG-93913-60	RG-93913-90
Stainless Steel Frame	RG-93915-30	RG-93915-60	RG-93915-90
Domestic/Export Crating	RG-93914-30	RG-93914-60	RG-93914-90

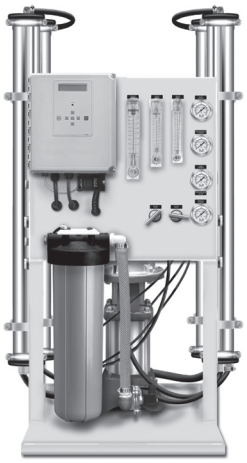
A variety of ultraviolet/carbon post-filters are available. Contact your SWT representative for more details and options.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

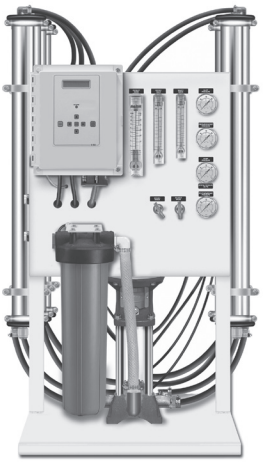
MEMBER Water Quality ASSOCIATION

FORM 1260
EFFECTIVE
AUGUST 2019

BLS SERIES 12,000 TO 18,000 GPD COMMERCIAL RO SYSTEMS



BLS 12000



BLS 15000



BLS 18000

BLS 12000 – 18000 Systems — Must choose Product Water Pressure Switch or Water Level Float Kit (See next page).

Part Number	Model	Flow Capacity *		Electrical Requirement		
		GPD	LPD	Voltage	Hertz	Phase
RG-939120006	BLS 12000 Standard	12,000	45,425	230 V	60 Hz	1 Ph
RG-939120009	BLS 12000 Standard	12,000	45,425	460 V	60 Hz	3 Ph
RG-939120004	BLS 12000 Optimum	12,000	45,425	230 V	60 Hz	1 Ph
RG-939120007	BLS 12000 Optimum	12,000	45,425	230 V	60 Hz	3 Ph
RG-939120003	BLS 12000 Optimum	12,000	45,425	460 V	60 Hz	3 Ph
RG-939120005	BLS 12000 Standard	12,000	45,425	380 V	50 Hz	3 Ph
RG-939120008	BLS 12000 Optimum	12,000	45,425	380 V	50 Hz	3 Ph
RG-939150006	BLS 15000 Standard	15,000	56,781	230 V	60 Hz	1 Ph
RG-939150009	BLS 15000 Standard	15,000	56,781	460 V	60 Hz	3 Ph
RG-939150004	BLS 15000 Optimum	15,000	56,781	230 V	60 Hz	1 Ph
RG-939150007	BLS 15000 Optimum	15,000	56,781	230 V	60 Hz	3 Ph
RG-939150003	BLS 15000 Optimum	15,000	56,781	460 V	60 Hz	3 Ph
RG-939150005	BLS 15000 Standard	15,000	56,781	380 V	50 Hz	3 Ph
RG-939150008	BLS 15000 Optimum	15,000	56,781	380 V	50 Hz	3 Ph
RG-939180006	BLS 18000 Standard	18,000	68,137	230 V	60 Hz	1 Ph
RG-939180009	BLS 18000 Standard	18,000	68,137	460 V	60 Hz	3 Ph
RG-939180004	BLS 18000 Optimum	18,000	68,137	230 V	60 Hz	1 Ph
RG-939180007	BLS 18000 Optimum	18,000	68,137	230 V	60 Hz	3 Ph
RG-939180003	BLS 18000 Optimum	18,000	68,137	460 V	60 Hz	3 Ph
RG-939180005	BLS 18000 Standard	18,000	68,137	380 V	50 Hz	3 Ph
RG-939180008	BLS 18000 Optimum	18,000	68,137	380 V	50 Hz	3 Ph

* Based on feed water with 500 mg/L NaCl and temperature of 25°C (77°F). Minimum membrane element salt rejection is 95% to 99%.

To properly function, all BLS Series RO Systems require either: A) a product water pressure switch (for pressurized storage tanks), or B) a water level float kit (for atmospheric water tanks).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1261
EFFECTIVE
AUGUST 2019

BLS SERIES 12,000 TO 18,000 GPD COMMERCIAL RO SYSTEMS

BLS 12000 – 18000 Product Water Pressure Switch & Water Level Float Kits — Must choose from the following when ordering.

Description	Part Number		
	BLS 12000	BLS 15000	BLS 18000
Product Water Pressure Switch with Relief Valve for Pressure Tanks	RG-93919-120	RG-93919-150	RG-93919-180
Water Level Float Kit for Atmospheric Tanks — 60 Hz Units, Standard Models *	RG-0050209	RG-0050209	N/A
Water Level Float Kit for Atmospheric Tanks — 50 Hz Units *	N/A	N/A	N/A

* FDA Approved Floats.

BLS 12000 – 18000 Optional Features & Accessories

Description	Part Number		
	BLS 12000	BLS 15000	BLS 18000
Clean-In-Place (CIP) Port Connections	RG-93920-120	RG-93920-150	RG-93920-180
Stainless Steel Pump — 60 Hz Units	RG-93912-120	RG-93912-150	RG-93912-180
Stainless Steel Pump — 50 Hz Units	RG-93913-120	RG-93913-150	RG-93913-180
Stainless Steel Frame	RG-93915-120	RG-93915-150	RG-93915-180
Domestic/Export Crating ***(Required)***	RG-93914-120	RG-93914-150	RG-93914-180

A variety of ultraviolet/carbon post-filters are available. Contact your SWT representative for more details and options.

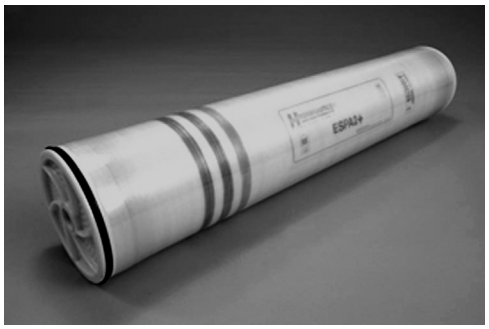
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

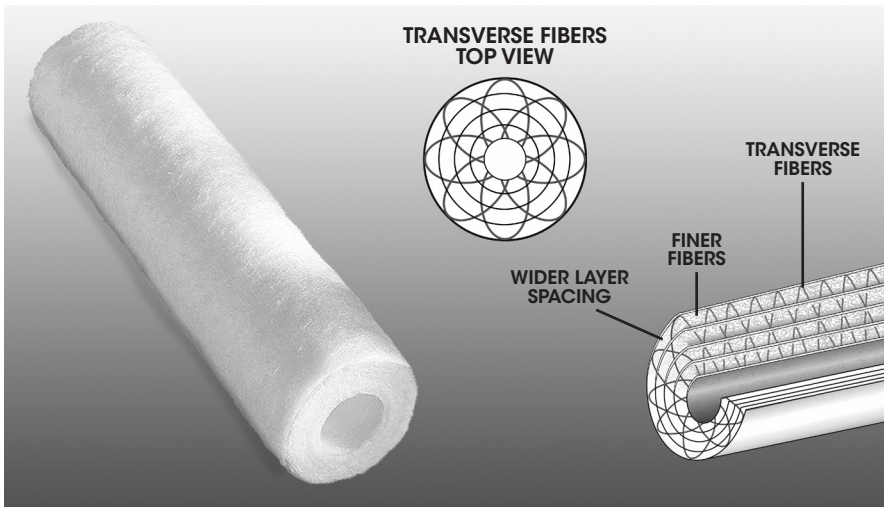
FORM 1261
EFFECTIVE
AUGUST 2019

Reverse Osmosis

BLS SERIES 3,000 TO 18,000 GPD RO SYSTEMS REPLACEMENT PARTS



Reverse Osmosis Membrane



System-Guard™ Spun Polypropylene Graded Density Cartridge

Replacement Parts for BLS 400 – 2400 Systems

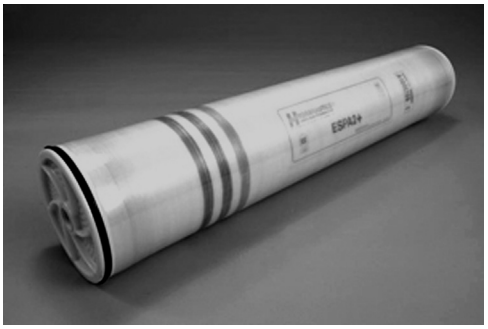
Part Number	Description	Quantity per Unit	Size Inches
BLS 400 Systems			
RG-7030252101	400 GPD Reverse Osmosis Membrane	1	2.5 x 21
SO72001	Pre-filter Sediment Cartridge — System-Guard™ Spun Polypropylene, Graded Density to 1 micron	1	2.5 x 20
BLS 800 Systems			
RG-7030252101	400 GPD Reverse Osmosis Membrane	2	2.5 x 21
SO72001	Pre-filter Sediment Cartridge — System-Guard™ Spun Polypropylene, Graded Density to 1 micron	1	2.5 x 20
BLS 950 Systems			
RG-7030254002	900 GPD Reverse Osmosis Membrane	1	2.5 x 40
SO72001	Pre-filter Sediment Cartridge — System-Guard™ Spun Polypropylene, Graded Density to 1 micron	1	2.5 x 20
BLS 1900 Systems			
RG-7030254002	900 GPD Reverse Osmosis Membrane	2	2.5 x 40
SO72001	Pre-filter Sediment Cartridge — System-Guard™ Spun Polypropylene, Graded Density to 1 micron	1	2.5 x 20
BLS 2400 Systems			
RG-7030404005	3000 GPD Reverse Osmosis Membrane	1	4 x 40
SO72001	Pre-filter Sediment Cartridge — System-Guard™ Spun Polypropylene, Graded Density to 1 micron	1	2.5 x 20

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

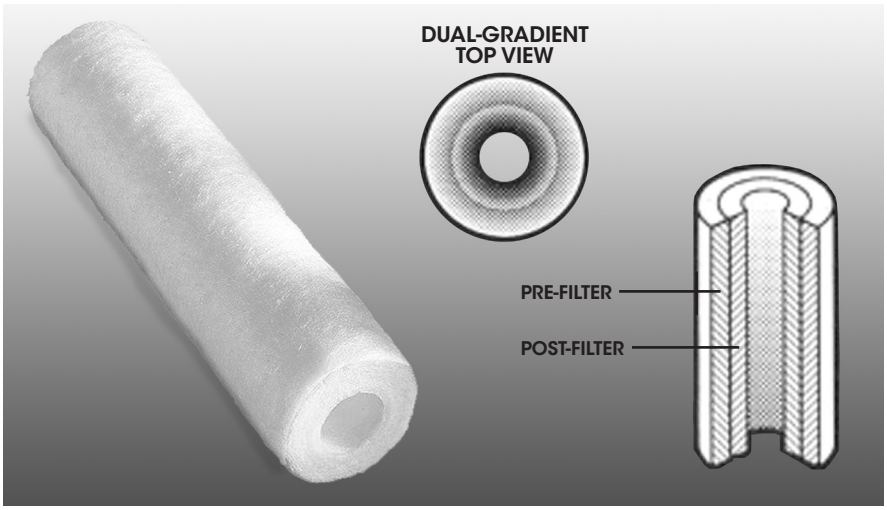
MEMBER Water Quality ASSOCIATION

FORM 1262
EFFECTIVE
AUGUST 2023

BLS SERIES 3,000 TO 18,000 GPD RO SYSTEMS REPLACEMENT PARTS



Reverse Osmosis Membrane



System-Guard™ Spun Polypropylene Dual-Gradient Cartridge

Replacement Parts for BLS 3000 – 18000 Systems

Part Number	Description	Quantity per Unit	Size Inches
BLS 3000 Systems			
RG-7030404005	3000 GPD Reverse Osmosis Membrane	1	4 x 40
SO72005-BB	Pre-filter Sediment Cartridge — System-Guard™ Spun Polypropylene, Dual-Gradient from 50 to 5 micron	1	4.5 x 20
BLS 6000 Systems			
RG-7030404005	3000 GPD Reverse Osmosis Membrane	2	4 x 40
SO72005-BB	Pre-filter Sediment Cartridge — System-Guard™ Spun Polypropylene, Dual-Gradient from 50 to 5 micron	1	4.5 x 20
BLS 9000 Systems			
RG-7030404005	3000 GPD Reverse Osmosis Membrane	3	4 x 40
SO72005-BB	Pre-filter Sediment Cartridge — System-Guard™ Spun Polypropylene, Dual-Gradient from 50 to 5 micron	1	4.5 x 20
BLS 12000 Systems			
RG-7030404005	3000 GPD Reverse Osmosis Membrane	4	4 x 40
SO72005-BB	Pre-filter Sediment Cartridge — System-Guard™ Spun Polypropylene, Dual-Gradient from 50 to 5 micron	1	4.5 x 20
BLS 15000 Systems			
RG-7030404005	3000 GPD Reverse Osmosis Membrane	5	4 x 40
SO72005-BB	Pre-filter Sediment Cartridge — System-Guard™ Spun Polypropylene, Dual-Gradient from 50 to 5 micron	1	4.5 x 20
BLS 18000 Systems			
RG-7030404005	3000 GPD Reverse Osmosis Membrane	6	4 x 40
SO72005-BB	Pre-filter Sediment Cartridge — System-Guard™ Spun Polypropylene, Dual-Gradient from 50 to 5 micron	1	4.5 x 20

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1262
EFFECTIVE
AUGUST 2023

COMMERCIAL RO SYSTEM OPTIONS

Recirculation System

All RO membrane elements require a minimum concentrate flow out of the membrane element, i.e., 3 gpm for a 4 inch diameter membrane element. Without recirculation, this amount of water must completely go to drain. With the recirculation system, a fixed amount of water (equal to the design capacity of the system) is sent to the drain and the remainder is recycled into the feed to the membrane element thereby conserving water. This option is standard on most of our RO systems

Low Feed Pressure Control Switch

The low pressure protection switch is installed on the outlet side of the system prefilter(s). It is a safety protection device to protect the high pressure pump from running dry by electrically shutting down the RO system if the water pressure after the prefilter(s) drops less than 10 psi. The RO will automatically restart if the pressure rises above 15 psi. Initial start-up of the high pressure pump creates an instantaneous high demand for water. If the inlet pressure is marginal, the ROunit could attempt to start and then shut-down because of low pressure. The pressure will then rise, the unit will attempt to start again, and shut-down again. This cycle could repeat itself many times. This usually results in damage to the high pressure pump and/or motor. It is important to have adequate incoming pressure (> 30 psi) and adequately sized feed piping to the RO unit. We recommend the feed piping to the RO unit be at least the same size as the inlet connection, but we would prefer that it be one size larger. For instance, the inlet connection on a BLS 1900 RO unit is 1/2 inch NPTF. The inlet piping should be at least 1/2 inch pipe but preferably 3/4 inch pipe. This option is standard on most of our RO systems.

Carbon Block Prefilter

The carbon block prefilter is used for two purposes. TFC and High Flow membranes are manufactured from a material that is chemically attacked by chlorine and other oxidizing agents. Activated carbon removes the chlorine from the feed water to the system. Activated carbon also removes some organics and can improve taste and odor.

Feed Water Pressure Gauges

The feed water pressure gauge is installed on the inlet side of the system prefilter(s). It measures the pressure of the feed water before it enters the system. When used in conjunction with the filter pressure gauge, it can be used to calculate the pressure drop across the system prefilter(s). When the pressure drop reaches 12 psi higher than the pressure drop across the new clean filter cartridge(s), it is time to replace the filter cartridge(s).

Filter Pressure Gauge

The filter pressure gauge is installed on the outlet side of the system prefilter(s). It measures the pressure of the feed water after the system prefilter(s). This is the pressure that is seen by the low feed pressure control switch. When used in conjunction with the feed water pressure gauge, it can be used to calculate the pressure drop across the system prefilter(s). When the pressure drop reaches 12 psi higher than the pressure drop across the new clean filter cartridge(s), it is time to replace the filter cartridge(s).

Product Water Control Switch

If you are storing the system product water in a pressurized storage tank, the product water control switch will automatically stop the system when the tank pressure reaches 40 psi and restarts the system when the pressure reaches 20 psi. It can also be used as a safety switch if the product water line is blocked, i.e., a valve is closed. The reason this is important is that the RO membrane is supported in the direction of normal flow to withstand the high pressure required to produce product water but it is not supported in the reverse direction. Excessive pressure on the product side of the membrane could cause the membrane to rupture resulting in high product flow and TDS.

Product Pressure Relief Valve

The product pressure relief valve is a mechanical safety relief valve which will release excessive pressure if the product water line is blocked, i.e., a valve is closed. The reason this is important is that the RO membrane is supported in the direction of normal flow to withstand the high pressure required to produce product water but it is not supported in the reverse direction. Excessive pressure on the product side of the membrane could cause the membrane to rupture resulting in high product flow and TDS.

Stainless Steel Pressure Vessels

Stainless steel pressure vessels are replacements for the standard PVC pressure vessels on most systems. They are usually selected for aesthetic reasons since the standard PVC pressure vessels have a working pressure rating of 230 psi.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1263
EFFECTIVE
DECEMBER 2000

COMMERCIAL RO SYSTEM OPTIONS

Product & Reject Water Flowmeters

The basic design of a majority of our RO systems is a fixed orifice reject flow controller which is rated at the system theoretical product output, i.e., a BLS 400 has a 400 gpd reject flow controller. The actual product output of any RO system is dependent on many factors—including feed water TDS, feed water temperature, and product water back pressure. To conserve water usage, the reject water can be regulated to the same flow rate as the product output while increasing the amount of recirculation. By installing a product flowmeter, you can directly read the actual amount of product being produced. By replacing the reject flow controller with a reject flowmeter and valve, you can regulate the reject flow to be equal to the product flow.

TDS Inline Monitor

On our smaller systems, we offer a TDS inline monitor. It is a monitor which has eight different TDS dip switch settings. You select the visual alarm point. It is battery operated. There is a push button on the face of the monitor that, when pushed, activates the monitor. If the product water TDS is less than the set point, a **GREEN** light illuminates. If the product water TDS is more than the set point, a **RED** light illuminates.

TDS Analog Meter

On our larger systems, we offer a TDS analog meter. It is powered from the system control circuitry and provides a constant analog read out of the product TDS while the system is operating.

TDS Digital Meter

On our larger systems, we also offer a TDS digital meter. It is powered from the system control circuitry and provides a constant digital read out of the product TDS while the system is operating. You can set an exact alarm set-point. A **GREEN** light is continuously illuminated when the product water TDS is below the set-point or a **RED** light is continuously illuminated when it is above the set-point. It also has dry (non-powered) N.O. and N.C. contacts which could be used for an external alarm if you so desire.

Manual Flush System

A periodic increase of the flow rate past the membrane increases the turbulence on the membrane surface which can help prevent membrane element fouling. By opening the manual flush system ball valve for as few as five minutes once per week, you may increase the life of the membrane element. This option is standard on most of our RO systems.

Automatic Flush System

A periodic increase of the flow rate past the membrane increases the turbulence on the membrane surface which can help prevent membrane element fouling. Setting the auto flush timer is as simple as pushing a few buttons. You simply set the correct time and then select Monday-Friday, Saturday-Sunday, Monday-Sunday, or any single day for the number of times per week you would like the RO system to automatically flush. You can then select from one to six times per day for that flush to occur and finally you decide the length of time for the flush. Care should be taken to try to select a time when the RO system will most likely not be operating. The auto flush timer will automatically open the auto flush solenoid valve on the day, at the time, and for the duration you programmed.

Time Delay Air Purge

When RO systems do not operate for long periods of time, the system can drain, allowing air to replace the water. Almost all of our systems have recirculation of reject water as a part of the standard design. If air is in the system, this air is recirculated through the system and can cause damage to the pump and membrane element. The time delay air purge is an adjustable timer (or timer with delay) which can be easily set to delay the start-up of the system high pressure pump for a period of time (usually one minute) after the inlet solenoid valve opens to fill the system with water before the high pressure pump starts.

Tank Level Float Control

If the product water is going to be stored in an atmospheric storage tank, some type of level switch is required to stop the RO system when the tank is full or the storage tank will overflow. The tank level float control is a mechanically-activated, wide-angle, normally-closed, float switch which is easily installed and can be adjusted to activate in as little as 3 inches or as much as 22 inches of tank height.

Low Level Float Cut-Out Switch

Running dry can damage most centrifugal pumps. The low level float cut-out switch is a mechanically-activated, wide-angle, normally-open, float switch which is easily installed and can be adjusted to activate in as little as 3 inches or as much as 22 inches of tank height to stop a re-pressurization pump before the tank is empty.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

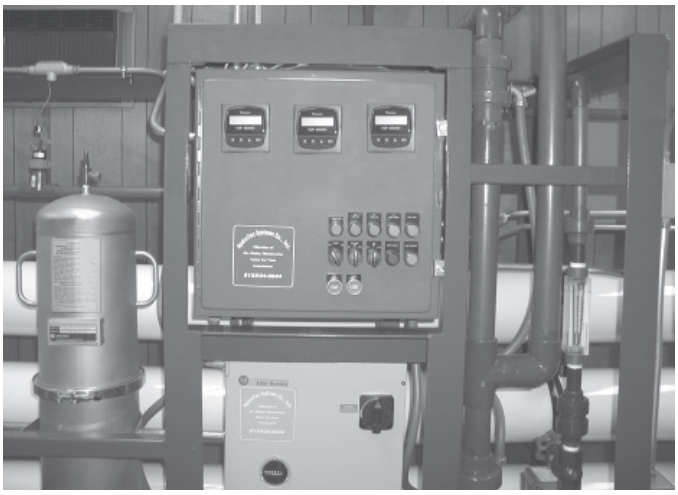
FORM 1263
EFFECTIVE
DECEMBER 2000

COMMERCIAL RO SYSTEMS

BRACKISH WATER, RIVER INTAKE AND SEAWATER INTRUSION SYSTEMS
(NOMINAL 6,500 TDS DESIGN)

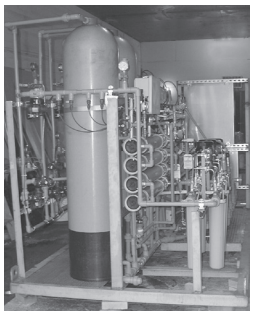
Standard Features

- Energy efficient, high flow membranes
- 5 micron sediment pre-filter
- Allen-Bradley programmable controller
- Liquid level float with auto shut-off
- Auto-flush system
- Pre- and post-filter, feed, concentrate, and product water pressure gauges
- Visual inline flow meters
- Low pressure feed water switch
- Victaulic style 304 stainless steel housing connections
- Low pressure alarm capable
- Motor starter with safety disconnect



Optional Features

- 2 m³d field portable system with gas or diesel powered generator
- Digital permeate TDS meter
- Automatic antiscalant dosing system
- Automatic or manual pH control dosing system
- Ethernet communication upgrade for the controller
- Digital permeate and concentrate flow meters with low level alarms
- Digital supply and concentrate pressure gauges with high level alarms
- Clean-in-place membrane maintenance station
- System shutdown during permeate flush
- Stainless steel wetted parts for liquid end of pump
- Step-down transformer from 3 phase to single phase
- Available in all international voltages



Operating Parameters

Operating Pressure	250 to 450 psi
Min. Supply Pressure	15 psi
Max. Temperature	113°F (45°C)
Nominal TDS	6,500 ppm
Max. Inlet Free Chlorine	< 0.1 ppm

Specifications

Membrane Housings	High pressure, fiberglass reinforced plastic membrane housings
Frame	Structural fiberglass and aluminum
Controller Power Requirements	120V/60Hz/1Ph
Motor Power Requirements	230–460V/60Hz/3Ph
Pumps (HTS-2 to HTS-20)	Rotary vain pump with brass head and Buna diaphragm
(HTS-28 to HTS-82)	Multi-stage centrifugal pump with stainless steel wetted parts and Viton seals

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1287
EFFECTIVE
JULY 2003

COMMERCIAL RO SYSTEMS

BRACKISH WATER, RIVER INTAKE AND SEAWATER INTRUSION SYSTEMS

	HTS-2-B	HTS-4-B	HTS-8-B	HTS-12-B	HTS-20-B	HTS-28-B	HTS-38-B	HTS-57-B	HTS-82-B
Actual Permeate (m^3d / gpd)	2 / 528	4 / 1056	8 / 2114	12 / 3170	20 / 5284	28.4 / 7503	38 / 10,040	57 / 15,060	82 / 21,664
Nominal Size (m^3d / gpd)	4.5 / 1200	4.5 / 1200	9.1 / 2400	18.2 / 4800	27.3 / 7200	36.3 / 9600	40.9 / 10,800	67 / 17,700	89.3 / 23,600
Recovery	10 - 50%	10 - 50%	10 - 50%	10 - 50%	45 - 60%	45 - 60%	45 - 60%	45 - 60%	50 - 60%
Concentration Rate (gpm)	3.1	3.2	3.1	2.0	3.0	3.1	8.5	12.3	12.1
Recycle Rate (gpm)	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Supply Rate (gpm)	3.5	4.0	4.6	4.2	6.7	8.3	15.5	22.7	27.1
RO Pump Design Flow (gpm)	3.5	4.0	4.6	5.2	6.7	8.3	15.5	22.7	27.1
RO Pump Design Pressure (psi)	450.0	679.0	800.0	850.0	880.0	980.0	865.0	930.0	1000.0
RO Motor HP (60 Hz)	2.0	2.0	5.0	5.0	5.0	7.5	15.0	20.0	25.0
RO Motor kWh @ Flow	1.20	2.07	2.80	3.36	4.49	6.19	10.20	20.00	24.80
CIP Pump Design Flow (gpm)	10	10	10	10	20	20	20	30	30
CIP Pump Design Pressure (psi)	60	60	60	60	60	60	60	60	60
CIP Motor HP (60 Hz)	1	1	1	1	2	2	2	3	3
CIP Motor kWh @ Flow	0.91	0.91	0.91	0.91	1.83	1.83	1.83	2.74	2.74
Chemical Pretreatment	Optional	Optional	Required	Required	Required	Required	Required	Required	Required
Membrane Elements									
Diameter (in / cm)	4 / 10.16	4 / 10.16	4 / 10.16	4 / 10.16	4 / 10.16	4 / 10.16	4 / 10.16	8 / 20.32	8 / 20.32
Number	1	1	2	2	2	2	3	1	1
Array (Pressure Vessels)	1-0	1-0	1-1	1-1	1-1	1-1	2-1	1-0	1-0
Connections NPS & DN									
Inlet (in / mm)	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	3/4 - 20	3/4 - 20	1 - 25	1 - 25	1 - 25
Permeate (in / mm)	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	3/4 - 20	1 - 25	1 - 25
Concentration (in / mm)	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	3/4 - 20	3/4 - 20
Estimated Footprint									
Height (in / cm)	30 / 76	30 / 76	30 / 76	30 / 76	36 / 91	36 / 91	60 / 152	60 / 152	60 / 152
Width (in / cm)	48 / 122	48 / 122	48 / 122	92 / 233.7	132 / 335.3	172 / 436.9	132 / 335.3	132 / 335.3	172 / 436.9
Depth (in / cm)	24 / 61	24 / 61	24 / 61	24 / 61	24 / 61	24 / 61	30 / 76	30 / 76	30 / 76
Estimated Weight									
Shipping (lb / kg)	195 / 88.45	195 / 88.45	220 / 99.8	285 / 130	330 / 150	420 / 191	455 / 206.4	498 / 226	624 / 284
Installed (lb / kg)	204 / 92.5	204 / 92.5	239 / 108.4	239 / 108.4	297 / 134.7	321 / 145.6	455 / 206.4	526 / 238.6	601 /272.6

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER
Water Quality ASSOCIATION

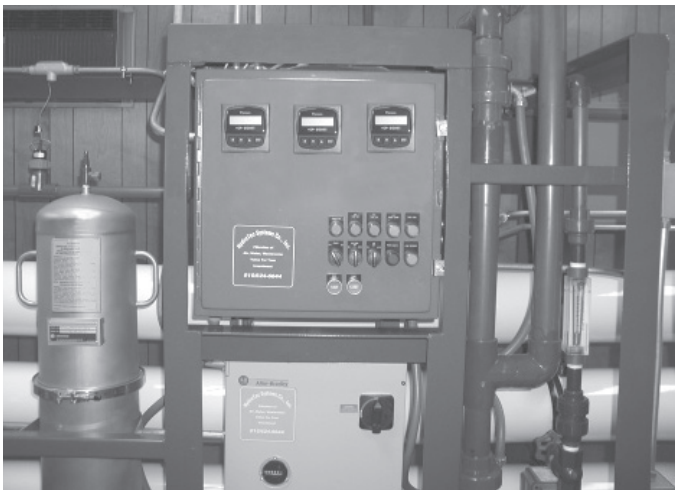
FORM 1287
EFFECTIVE
JULY 2003

COMMERCIAL RO SYSTEMS

VERY HIGH TDS, BRACKISH WATER, RIVER INTAKE AND SEAWATER INTRUSION SYSTEMS
(NOMINAL <20,000 TDS DESIGN)

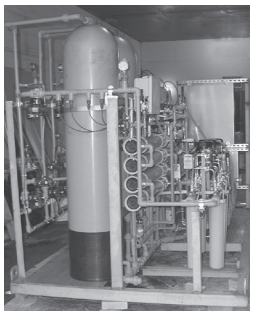
Standard Features

- Energy efficient, high flow membranes
- 5 micron sediment pre-filter
- Allen-Bradley programmable controller
- Liquid level float with auto shut-off
- Auto-flush system
- Pre- and post-filter, feed, concentrate, and product water pressure gauges
- Visual inline flow meters
- Low pressure feed water switch
- Victaulic style 304 stainless steel housing connections
- Low pressure alarm capable
- Motor starter with safety disconnect



Optional Features

- 2 m³d field portable system with gas or diesel powered generator
- Digital permeate TDS meter
- Automatic antiscalant dosing system
- Automatic or manual pH control dosing system
- Ethernet communication upgrade for the controller
- Digital permeate and concentrate flow meters with low level alarms
- Digital supply and concentrate pressure gauges with high level alarms
- Clean-in-place membrane maintenance station
- System shutdown during permeate flush
- Stainless steel wetted parts for liquid end of pump
- Step-down transformer from 3 phase to single phase
- Available in all international voltages



Operating Parameters

Operating Pressure	750 to 1000 psi
Min. Supply Pressure	15 psi
Max. Temperature	113°F (45°C)
Nominal TDS	< 20,000 ppm
Max. Inlet Free Chlorine	< 0.1 ppm

Specifications

Membrane Housings	High pressure, fiberglass reinforced plastic membrane housings
Frame	Structural fiberglass and aluminum
Controller Power Requirements	120V/60Hz/1Ph
Motor Power Requirements	230–460V/60Hz/3Ph
Pumps	Neutating disc design with positive displacement, brass pump head, Buna diaphragm, and stainless steel valve and seat

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1288
EFFECTIVE
NOVEMBER 2004

COMMERCIAL RO SYSTEMS

VERY HIGH TDS, BRACKISH WATER, RIVER INTAKE AND SEAWATER INTRUSION SYSTEMS

	HTS-2-VHB	HTS-4-VHB	HTS-8-VHB	HTS-12-VHB	HTS-20-VHB	HTS-28-VHB	HTS-38-VHB	HTS-57-VHB	HTS-82-VHB
Actual Permeate (m^3d / gpd)	2 / 528	4 / 1056	8 / 2114	12 / 3170	20 / 5284	28.4 / 7503	38 / 10,040	57 / 15,060	82 / 21,664
Nominal Size (m^3d / gpd)	4.5 / 1200	4.5 / 1200	9.1 / 2400	18.2 / 4800	27.3 / 7200	36.3 / 9600	40.9 / 10,800	67 / 17,700	89.3 / 23,600
Recovery	10 - 50%	10 - 50%	10 - 50%	10 - 50%	45 - 60%	45 - 60%	45 - 60%	45 - 60%	50 - 60%
Concentration Rate (gpm)	3.1	3.2	3.1	2.0	3.0	3.1	8.5	12.3	12.1
Recycle Rate (gpm)	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Supply Rate (gpm)	3.5	4.0	4.6	4.2	6.7	8.3	15.5	22.7	27.1
RO Pump Design Flow (gpm)	3.5	4.0	4.6	5.2	6.7	8.3	15.5	22.7	27.1
RO Pump Design Pressure (psi)	450.0	679.0	800.0	850.0	880.0	980.0	865.0	930.0	1000.0
RO Motor HP (60 Hz)	2.0	2.0	5.0	5.0	5.0	7.5	15.0	20.0	25.0
RO Motor kWh @ Flow	1.20	2.07	2.80	3.36	4.49	6.19	10.20	20.00	24.80
CIP Pump Design Flow (gpm)	10	10	10	10	20	20	20	30	30
CIP Pump Design Pressure (psi)	60	60	60	60	60	60	60	60	60
CIP Motor HP (60 Hz)	1	1	1	1	2	2	2	3	3
CIP Motor kWh @ Flow	0.91	0.91	0.91	0.91	1.83	1.83	1.83	2.74	2.74
Chemical Pretreatment	Optional	Optional	Required	Required	Required	Required	Required	Required	Required
Membrane Elements									
Diameter (in / cm)	4 / 10.16	4 / 10.16	4 / 10.16	4 / 10.16	4 / 10.16	4 / 10.16	4 / 10.16	8 / 20.32	8 / 20.32
Number	1	1	2	2	2	2	3	1	1
Array (Pressure Vessels)	1-0	1-0	1-1	1-1	1-1	1-1	2-1	1-0	1-0
Connections NPS & DN									
Inlet (in / mm)	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	3/4 - 20	3/4 - 20	1 - 25	1 - 25	1 - 25
Permeate (in / mm)	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	3/4 - 20	1 - 25	1 - 25
Concentration (in / mm)	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	3/4 - 20	3/4 - 20
Estimated Footprint									
Height (in / cm)	30 / 76	30 / 76	30 / 76	30 / 76	36 / 91	36 / 91	60 / 152	60 / 152	60 / 152
Width (in / cm)	48 / 122	48 / 122	48 / 122	92 / 233.7	132 / 335.3	172 / 436.9	132 / 335.3	132 / 335.3	172 / 436.9
Depth (in / cm)	24 / 61	24 / 61	24 / 61	24 / 61	24 / 61	24 / 61	30 / 76	30 / 76	30 / 76
Estimated Weight									
Shipping (lb / kg)	195 / 88.45	195 / 88.45	220 / 99.8	285 / 130	330 / 150	420 / 191	455 / 206.4	498 / 226	624 / 284
Installed (lb / kg)	204 / 92.5	204 / 92.5	239 / 108.4	239 / 108.4	297 / 134.7	321 / 145.6	455 / 206.4	526 / 238.6	601 /272.6

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

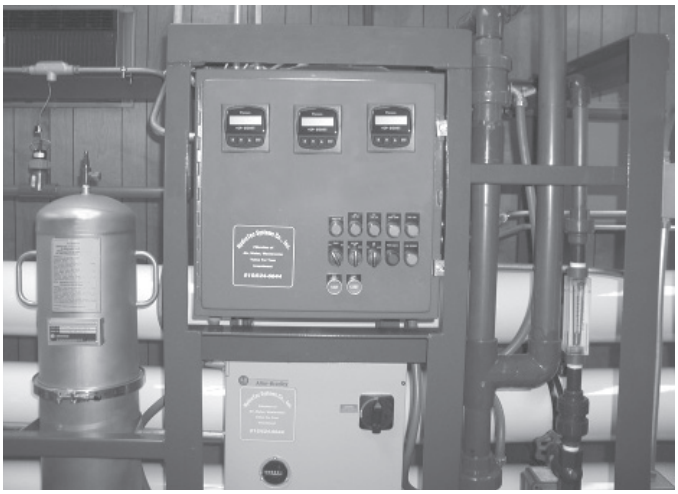
FORM 1288
EFFECTIVE
NOVEMBER 2004

COMMERCIAL RO SYSTEMS

SEAWATER DESALINATION SYSTEMS
(NOMINAL 35,000 TDS DESIGN)

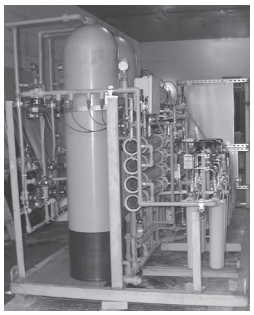
Standard Features

- Energy efficient, high flow membranes
- 5 micron sediment pre-filter
- Allen-Bradley programmable controller
- Liquid level float with auto shut-off
- Auto-flush system
- Pre- and post-filter, feed, concentrate, and product water pressure gauges
- Visual inline flow meters
- Low pressure feed water switch
- Victaulic style 304 stainless steel housing connections
- Low pressure alarm capable
- Motor starter with safety disconnect



Optional Features

- 2 m³d field portable system with gas or diesel powered generator
- Digital permeate TDS meter
- Automatic antiscalant dosing system
- Automatic or manual pH control dosing system
- Ethernet communication upgrade for the controller
- Digital permeate and concentrate flow meters with low level alarms
- Digital supply and concentrate pressure gauges with high level alarms
- Clean-in-place membrane maintenance station
- System shutdown during permeate flush
- Stainless steel wetted parts for liquid end of pump
- Step-down transformer from 3 phase to single phase
- Available in all international voltages



Operating Parameters

Operating Pressure	1000 psi
Min. Supply Pressure	15 psi
Max. Temperature	113°F (45°C)
Nominal TDS	35,000 ppm
Max. Inlet Free Chlorine	< 0.1 ppm

Specifications

Membrane Housings	High pressure, fiberglass reinforced plastic membrane housings
Frame	Structural fiberglass and aluminum
Controller Power Requirements	120V/60Hz/1Ph
Motor Power Requirements	230–460V/60Hz/3Ph
Pumps	Neutating disc design with positive displacement, brass pump head, Buna diaphragm, and stainless steel valve and seat

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1289
EFFECTIVE
JULY 2003

COMMERCIAL RO SYSTEMS

SEAWATER DESALINATION SYSTEMS

	HTS-2-SEA	HTS-4-SEA	HTS-8-SEA	HTS-12-SEA	HTS-20-SEA	HTS-28-SEA	HTS-38-SEA	HTS-57-SEA	HTS-82-SEA
Actual Permeate (m^3d / gpd)	0.38 / 100	1.13 / 300	1.9 / 500	3.8 / 1000	11.4 / 3000	29 / 7600	38 / 10,000	57 / 15,000	76 / 20,000
Nominal Size (m^3d / gpd)	1.9 / 500	1.9 / 500	1.9 / 500	4.5 / 1200	13.6 / 3600	36.3 / 9600	54.5 / 14,400	82 / 21,600	114 / 30,000
Recovery	50 - 75%	50 - 75%	50 - 75%	50 - 75%	50 - 75%	50 - 75%	50 - 75%	50 - 75%	50 - 75%
Concentration Rate (gpm)	0.07	0.14	0.21	3.10	3.10	6.50	6.90	9.60	12.80
Recycle Rate (gpm)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.7
Supply Rate (gpm)	1.7	1.7	1.7	3.8	5.1	11.7	13.9	20.0	26.7
RO Pump Design Flow (gpm)	1.7	1.7	1.7	3.8	5.1	11.7	13.9	20.0	36.4
RO Pump Design Pressure (psi)	450.0	679.0	807.0	950.0	1050.0	1050.0	1050.0	1050.0	1050.0
RO Motor HP (60 Hz)	2.0	2.0	5.0	5.0	5.0	10.0	15.0	20.0	25.0
RO Motor kWh @ Flow	0.58	0.88	1.04	2.75	4.08	9.35	11.11	20.00	24.80
CIP Pump Design Flow (gpm)	10	10	10	10	20	20	20	30	30
CIP Pump Design Pressure (psi)	60	60	60	60	60	60	60	60	60
CIP Motor HP (60 Hz)	1	1	1	1	2	2	2	3	3
CIP Motor kWh @ Flow	0.91	0.91	0.91	0.91	1.83	1.83	1.83	2.74	2.74
Chemical Pretreatment	Optional	Optional	Optional	Optional	Required	Required	Required	Required	Required
Membrane Elements									
Diameter (in / cm)	4 / 10.16	4 / 10.16	4 / 10.16	4 / 10.16	4 / 10.16	4 / 10.16	4 / 10.16	8 / 20.32	8 / 20.32
Number	1	1	1	2	3	8	12	18	6
Array (Pressure Vessels)	1-0	1-0	1-0	1-1	3-0	2*4	2*6	3*6	6-0
Connections NPS & DN									
Inlet (in / mm)	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	3/4 - 20	3/4 - 20	1 - 25	1 - 25	1 - 25
Permeate (in / mm)	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	3/4 - 20	1 - 25	1 - 25
Concentration (in / mm)	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	1/2 - 15	3/4 - 20	3/4 - 20
Estimated Footprint									
Height (in / cm)	30 / 76	30 / 76	30 / 76	30 / 76	36 / 91	36 / 91	60 / 152	60 / 152	60 / 152
Width (in / cm)	48 / 122	48 / 122	48 / 122	48 / 122	48 / 122	166 / 422	246 / 625	246 / 625	246 / 625
Depth (in / cm)	24 / 61	24 / 61	24 / 61	24 / 61	24 / 61	24 / 61	30 / 76	30 / 76	30 / 76
Estimated Weight									
Shipping (lb / kg)	245 / 111.2	245 / 111.2	245 / 111.2	270 / 122.5	305 / 138.3	405 / 184	445 / 202	525 / 239	730 / 330
Installed (lb / kg)	204 / 92.5	204 / 92.5	239 / 108.4	239 / 108.4	297 / 134.7	321 / 145.6	455 / 206.4	526 / 238.6	601 /272.6

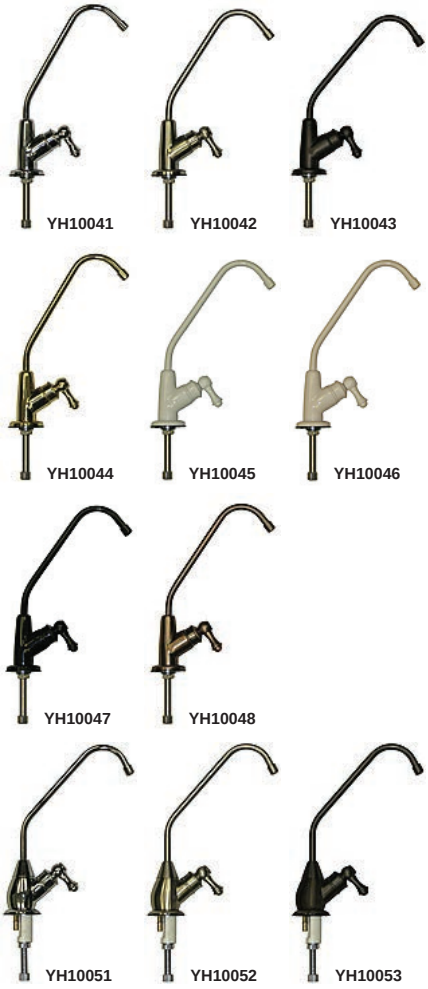
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER
Water Quality ASSOCIATION

FORM 1289
EFFECTIVE
JULY 2003

POU Components

PREMIUM FAUCETS



SWT's Premium Faucets *for point-of-use (POU) water treatment systems combine an attractive, contemporary appearance with materials that ensure durability, reliability, safety, and purity.*

FEATURES

- Ceramic valve design provides smooth operation.
- Solid metal body construction provides superior durability.
- Lead-free brass assures regulatory compliance to ANSI/NSF standards and California Prop. 65.
- Long reach spout rotates 360 degrees.
- Air gap option available to provide protection from back-siphonage for RO system uses.
- Open relief option available to provide dependable protection for undercounter filters at a reasonable cost. Water pressure reaches the filter only when the faucet lever is activated. This limits stress and potential failure of the filter housing.

SPECIFICATIONS

Dimensions:
9-1/2 inch Height x 5-1/2 inch Reach

Faucet Base:
1-3/4 inch Diameter

Hole Size Requirements:
1/2 inch Diameter

Operating Pressure:
125 psi (8.3 bar) maximum

Temperature Range:
40 to 100°F

Connection Size:
1/4 inch Compression Fitting Standard
NOTE: A Faucet Connector is required to connect the faucet to its water source.

LONG REACH FAUCETS

Part Number	Description
YH10041	Polished Chrome Finish
YH10042	Brushed Nickle Finish
YH10043	Oil Rubbed Bronze Finish
YH10044	Polished Brass Finish
YH10045	White Gloss Finish
YH10046	Almond Gloss Finish
YH10047	Black Gloss FInish
YH10048	Oil Rubbed Copper Finish



LONG REACH AIR GAP FAUCETS

Part Number	Description
YH10051	Polished Chrome Finish
YH10052	Brushed Nickle Finish
YH10053	Oil Rubbed Bronze Finish

FAUCET CONNECTORS

Part Number	Description
GJ-C13208U7S	Quick Connect 7/16 inch faucet x 1/4 inch tube adapter
GJ-C13212U7S	Quick Connect 7/16 inch faucet x 3/8 inch tube adapter

ANGLE STOP ADAPTER VALVES

Part Number	Description
Gj-PPASV121208	3/8 inch male thread to 3/8 inch female compression x 1/4 inch tube O.D.
Gj-PPASV121212	3/8 inch male thread to 3/8 inch female compression x 3/8 inch tube O.D.

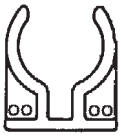
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1323
EFFECTIVE
JUNE 2015

RO COMPONENTS

CLIPS

Part Number	Description	Mounting Diameter Inches	Color
	**Heavy Duty Clip** This is an extra strong clip that provides very firm support of the membrane housing. Requires strong person to place housing into clips. Four holes for 0.25 inch tubing provided. Fits 2.375 inch cylinder.		
WW50001	Single extra strong membrane housing clip with 0.25 inch tube holes	2.375	White
WW50002	Single extra strong membrane housing clip with 0.25 inch tube holes	2.375	Black
	**Standard Clip** This is our standard clip for mounting membrane housings. Provides firm support as well as easy placement of the membrane housing. Four holes for 0.25 inch tubing provided. Fits 2.375 inch cylinder.		
WW50003	Single membrane housing clip with 0.25 inch tube holes	2.375	White
WW50004	Single membrane housing clip with 0.25 inch tube holes	2.375	Black
	**Single Clip** This clip is for mounting an inline filter or automatic shutoff valve to a flat surface. Fits 1.95 inch O.D. cylinder.		
WW50021	Single inline filter or automatic shutoff valve clip	2	White
WW50022	Single inline filter or automatic shutoff valve clip	2	Black
	**Double Clip** This is for mounting an inline filter or automatic shutoff valve to the membrane housing, piggyback style. Fits cylinder sizes 2.375 inch and 1.95 inch.		
WW50007	Double clip to piggyback inline filter or automatic shutoff valve to membrane housing	2.375 x 2	White
WW50008	Double clip to piggyback inline filter or automatic shutoff valve to membrane housing	2.375 x 2	Black
	**Double Clip** This is used for mounting two inline filters or an inline filter and automatic shutoff valve, piggyback style. Cylinder sizes are both 1.95 inch.		
AP50009	Double clip to piggyback inline filters or inline filter and automatic shutoff valve	2 x 2	White
AP50010	Double clip to piggyback inline filters or inline filter and automatic shutoff valve	2 x 2	Black
	**Double Clip** This is commonly used for piggyback style mounting of two larger inline filters, two standard membrane housings, or any combination thereof. Fits cylinder sizes 2.45 inch x 2.45 inch.		
AP50011	Double clip to piggyback membrane housings and/or large inline filters	2.5 x 2.5	White
AP50012	Double clip to piggyback membrane housings and/or large inline filters	2.5 x 2.5	Black
	**Restrictor Clip** This is used to support a flow restrictor. Includes foam tape for mounting to a flat surface.		
AP50020	Flow restrictor clip with foam tape pad for mounting	—	White

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1223
EFFECTIVE
NOVEMBER 1999

RO MEMBRANES

RESIDENTIAL & COMMERCIAL MEMBRANES

Part Number	Type	Material	Niminal Dimension Inches	GPD Rating	Maximum PSI Rating	Average % NaCl Rejection	Tested @ PPM Input NaCl / PSI
Residential Standard Membrane Elements							
ED20112	Standard	CTA	1.8 x 12	12	300	95.0	500 / 60
ED20116	Standard	CTA	1.8 x 12	16	300	95.0	500 / 60
ED20122*	Standard	CTA	1.8 x 12	22	300	92.0	500 / 60
ED20224	Standard	TFM	1.8 x 12	24	300	98.0	500 / 60
TW30-1812-24**	Standard	TFC	1.8 x 12	24	300	96.0	250 / 50
ED20236	Standard	TFM	1.8 x 12	36	300	98.0	500 / 60
TW30-1812-36**	Standard	TFC	1.8 x 12	36	300	96.0	250 / 50
ED20250	Standard	TFM	1.8 x 12	50	300	98.0	500 / 60
TW30-1812-50**	Standard	TFC	1.8 x 12	50	300	96.0	250 / 50
ED20275*	Standard	TFM	1.8 x 12	75	300	96.0	500 / 60
TW30-1812-75**	Standard	TFC	1.8 x 12	75	300	96.0	250 / 50
ED202100	Standard	TFM	1.8 x 12	100	300	96.0	500 / 60
TW30-1812-100**	Standard	TFC	1.8 x 12	100	300	96.0	250 / 50
Commercial Standard & Low Pressure Membrane Elements							
TW30-2026	Standard	TFC	2.0 x 26	220	300	96.0	2,000 / 225
ED-AG2514TF	Standard	TFM	2.5 x 14	180	300	99.4	2,000 / 225
TW30-2514	Standard	TFC	2.5 x 14	200	300	98.0	2,000 / 225
ED-AG2521TF	Standard	TFM	2.5 x 21	300	300	99.4	2,000 / 225
TW30-2521	Standard	TFC	2.5 x 21	325	300	98.0	2,000 / 225
ED-AK2521TF	Low Pressure	TFM	2.5 x 21	300	300	99.0	500 / 107
XLE-2521	Low Pressure	TFC	2.5 x 21	365	300	98.0	2,000 / 125
ED-AG2540TF	Standard	TFM	2.5 x 40	710	300	99.4	2,000 / 225
TW30-2540	Standard	TFC	2.5 x 40	850	300	98.0	2,000 / 225
ED-AK2540TF	Low Pressure	TFM	2.5 x 40	650	300	98.0	2,000 / 125
XLE-2540	Low Pressure	TFC	2.5 x 40	850	300	99.0	500 / 107
ED-AG4014TF	Standard	TFM	4.0 x 14	550	300	99.4	2,000 / 225
TW30-4014	Standard	TFC	4.0 x 14	525	300	98.0	2,000 / 225
ED-AK4014TF	Low Pressure	TFM	4.0 x 14	550	300	99.0	500 / 107
ED-AG4021TF	Standard	TFM	4.0 x 21	1,050	300	99.4	2,000 / 225
TW30-4021	Standard	TFC	4.0 x 21	900	300	98.0	2,000 / 225
ED-AK4021TF	Low Pressure	TFM	4.0 x 21	1,050	300	99.0	500 / 107
XLE-4021	Low Pressure	TFC	4.0 x 21	1,025	300	98.0	2,000 / 125
ED-AG4040TF	Standard	TFM	4.0 x 40	2,200	300	99.4	2,000 / 225
TW30-4040	Standard	TFC	4.0 x 40	2,400	300	98.0	2,000 / 225
ED-AK4040TF	Low Pressure	TFM	4.0 x 40	2,200	300	99.0	500 / 107
XLE PRO-4040	Low Pressure	TFC	4.0 x 40	2,750	600	99.0	2,000 / 125
XLE-440	Low Pressure	TFC	7.9 x 40	14,000	600	99.0	2,000 / 125

* Minimum order of 25 pieces. ** Minimum order of 100 pieces.
LE (Low Energy) membrane elements are designed to work at a lower water pressure.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1198
EFFECTIVE
MAY 2025

RO MEMBRANES

COMMERCIAL MEMBRANES

Part Number	Type	Material	Niminal Dimension Inches	GPD Rating	Maximum PSI Rating	Average % NaCl Rejection	Tested @ PPM Input NaCl / PSI
Commercial Brackish Water Membrane Elements							
BW30-2540	Brackish Water	TFC	2.5 x 40	850	600	99.5	2,000 / 225
BW30-4040	Brackish Water	TFC	4.0 x 40	2,400	600	99.5	2,000 / 225
BW30-4040-FR	Brackish Water	TFC	4.0 x 40	2,200	600	99.5	2,000 / 225
BW30LE-4040	Brackish Water	TFC	4.0 x 40	2,300	600	99.0	2,000 / 225
BW30-365	Brackish Water	TFC	8.0 x 40	9,500	600	99.5	2,000 / 225
BW30-365-FR	Brackish Water	TFC	8.0 x 40	9,500	600	99.5	2,000 / 225
BW30-400	Brackish Water	TFC	8.0 x 40	10,500	600	99.0	2,000 / 225
BW30LE-440	Brackish Water	TFC	8.0 x 40	11,500	600	99.0	2,000 / 150
Commercial Sea Water Membrane Elements							
SW30-2514	Sea Water	TFC	2.5 x 14	150	1,000	99.2	3,200 / 800
SW30-2521	Sea Water	TFC	2.5 x 21	300	1,000	99.2	3,200 / 800
SW30-2540	Sea Water	TFC	2.5 x 40	700	1,000	99.2	3,200 / 800
SW30-4021	Sea Water	TFC	4.0 x 21	800	1,000	99.2	3,200 / 800
SW30-4040	Sea Water	TFC	4.0 x 40	1,950	1,000	99.2	3,200 / 800
SW30-8040	Sea Water	TFC	8.0 x 40	6,000	1,015	98.6	3,200 / 800
SW30HR-320	Sea Water	TFC	8.0 x 40	6,000	1,015	99.2	3,200 / 800
SW30HR-380	Sea Water	TFC	8.0 x 40	6,000	1,015	99.4	3,200 / 800
Commercial Nano Filtration Membrane Elements							
NF90-2540	Nano Filtration	TFC	2.5 x 40	520	250	85 – 95	2,000 / 70
NF90-4040	Nano Filtration	TFC	4.0 x 40	1,500	250	85 – 95	2,000 / 70
NF270-400	Nano Filtration	TFC	8.0 x 40	12,500	250	40 – 60	2,000 / 70
NF90-400	Nano Filtration	TFC	8.0 x 40	7,500	250	85 – 95	2,000 / 70
NF200-400	Nano Filtration	TFC	8.0 x 40	6,800	600	35 – 50	500 / 70
NF-400	Nano Filtration	TFC	8.0 x 40	11,000	600	98.0	500 / 70

LE (Low Energy) membrane elements are designed to work at a lower water pressure.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1198
EFFECTIVE
MAY 2025

Section 4

Residential Water Treatment Systems & Conditioners

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

ULTRAFILTRATION SYSTEMS

BRANEWAVE™ UF SYSTEMS
0.02 MICRON ULTRAFILTRATION



Cutaway view of BraneWave UF System with Automatic Backflush Valve

BraneWave UF Systems contain NSF 61 certified membrane and all wetted parts.



Solar Panel

BraneWave UF Systems — *SMART UF TECHNOLOGY*

SWT does it again! We've made the filtration of sub-micron particles simple, affordable, and available at a high flow rate. SWT's BraneWave UF Systems are capable of removing all waterborne pathogens and colloids to provide particulate-free, pure water on demand.

Using the highest quality materials, we have packed more than five miles of membrane into a point-of-entry, ultrafiltration, water treatment system requiring no pumps, storage tanks, or solenoids. BraneWave UF Systems are available with automatic backflush control valve (AC adapter or solar panel power supply) or manual backflush valve. Made in USA.

Features and Benefits

- 0.02 micron absolute filtration (99.99% removal)
- Automatic backflush valve (AC adapter or solar panel power supply) or manual valve included
- Bottom drain assembly available
- Easy maintenance
- Reversible flow
- No pumps or storage tanks needed
- Parallel, triplex, or quad systems available
- Can be manifolded for commercial flow rates

System Removes: Bacteria, cysts, viruses, colloids (iron, manganese), color, tannins (organics), silt

System Includes: Chrome tank jacket, factory pre-set programmable controller, 1 inch fittings

Applications: Seasonal homes, sprayers and misting equipment, restaurants, RO pre-filtration, parts washing, lumber and mining camps, commercial boats, second and third world areas, disaster areas. *Replaces UV and chlorination when no electricity is available.*

Options: Clean water backflush, BraneWave System Sanitizer, bypass valve, bottom drain assembly

Specifications

Service Flow Rate	12 gpm (45.4 lpm) Peak 10 gpm (37.9 lpm) Cont.
Backflush Rate	3.0 gpm (11.4 lpm)
Temperature Range	35 to 120°F (1.7 to 49°C)
Operating Pressure	
Membrane	10 to 120 psi (0.7 to 8.3 bar)
System	20 to 120 psi (1.4 to 8.3 bar)
Unit Dimensions	9 x 54.25 inch (22.9 x 137.8 cm)
Unit Weight	35 lb (15.9 kg)
Sanitization Port	3/8 inch
Drain Port	3/4 inch
Pre-filtration	5 micron or less
Max. Chlorine Allowed	1.0 ppm (200 ppm for cleaning)

Average Reduction

Bacteria	4.4 log
Virus	2.4 log
Cyst	2 log (est)

BraneWave UF Systems

Part Number	Power Supply	Flow Rate			Overall Dimensions	Connection Size
		Peak Service	Cont. Service	Backflush		
UFA12C	AC Adapter	12 gpm	10 gpm	3.0 gpm	54"H x 14.5"D x 9.5"W	1 inch Brass Sweat
UFA12C-SP	Solar Panel	12 gpm	10 gpm	3.0 gpm	54"H x 14.5"D x 9.5"W	1 inch Brass Sweat
UFM12F	Manual	12 gpm	10 gpm	5.0 gpm	54"H x 14.5"D x 9.5"W	1 inch Brass MNPT
UFA06C	AC Adapter	6 gpm	5 gpm	3.0 gpm	34"H x 14.5"D x 9.5"W	1 inch Brass Sweat
UFA06C-SP	Solar Panel	6 gpm	5 gpm	3.0 gpm	34"H x 14.5"D x 9.5"W	1 inch Brass Sweat
UFM06F	Manual	6 gpm	5 gpm	5.0 gpm	34"H x 14.5"D x 9.5"W	1 inch Brass MNPT

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1340
EFFECTIVE
MAY 2019

BRANEWAVE™ UF SYSTEMS
0.02 MICRON ULTRAFILTRATION

Optional Equipment

Part Number	Description
2.5 x 20 inch Pre-Filter Components	
SO72005	2.5 x 20 System-Guard™ Spun PP Cartridge, 5 micron, 6–10 gpm
SO72001	2.5 x 20 System-Guard™ Spun PP Cartridge, 1 micron, 6–10 gpm
YH16511	20" Easy Service Housing with Lock Ring & Push-Button Pressure Relief, 1" FPT Ports
YH40010	L-Shaped Bracket for One (1) Easy Service Housing, White, Metal
YH40025	L-Shaped Bracket for Two (2) Easy Service Housings, White, Metal
YH40110	Wrench for Easy Service Housing
YH-G10105	Buna-N O-ring for Easy Service Housing
4.5 x 20 inch Pre-Filter Components	
SO72005-BB	4.5 x 20 Jumbo Dual-Gradient PP Cartridge, 50 / 5 micron, 10+ gpm
SO72001-BB	4.5 x 20 Jumbo Dual-Gradient PP Cartridge, 25 / 1 micron, 10+ gpm
CB97010	4.5 x 20 Jumbo Carbon Block Cartridge, 10 micron, 4–7 gpm
MA-15526303	4.5 x 20 Jumbo Radial-Flow Iron Reduction Cartridge, 20 micron, 3–6 gpm
YH16512	20" Jumbo Easy Service Housing with Lock Ring & Push-Button Pressure Relief, 1" FPT Ports
YH40030	L-Shaped Bracket for One (1) Jumbo Housing, White, Metal
YH40120	Wrench for Jumbo Housing
YH-G10122	Buna-N O-Ring for Jumbo Housing
Sanitizer Systems	
UF-BW-SAN	BraneWave™ System Sanitizer, 10 x 16, 3 gallon feed
APS-CSA-1	Chlorastick™ Pipe Sanitizer, 1" FNPT, includes one chlorine module — *For Pipes Only (not for UF Systems)*
Tech Series Automatic Backwashing Pre-Filters	
FFA100C	9 x 48 FilterEase™ Filter, 1" Brass Sweat, 4–7 gpm Service, 4.5 gpm Backwash
FFA150C	10 x 54 FilterEase™ Filter, 1" Brass Sweat, 4–9 gpm Service, 5.0 gpm Backwash
MFA075C-025	9 x 48 MetalEase™ Filter, 1" Brass Sweat, 4–6 gpm Service, 9.0 gpm Backwash
MFA113C-027	10 x 54 MetalEase™ Filter, 1" Brass Sweat, 6–8 gpm Service, 12.0 gpm Backwash
Bottom Drain Accessories	
BD-25-34BVGH	Bottom Drain Assembly, 3/4" FPT, includes 2.5" x 3/4" PVC Bottom Adapter, Connector, Elbow, 3/4" FPT Ball Valve, Brass Garden Hose Adapter, PVC Plug
SM-CL258	Bottom Plug, 2.5"-8 NPSM
SM-TR1258	Bottom Adapter, 2.5"-8 NPSM x 1" FNPT
Replacement UF Module	
UF-BW-RM-CF	BraneWave™ UF Module
BraneWave UF Field Test Kit	
UF-INLINE-FT-KIT	Field Test Kit includes: (1) BraneWave™ UF Field Test Module; (2) Female Adapter, 1" FBSP x 1" ASTM spigot, Sch40 PVC; (2) Reducer Bushings, 1" spigot x 3/4" FPT, Sch80 PVC; (2) Reducer Bushings, 3/4" MPT x 1/4" FPT, Sch80 PVC; (2) Plugs, 3/4" MPT, Sch80 PVC; (1) Coupling, 3/4" MPT or 1/2" FPT x 3/4" garden hose, brass; (1) Diverter Valve Kit with 1/4" elbow; (1) Diverter Adapter, 15/16", brass; (1) Diverter Adapter, 13/16", brass; (1) Long Reach Spout Kit with 1/4" elbow, chrome plated

WARNING: These systems are intended for the disinfection of microbiologically contaminated water that meets all other public health standards. These systems are not intended for the treatment of water that has an obvious contamination or intentional source, such as raw sewage. These systems are not intended to convert wastewater or raw sewage into potable drinking water. These systems are intended for use on visually clear water.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1340
EFFECTIVE
MAY 2019

BRANEWAVE™ UF FIELD TEST KIT
0.02 MICRON ULTRAFILTRATION



BraneWave UF Field Test Kit
(P/N UF-INLINE-FT-KIT)

SWT's **BraneWave UF Field Test Kit** is designed to quickly and dramatically demonstrate the results of installing a BraneWave UF System on a subject water application with visible particles (including sediment or tannin). For tannin removal, since the molecular weights vary widely, it is especially important that the filtration level be determined prior to a full-system installation. Using the necessary combination of fittings included with the test kit, attach the BraneWave UF Field Test Module to an untreated faucet and run the water through the module. Clear, clean water indicates immediately that the tannin problem can be successfully solved with a BraneWave UF System. It's that quick and simple.

FEATURES AND BENEFITS

- Demonstrates effectiveness of BraneWave Ultrafiltration System
- Installs quickly and easily to faucet
- All hardware included, no tools necessary
- Determines tannin removal ability of BraneWave UF System prior to installation
- Requires only water pressure to operate, no pump necessary

BRANEWAVE UF FIELD TEST KIT INCLUDES:

(1) BraneWave UF Field Test Module

(2) Female Adapters, 1 inch FBSP x 1 inch ASTM spigot, Sch40 PVC

(2) Reducer Bushings, 1 inch spigot x 3/4 inch FPT, Sch80 PVC

(2) Reducer Bushings, 3/4 inch MPT x 1/4 inch FPT, Sch80 PVC

(2) Plugs, 3/4 inch MPT, Sch80 PVC

(1) Coupling, 3/4 inch MPT or 1/2 inch FPT x 3/4 inch garden hose, brass

(1) Diverter Valve Kit with 1/4 inch elbow

(1) Diverter Adapter, 15/16 inch, brass

(1) Diverter Adapter, 13/16 inch, brass

(1) Long Reach Spout with 1/4 inch elbow, chrome plated

The **BraneWave UF Field Test Module** is a hollow fiber ultrafilter installed within a 1.25 x 8 inch polypropylene sleeve with specified inlet and outlet ends.

BRANEWAVE UF FIELD TEST MODULE SPECIFICATIONS:

Filtration Level: . . . . . 0.02 micron

Operating Temperature: . . . . . 35 to 100°F (2 to 38°C)

Operating Pressure (Inlet): . . . . . 10 to 100 psi (0.68 to 6.8 bar)

Continuous Flow Rate: . . . . . 0.84 gpm at 50 psi and 68°F (20°C)
0.68 gpm at 40 psi and 68°F (20°C)

End Openings: . . . . . 1 inch male BSP

Shipped with protective end caps and a preservative solution of Glycerine and Metabisulfite .

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1346
EFFECTIVE
MARCH 2012

WATER FORCE™

Economically stimulate your water!



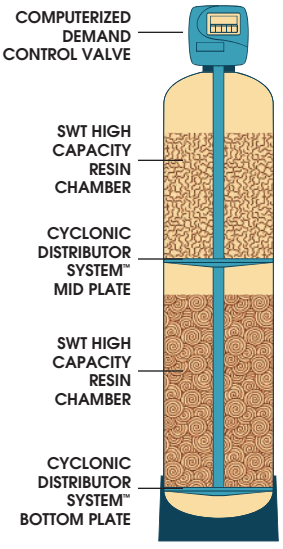
We now face an opportunity — and an obligation — to turn the page on the wasteful and inefficient state of yesterday's water treatment systems. Our plan begins with SWT's line of Water Force™ Dual-chamber Systems.

Our world cannot afford water treatment as usual – not at a moment when the energy challenge we face is so great and the consequences of inaction are so dangerous. We must act quickly and we must act boldly. SWT has a comprehensive water conditioning plan that provides immediate relief to struggling consumers and industry professionals. It also summons the industry to face some of the great challenges of our time: confronting our dependence on the use of multiple filtration tank systems, addressing the moral, economic, and environmental challenge of wasted salt and water, and building a clean energy future utilizing advanced water treatment technologies to benefit everyone on this planet.

- Reduce energy usage and help cut energy bills
- Invest in energy efficient improvements
- Help our planet and our economy
- Pioneer the green technologies that will be in high demand throughout the world

---

Water Force™ multi-chamber tanks eliminate the need for separate softening and filter tanks. The advanced flow-through-design makes sure the beds remain separated and provides a service flow pattern that directs the water in a manner which eliminates channeling to completely utilize both beds. At the same time the system uses up to 60% less water for regeneration and cleaning than a traditional two-tank system. SWT's multi-chamber tank system offers better performance with less operating cost.



Made in USA

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1321
EFFECTIVE
MARCH 2013

RESIDENTIAL TREATMENT SYSTEMS

WATER FORCE ONE™
HYBRID WATER SOFTENER & CARBON FILTER



Shown with optional chrome tank jacket .

SWT's Water Force *water conditioners follow the modern path of "green" manufacturing for water treatment by focusing on the development of multi-purpose systems. Simply, they are water softeners that do more than just soften water.*

These are single tank, multi-chambered systems that save on energy and space, use less manufacturing materials for a single system versus traditional multiple tank installations, and require less water and salt for the cleaning cycles.

Water Force One (WF1) — Chlorinated water causes a gradual reduction in a water softener's effectiveness. The carbon chamber of Water Force One removes the chlorine before it ever comes in contact with the softening resin — adding years to the life of the system.

And because the carbon bed is easily accessible and separated from the softening resin, it can be rebedded without having to replace the softening resin at the same time. (Typically, carbon should be changed out every 4 to 5 years, whereas softening resin that is protected from chlorine can last 20 to 25 years.)

Benefits:

- Conserves water and salt
- Lower pressure drop
- Energy efficient controller uses less than $5 00 of electricity per year
- 100% corrosion free system
- Compact design reduces installation space
- Computerized controller monitors and adjusts to actual water usage
- Increased resin capacity
- All components NSF listed

Product Specifications:

Control Valve . . . . . Computer metered, fully automatic

Distribution System . . . Cyclonic Distributor System™ (with bottom- and mid-plate)

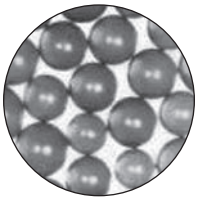
Carbon . . . . . ProActive™ Coconut shell or SuperCat™ (0 75 cu ft)

Softening Resin . . . . . ProSoft™ Premium, 8% crosslink (1 25 cu ft)

SWT Water Force One Water Conditioners Feature...







...fully programmable "smart" control valve, efficient Cyclonic Distributor System, and high capacity ProSoft Premium resin with ProActive carbon.

Part Number	Carbon Type	Softening Capacity Grains	Service Flow Rate GPM	Dual-chamber Tank		Brine Tank		Standard Connection Size
				Size Inches	Color	Size Inches	Color	
DCP12GC07-CD	Coconut Shell	40,000	3 to 10	10 x 60	Black	15 x 17 x 33	Black	1 inch Brass Sweat
DCP12GS07-CD	SuperCat	40,000	3 to 10	10 x 60	Black	15 x 17 x 33	Black	1 inch Brass Sweat

10 year warranty on mineral tank, 5 year warranty on valve .
Units include brine well, safety brine valve assembly with air check, brine tank overflow, upper screen, brine line tubing & connectors .
Bypass valve optional .Chrome tank jacket optional .

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1321
EFFECTIVE
MARCH 2013

RESIDENTIAL TREATMENT SYSTEMS

WATER FORCE TWO™
HYBRID WATER SOFTENER & TANNIN FILTER



Shown with optional chrome tank jacket.

SWT's Water Force Two Water Conditioners feature fully programmable "smart" control valve, efficient Cyclonic Distributor System™, and high capacity ProSoft™ softening resin with ProSelect™ Tannin-HP.

SWT's Water Force™ *water conditioners follow the modern path of "green" manufacturing for water treatment by focusing on the development of multi-purpose systems. Simply, they are water softeners that do more than just soften water.*

Water Force Two (WF2) — Tannin resins work most effectively when the water is free from calcium, iron, and manganese and the proper regeneration method is used. Clean tannin resin allows both anionic attraction and a capillary action to grab and hold the tannin on the resin bead. With WF2, the water is softened and Fe2 removed before it ever enters the tannin chamber. Then, WF2's propriatary regeneration process not only allows for better tannin bed cleaning, but uses 50% less water for regeneration. That's why WF2 outperforms other tannin systems on the market while utilizing less brine to do so. It's simply a more efficient system, designed for the cost-conscious consumer.

Benefits:

- Conserves water and salt
- Lower pressure drop
- Energy efficient controller uses less than $5.00 of electricity per year
- 100% corrosion free system
- Compact design reduces installation space
- Computerized controller monitors and adjusts to actual water usage
- Increased resin capacity
- All components NSF listed

Product Specifications:

Control Valve . . . . . Computer metered, fully automatic
Distribution System . . . . . Cyclonic Distributor System (with bottom- and mid-plate)
Tannin Resin . . . . . ProSelect Tannin-HP (0.5 to 1.0 cu.ft.)
Softening Resin . . . . . ProSoft Premium or Fine Mesh, 8% crosslink (1.0 to 1.25 cu.ft.)

Part Number	Description	Softening Capacity Grains	Service Flow Rate GPM	Standard Connection Size
DAT10CP10-L2	1 cu.ft. ProSelect Tannin-HP, 1 cu.ft. ProSoft Premium	40,000	3 to 10	1 inch Copper Tube
DAT07CP12-L2	0.75 cu.ft. ProSelect Tannin-HP, 1.25 cu.ft. ProSoft Premium	40,000	3 to 10	1 inch Copper Tube
DAT07CF12-L2	0.75 cu.ft. ProSelect Tannin-HP, 1.25 cu.ft. ProSoft Fine Mesh	42,500	3 to 10	1 inch Copper Tube
DAT07CP10-L2	0.75 cu.ft. ProSelect Tannin-HP, 1 cu.ft. ProSoft Premium	40,000	3 to 10	1 inch Copper Tube
DAT07CF10-L2	0.75 cu.ft. ProSelect Tannin-HP, 1 cu.ft. ProSoft Fine Mesh	42,500	3 to 10	1 inch Copper Tube
DAT05CP10-L2	0.5 cu.ft. ProSelect Tannin-HP, 1 cu.ft. ProSoft Premium	40,000	3 to 10	1 inch Copper Tube

10 year warranty on mineral tank, 5 year warranty on valve.

Units include 10 x 60 PP tank (black), 15 x 17 x 33 brine tank (black), brine well, safety brine valve assembly with air check, brine tank overflow, upper screen, brine line tubing & connectors.

Bypass valve optional. Chrome tank jacket optional.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1360
EFFECTIVE
FEBRUARY 2024

RESIDENTIAL TREATMENT SYSTEMS

WATER FORCE THREE™
HYBRID WATER SOFTENER & NITRATE FILTER



Shown with optional chrome tank jacket.

SWT's Water Force Three Water Conditioners feature fully programmable "smart" control valve, efficient Cyclonic Distributor System™, and high capacity ProSoft™ Premium resin with ProSelect™ Nitrate.

SWT's Water Force™ *water conditioners follow the modern path of "green" manufacturing for water treatment by focusing on the development of multi-purpose systems. Simply, they are water softeners that do more than just soften water.*

Water Force Three (WF3) — Nitrate resins are some of the more delicate resins on the market. They are easy to foul with iron, and expensive to replace. That's why WF3 provides a separate, dedicated chamber for the nitrate resin beneath a cation resin chamber in order to protect the nitrate resin from fouling and to add years of service to the system.

And, did you know that when a water softener resgenerates with salt (sodium chloride), half of the salt is not used (the chloride side)? And when a nitrate system regenerates with salt, half of the salt is not used (the sodium side). But, with WF3, the softener and nitrate resins are located in one tank to maximize efficiency and reduce waste by using both sides of the salt and 40% less water.

Benefits:

- Conserves water and salt
- Lower pressure drop
- Energy efficient controller uses less than $5.00 of electricity per year
- 100% corrosion free system
- Compact design reduces installation space
- Computerized controller monitors and adjusts to actual water usage
- Increased resin capacity
- All components NSF listed

Product Specifications:

Control Valve . . . . . Computer metered, fully automatic
Distribution System . . . . . Cyclonic Distributor System (with bottom- and mid-plate)
Nitrate Resin . . . . . ProSelect Nitrate (0.5 to 1.0 cu.ft.)
Softening Resin . . . . . ProSoft Premium, 8% crosslink (1.0 to 1.25 cu.ft.)

Part Number	Description	Softening Capacity Grains	Service Flow Rate GPM	Standard Connection Size
DAN10CP10-CDU	1 cu.ft. ProSelect Nitrate, 1 cu.ft. ProSoft Premium, Downflow Service/Upflow Regen	32,000	3 to 10	1 inch Brass Sweat
DAN07CP12-CDU	0.75 cu.ft. ProSelect Nitrate, 1.25 cu.ft. ProSoft Premium, Downflow Service/Upflow Regen	40,000	3 to 10	1 inch Brass Sweat
DAN07CP12-L2CV	0.75 cu.ft. ProSelect Nitrate, 1.25 cu.ft. ProSoft Premium, Downflow Service/Downflow Regen/Extended Fast Rinse	40,000	3 to 10	1 inch Copper Sweat
DAN05CP10-CDU	0.5 cu.ft. ProSelect Nitrate, 1 cu.ft. ProSoft Premium, Downflow Service/Upflow Regen	32,000	3 to 10	1 inch Brass Sweat
DAN05CP10-CDD	0.5 cu.ft. ProSelect Nitrate, 1 cu.ft. ProSoft Premium, Downflow Service/Downflow Regen	32,000	3 to 10	1 inch Brass Sweat

10 year warranty on mineral tank, 5 year warranty on valve.

Units include 10 x 60 PP tank (black), 15 x 17 x 33 brine tank (black), brine well, safety brine valve assembly with air check, brine tank overflow, upper screen, brine line tubing & connectors.

Bypass valve optional. Chrome tank jacket optional.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1361
EFFECTIVE
JUNE 2023

RESIDENTIAL WATER SOFTENERS

LOGIX SERIES WATER SOFTENERS
(1 INCH FULLY PORTED VALVING)



SWT's Logix Series Residential Water Softeners utilize ProSoft™ Premium resin. This is the same resin SWT used to treat the water servicing the Capitol Building in Washington DC. Also available is the newest in computer monitoring technology for maximized efficiency. Plus, these systems feature SWT's revolutionary **Cyclonic Distributor System**™ to provide full bed contact, less channeling, and superior backwashing (see next page).

- **100% corrosion free** system with attractive all black components
- **Energy efficient** controller uses less than $5.00 of electricity per year
- Never lose system memory and timer clock to power failure — **no battery required for backup!**
- Computerized controller **monitors and adjusts to actual water usage**
- All units include **upper screen, brine pickup with air check, brine well overflow connection, brine tank with injection molded lid, brine line tube and connectors**
- **10 year warranty** on tank, **5 year warranty** on valve
- All components **NSF listed**
- All **international voltages** available

Part Number	Tank Size Inches	System Service Flow Rate	Softening Capacity (Grains / Lbs. of Salt) *			Max. Valve Flow Rate @ 15 psid	Standard Connection Size
			6 lb/cu.ft.	10 lb/cu.ft.	15 lb/cu.ft.		
Computer Metered Systems with Professional Programming and Water Use Averaging							
WSC761P2-75	8 x 44	Up to 5 gpm	17,850	22,650	25,800	25 gpm	1 inch Copper Tube
WSC761P2-10	9 x 48	Up to 7 gpm	23,800	30,200	34,400	25 gpm	1 inch Copper Tube
WSC761P2-15	10 x 54	Up to 10 gpm	35,700	45,300	51,600	25 gpm	1 inch Copper Tube
WSC761P2-20	12 x 52	Up to 12 gpm	47,600	60,400	68,800	25 gpm	1 inch Copper Tube
Electronic Time Clock Systems with Semi-Programmable Regeneration							
WSC741P-75	8 x 44	Up to 5 gpm	17,850	22,650	25,800	25 gpm	1 inch Copper Tube
WSC741P-10	9 x 48	Up to 7 gpm	23,800	30,200	34,400	25 gpm	1 inch Copper Tube
WSC741P-15	10 x 54	Up to 10 gpm	35,700	45,300	51,600	25 gpm	1 inch Copper Tube
WSC741P-20	12 x 52	Up to 12 gpm	47,600	60,400	68,800	25 gpm	1 inch Copper Tube

Computer Metered Systems with Semi-Programmable Regeneration and Water Use Averaging

Part Number	Tank Size Inches	System Service Flow Rate	Softening Capacity (Grains / Lbs. of Salt) *			Max. Valve Flow Rate @ 15 psid	Standard Connection Size
			Low 3.3 lb/cu.ft.	Standard 9 lb/cu.ft.	High 15 lb/cu.ft.		
WSC761P-75	8 x 44	Up to 5 gpm	11,000	19,000	23,000	25 gpm	1 inch Copper Tube
WSC761P-10	9 x 48	Up to 7 gpm	15,000	25,000	30,000	25 gpm	1 inch Copper Tube
WSC761P-15	10 x 54	Up to 10 gpm	22,000	38,000	45,000	25 gpm	1 inch Copper Tube
WSC761P-20	12 x 52	Up to 12 gpm	28,000	50,000	60,000	25 gpm	1 inch Copper Tube

* Operating capacities based on influent of 400 ppm as $CaCO_3$ with a ratio of 2 parts calcium to 1 part magnesium at 2.0 gpm/cu.ft. flow rate. Capacities include 10% safety factor.

Operating Pressure: 20 to 120 psi **Operating Water Temperature:** 35 to 100°F

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1308
EFFECTIVE
JUNE 2010

RESIDENTIAL WATER SOFTENERS

LOGIX SERIES WATER SOFTENERS
(1 INCH FULLY PORTED VALVING)

OPTIONAL CHROME TANK JACKET



No unsightly exposed tank neck

Durable textured black cover

Made of high-impact polystyrene for exceptional strength and durability

Fully insulated to add protection to the tank and eliminate condensation

Attractive high gloss chrome finish

Light weight and easy to install

Resists UV degradation

Options

Part Number	Description
RG-TJ0844EC	Chrome Tank Jacket, 8 x 44 inch
RG-TJ0948EC	Chrome Tank Jacket, 9 x 48 inch
RG-TJ1054EC	Chrome Tank Jacket, 10 x 54 inch
RG-TJ1252EC	Chrome Tank Jacket, 12 x 52 inch
UA/BV1256	Bypass Valve
UA-1244336	Chlorine Generator — Brine Cycle
UA-1268102	Low Salt Indicator — Brine Cycle
By Request	Substitute Brine Tank, 18 x 33 inch, Black
By Request	Substitute Brine Tank, 18 x 40 inch, Black
By Request	Substitute 3/4 inch Copper Fittings
By Request	Substitute 3/4 or 1 inch PVC Socket Fittings
By Request	Substitute 3/4 or 1 inch PVC NPT Fittings
By Request	Substitute 3/4 or 1 inch Brass NPT Fittings

Grid plates, safety floats in brine tank, and alternate packaging for individual shipment are also available. Call for details.

Notes:

A black 15 x 17 x 33 inch brine tank with injection molded lid is standard. Substitutions are available on request. See "Options" above.

1 inch copper tube installation fittings are standard. Substitutions are available on request. See "Options" above.

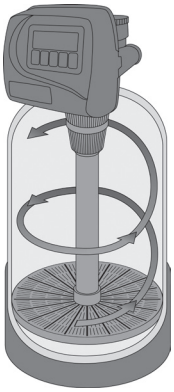
All units are supplied with ProSoft™ Premium 8% crosslink resin. Resin substitutions are available on request at extra cost.

Resin ratings are as follows:

	CROSSLINK	$CaCO_3$ CAP @ 15 lb/cu.ft.
ProSoft™ Gold	7%	32,000
ProSoft™ Premium	8%	33,000
ProSoft™ Fine Mesh	8%	34,600
ProSoft™ Heavy Duty	10%	35,600
ProSoft™ High Porosity	12%	28,000

In basic terms, crosslinkage refers to the resin beads' physical strength or ability to withstand chemical attack from chlorine, resin bed cleaners, and caustics used in DI applications.

SWT's Water Treatment Systems Include
CYCLONIC DISTRIBUTOR SYSTEM™



- Up to 30% less backwash flow rate is required...conserving water for the customer.
- Distributor plate is designed for more than 6,500 lb load capacity.
- Reduces system pressure loss while increasing flow and efficiency through the bed.
- Available for 7, 8, 9, 10, 12, 13, 14, and 16 inch systems.

This environmentally friendly design offers the most efficient service and backwashining characteristics available — reducing the amount of water to drain in backwash, while increasing the overall filtration capacity of a system.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1308
EFFECTIVE
JUNE 2010

RESIDENTIAL WATER SOFTENERS

TECH SERIES WATER SOFTENERS
(1 INCH FULLY PORTED VALVING)



SWT's Tech Series Residential Water Softeners *utilize ProSoft™ Premium resin. This is the same resin SWT used to treat the water servicing the Capitol Building in Washington DC. Also available is the newest in computer monitoring technology for maximized efficiency. Plus, these systems feature SWT's revolutionary* ***Cyclonic Distributor System™*** *to provide full bed contact, less channeling, and superior backwashing (see reverse side).*

- **100% corrosion-free** system with attractive all black components
- **Energy efficient** controller uses less than $5.00 of electricity per year
- Never lose system memory and timer clock to power failure — **no battery required for backup!**
- **Automatic variable reserve** based on water usage history
- All units include **upper screen, brine safety float, brine well overflow connection, brine tank with injection molded lid, brine line tube and connectors**
- **10 year warranty** on tank, **5 year warranty** on valve
- All components **NSF listed**
- All **international voltages** available

Part Number	Tank Size Inches	System Service Flow Rate	Softening Capacity * Grains / Lbs. of Salt			Max. Value Flow Rate @15 psid	Standard Connection Size
			6 lb/cu.ft.	10 lb/cu.ft.	15 lb/cu.ft.		
Computer Metered Systems with Professional Level Programming							
WSCCDM-10	9 x 48	7 gpm	23,800	30,200	34,400	27 gpm	1 inch Brass Sweat
WSCCDM-15	10 x 54	10 gpm	35,700	45,300	51,600	27 gpm	1 inch Brass Sweat
WSCCDM-20	12 x 52	14 gpm	47,600	60,400	68,800	27 gpm	1 inch Brass Sweat
WSCCDM-25	13 x 54	18 gpm	59,500	75,500	86,000	27 gpm	1 inch Brass Sweat
WSCCDM-30	13 x 65	21 gpm	71,400	90,600	103,200	27 gpm	1 inch Brass Sweat
WSCCDM-35	14 x 65	24 gpm	83,300	105,700	120,400	27 gpm	1 inch Brass Sweat
Electronic Time Clock Systems with Basic Programming (Non-Metered)							
WSCCTC-10	9 x 48	7 gpm	23,800	30,200	34,400	27 gpm	1 inch Brass Sweat
WSCCTC-15	10 x 54	10 gpm	35,700	45,300	51,600	27 gpm	1 inch Brass Sweat
WSCCTC-20	12 x 52	14 gpm	47,600	60,400	68,800	27 gpm	1 inch Brass Sweat

* Operating capacities based on influent of 400 ppm as $CaCO_3$ with a ratio of 2 parts calcium to 1 part magnesium at 2.0 gpm/cu.ft. flow rate. Capacities include 10% safety factor.

Operating Pressure: 20 to 120 psi **Operating Water Temperature:** 35 to 100°F

Valve Service Cv = 7.0 (18 gpm @ 7 psid, 21 gpm @ 9 psid, 24 gpm @ 12 psid)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1309
EFFECTIVE
MAY 2013

RESIDENTIAL WATER SOFTENERS

TECH SERIES WATER SOFTENERS
(1 INCH FULLY PORTED VALVING)

OPTIONAL CHROME TANK JACKET



No unsightly exposed tank neck

Durable textured black cover

Made of high-impact polystyrene for exceptional strength and durability

Fully insulated to add protection to the tank and eliminate condensation

Attractive high gloss chrome finish

Light weight and easy to install

Resists UV degradation

Options

TANK JACKETS

Chrome Tank Jacket, 8 x 44 inch (P/N RG-TJ0844EC)
Chrome Tank Jacket, 9 x 48 inch (P/N RG-TJ0948EC)
Chrome Tank Jacket, 10 x 54 inch (P/N RG-TJ1054EC)
Chrome Tank Jacket, 12 x 52 inch (P/N RG-TJ1252EC)

BYPASS VALVE

Bypass Valve (P/N LC-V3006)

BRINE TANKS SUBSTITUTIONS (BY REQUEST)

Brine Tank, 18 x 33 inch, Black
Brine Tank, 18 x 40 inch, Black

FITTINGS SUBSTITUTIONS (BY REQUEST)

1 inch PVC Male NPT Elbow Assembly
3/4 x 1 inch PVC Solvent Elbow Assembly
3/4 inch Brass Sweat Assembly LF
1-1/4 inch Plastic Male NPT Assembly
1 inch Plastic Male BSPT Assembly
1-1/4 & 1-1/2 inch PVC Solvent Assembly
1-1/4 inch Plastic Male BSPT Assembly
1-1/4 & 1-1/2 inch Brass Sweat Assembly LF
3/4 inch SharkBite® Assembly LF
1 inch SharkBite® Assembly LF
3/4 inch Plastic Male BSPT Assembly
3/4 inch John Guest® Elbow Assembly
1 inch PVC Male BSPT Elbow Assembly
1 inch John Guest® Straight Assembly
Vertical 90 degree Adapter Assembly

Grid plates and alternate packaging for individual shipment are also available. Call for details.

Notes:

A black 15 x 17 x 33 inch brine tank with injection molded lid is standard. Substitutions are available on request. See "Options" above.

1 inch brass sweat installation fittings are standard on all units. Substitutions are available on request. See "Options" above.

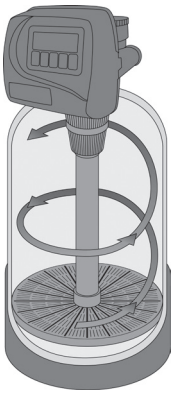
All units are supplied with ProSoft™ Premium 8% crosslink resin. Resin substitutions are available on request at extra cost.

Resin ratings are as follows:

	CROSSLINK	$CaCO_3$ CAP @ 15 lb/cu.ft.
ProSoft™ Gold	7%	32,000
ProSoft™ Premium	8%	33,000
ProSoft™ Fine Mesh	8%	34,600
ProSoft™ Heavy Duty	10%	35,600
ProSoft™ High Porosity	12%	28,000

In basic terms, crosslinkage refers to the resin beads' physical strength or ability to withstand chemical attack from chlorine, resin bed cleaners, and caustics used in DI applications.

SWT's Water Treatment Systems Include CYCLONIC DISTRIBUTOR SYSTEM™



- Up to 30% less backwash flow rate is required...conserving water for the customer.
- Distributor plate is designed for more than 6,500 lb load capacity.
- Reduces system pressure loss while increasing flow and efficiency through the bed.
- Available for 7, 8, 9, 10, 12, 13, 14, and 16 inch systems.

This environmentally friendly design offers the most efficient service and backwashining characteristics available — reducing the amount of water to drain in backwash, while increasing the overall filtration capacity of a system.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1309
EFFECTIVE
MAY 2013

RESIDENTIAL WATER SOFTENERS

TECH SERIES HIGH FLOW SOFTENERS
(1.25 INCH FULLY PORTED VALVING)



SWT's Tech Series High Flow Residential Water Softeners utilize ProSoft™ Premium resin. This is the same resin SWT used to treat the water servicing the Capitol Building in Washington DC. Also available is the newest in computer monitoring technology for maximized efficiency. Plus, these systems feature SWT's revolutionary **Cyclonic Distributor System**™ to provide full bed contact, less channeling, and superior backwashing (see reverse side).

- **100% corrosion-free** system with attractive all black components
- **Energy efficient** controller uses less than $5.00 of electricity per year
- Never lose system memory and timer clock to power failure — **no battery required for backup!**
- **Automatic variable reserve** based on water usage history
- All units include **upper screen, brine safety float, brine well overflow connection, brine tank with injection molded lid, brine line tube and connectors**
- **10 year warranty** on tank, **5 year warranty** on valve
- All components **NSF listed**
- All **international voltages** available

Computer Metered Systems with Professional Level Programming

Part Number	Tank Size Inches	Softening Capacity * Grains / Lbs. of Salt			System Service Flow Rate		Max. Valve Flow Rate @ 15 psid	Standard ** Connection Size
		6 lb/cu.ft.	10 lb/cu.ft.	15 lb/cu.ft.	Standard	Peak		
WSCCDM125-100	9 x 48	23,800	30,200	34,400	5 gpm	10 gpm	34 gpm	1-1/4 inch Brass Sweat
WSCCDM125-150	10 x 54	35,700	45,300	51,600	7.5 gpm	15 gpm	34 gpm	1-1/4 inch Brass Sweat
WSCCDM125-200	12 x 52	47,600	60,400	68,800	10 gpm	20 gpm	34 gpm	1-1/4 inch Brass Sweat
WSCCDM125-250	13 x 54	59,500	75,500	86,000	12.5 gpm	25 gpm	34 gpm	1-1/4 inch Brass Sweat
WSCCDM125-300	13 x 65	71,400	90,600	103,200	15 gpm	30 gpm	34 gpm	1-1/4 inch Brass Sweat
WSCCDM125-350	14 x 65	83,300	105,700	120,400	17.5 gpm	34 gpm	34 gpm	1-1/4 inch Brass Sweat
WSCCDM125-400	16 x 65	95,200	120,800	137,600	20 gpm	34 gpm	34 gpm	1-1/4 inch Brass Sweat
WSCCDM125-500	18 x 65	119,000	151,000	172,000	25 gpm	34 gpm	34 gpm	1-1/4 inch Brass Sweat
WSCCDM125-700	21 x 62	166,600	211,400	240,800	34 gpm	34 gpm	34 gpm	1-1/4 inch Brass Sweat

* Operating capacities based on influent of 400 ppm as $CaCO_3$ with a ratio of 2 parts calcium to 1 part magnesium at 2.0 gpm/cu.ft. flow rate. Capacities include 10% safety factor.

** Standard connection fitting is 1-1/4 & 1-1/2 inch Lead-Free Brass Sweat Assembly. See next page for other available options.

Operating Pressure: 20 to 120 psi

Operating Water Temperature: 35 to 100°F

Valve Service Cv = 8.8

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1310
EFFECTIVE
MAY 2013

RESIDENTIAL WATER SOFTENERS

TECH SERIES HIGH FLOW SOFTENERS
(1.25 INCH FULLY PORTED VALVING)

OPTIONAL CHROME TANK JACKET



No unsightly exposed tank neck

Durable textured black cover

Made of high-impact polystyrene for exceptional strength and durability

Fully insulated to add protection to the tank and eliminate condensation

Attractive high gloss chrome finish

Light weight and easy to install

Resists UV degradation

Options

TANK JACKETS

Chrome Tank Jacket, 8 x 44 inch (P/N RG-TJ0844EC)
Chrome Tank Jacket, 9 x 48 inch (P/N RG-TJ0948EC)
Chrome Tank Jacket, 10 x 54 inch (P/N RG-TJ1054EC)
Chrome Tank Jacket, 12 x 52 inch (P/N RG-TJ1252EC)

BYPASS VALVE

Bypass Valve (P/N LC-V3006)

BRINE TANKS SUBSTITUTIONS (BY REQUEST)

Brine Tank, 18 x 33 inch, Black
Brine Tank, 18 x 40 inch, Black

FITTINGS SUBSTITUTIONS (BY REQUEST)

1 inch PVC Male NPT Elbow Assembly
3/4 x 1 inch PVC Solvent Elbow Assembly
1 inch Brass Sweat Assembly LF
3/4 inch Brass Sweat Assembly LF
1-1/4 inch Plastic Male NPT Assembly
1 inch Plastic Male BSPT Assembly
1-1/4 & 1-1/2 inch PVC Solvent Assembly
1-1/4 inch Plastic Male BSPT Assembly
3/4 inch SharkBite® Assembly LF
1 inch SharkBite® Assembly LF
3/4 inch Plastic Male BSPT Assembly
3/4 inch John Guest® Elbow Assembly
1 inch PVC Male BSPT Elbow Assembly
1 inch John Guest® Straight Assembly
Vertical 90 degree Adapter Assembly

Grid plates and alternate packaging for individual shipment are also available. Call for details.

Notes:

A black 15 x 17 x 33 inch brine tank with injection molded lid is standard. Substitutions are available on request. See "Options" above.

1-1/4 & 1-1/2 inch lead-free brass sweat installation fittings are standard. Substitutions available on request. See "Options" above.

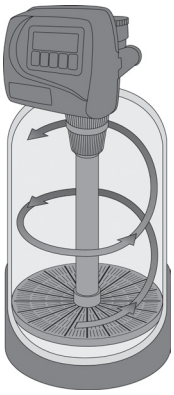
All units are supplied with ProSoft™ Premium 8% crosslink resin. Resin substitutions are available on request at extra cost.

Resin ratings are as follows:

	CROSSLINK	$CaCO_3$ CAP @ 15 lb/cu.ft.
ProSoft™ Gold	7%	32,000
ProSoft™ Premium	8%	33,000
ProSoft™ Fine Mesh	8%	34,600
ProSoft™ Heavy Duty	10%	35,600
ProSoft™ High Porosity	12%	28,000

In basic terms, crosslinkage refers to the resin beads' physical strength or ability to withstand chemical attack from chlorine, resin bed cleaners, and caustics used in DI applications.

SWT's Water Treatment Systems Include CYCLONIC DISTRIBUTOR SYSTEM™



- Up to 30% less backwash flow rate is required...conserving water for the customer.
- Distributor plate is designed for more than 6,500 lb load capacity.
- Reduces system pressure loss while increasing flow and efficiency through the bed.
- Available for 7, 8, 9, 10, 12, 13, 14, and 16 inch systems.

This environmentally friendly design offers the most efficient service and backwashining characteristics available — reducing the amount of water to drain in backwash, while increasing the overall filtration capacity of a system.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1310
EFFECTIVE
MAY 2013

AllSoft™

Quality Water 100% of the Time!

Safe Water Technologies' AllSoft Twin Tank System provides continuous soft water all day. Everyday! One tank is always in service, while the other tank is in regeneration. The AllSoft system can be configured for either twin alternating or twin parallel operation.



AllSoft shown with optional chrome finish tank jackets.

Soft Water Backwash

The AllSoft system backwashes with softened water to eliminate hardness carryover. The AllSoft system is also extremely efficient, using as little as 30 gallons of soft water to regenerate.

Product Reliability

The AllSoft system combines the time-proven Performa 278 Series valve body with the innovative electronic controls of the Logix 764 Series product line to provide a reliable product. SWT dealers do not need to stock new parts for this system, as the standard service parts for SWT residential systems are all that is required.

Memory and History Capabilities

The AllSoft system meters and stores water usage data. This data can be displayed, allowing the user to monitor usage and fine-tune the cycle settings accordingly.

Easy-to-Read Display

The AllSoft controllers have a large four-digit display, allowing the user to easily see the remaining capacity and the flow rate. The controller also clearly displays which tank is in service, and which is in regeneration or standby.

The Competition Doesn't Compare!	Fleck 9000	Kinetico Twin	**SWT AllSoft**
Includes SWT's Cyclonic Distributor System™	No	No	**Yes**
Fully ported 1 inch valves for high flow rates and low pressure drops	No	No	**Yes**
Twin parallel operation option	No	No	**Yes**
Isolation of unit for servicing *	No	No	**Yes**
Common parts with other family valves	No	Yes	**Yes**
Low cost, highly advanced electronics	No	No	**Yes**
Flow and usage history at the touch of a button	No	No	**Yes**

* Isolation is configuration-dependent.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1235
EFFECTIVE
APRIL 2014

RESIDENTIAL WATER SOFTENERS

ALLSOFT™ TWIN ALTERNATING SOFTENERS



SWT's AllSoft Twin Tank Residential Water Softener Systems utilize ProSoft™ and ProSelect™ resins as the primary functioning layers. These cation and anion exchange units are designed to remove calcium and magnesium (hardness), and are also available with nitrate, chlorine, and tannin removal capabilities. AllSoft systems feature the newest in computer monitoring technology for maximized efficiency.

- **Fully ported 1 inch valves**
- **100% corrosion-free** system
- **Energy efficient controller** uses less than $5.00 of electricity per year
- **SWT's Cyclonic Distributor System™** increases flow efficiency
- **Power Loss Memory Retention** stores programmed parameters in static memory (battery back-ups not needed)
- **10 year warranty** on tanks, **5 year warranty** on valves
- All units include **bypass valves, brine tank, and (2) brine pickups with air check assembly**
- **Safety floats and chrome finish tank jackets** available
- **Twin parallel** configuration optional

Part Number	Tank Size Inches	$CaCO_3$ (Hardness) Capacity Per Tank			Service Standard Flow Rate GPM	Service Peak Flow Rate GPM	Standard Connection Size Inches
		@ 6 lb/cu.ft. Grains/Gallon	@ 10 lb/cu.ft. Grains/Gallon	@ 15 lb/cu.ft. Grains/Gallon			
WSC76PT-50	7 x 44	11,000	13,775	16,750	3 GPM	6 GPM	1" Copper
WSC76PT-75	8 x 44	16,500	20,650	25,125	4 GPM	8 GPM	1" Copper
WSC76PT-10	9 x 48	22,000	27,550	33,500	5 GPM	10 GPM	1" Copper
WSC76PT-15	10 x 54	33,000	41,325	50,250	7.5 GPM	15 GPM	1" Copper
WSC76PT-20	12 x 52	44,000	55,100	67,000	10 GPM	20 GPM	1" Copper
WSC76PT-25	13 x 54	55,000	68,875	83,750	12.5 GPM	20 GPM	1" Copper
WSC76PT-35	14 x 65	77,000	96,425	117,250	17.5 GPM	20 GPM	1.25" Copper

Operating capacity based on influent of 500 ppm as $CaCO_3$ with ratio of 2 parts calcium to 1 part magnesium.
Capacities include a 5 to 10% safety factor.
Operating pressure: 20 to 150 psi (1.4 to 10.3 bar)
Operating temperature: 36 to 120°F (2 to 48.9°C)
All pressure vessels are wound fiberglass, reinforced polypropylene copolymer, and are NSF® listed.
All control valves are NSF® listed.
International voltages available at additional cost.
Other connections are available.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1235
EFFECTIVE
APRIL 2014

SOFT N' PURE™

ULTRAVIOLET, CARBON FILTRATION & SOFTENING SYSTEM

SWT's Soft n' Pure Whole House Water Purification System is the first affordable water treatment system to not only soften water, but also remove or significantly reduce over 100 carcinogenic chemicals as listed by the EPA, and also disinfect the entire home's water supply against harmful pathogenic bacteria such as: E. Coli, baccilary dysentery, typhoid, cholera, and others.



PATENTED PRODUCT

- 30,000 microwatts of UV power
- Up to 33,000 grain softening capacity
- Flow rates up to 10 gallons per minute
- Corrosion-free fiberglass tanks and Noryl valves
- Fully programmable, energy efficient controller

Constant improvements in water treatment technology have allowed the Soft n' Pure system to be manufactured on a scale that for the first time is both affordable and easy to maintain.

A step up from reverse osmosis, SWT's Soft n' Pure system is capable of not just treating 10 or 20 gallons of water per day for drinking, but is capable of actually purifying several hundred gallons per day. It will treat all the water for every sink, faucet, shower, and bathtub throughout the home.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 0103
EFFECTIVE
AUGUST 2005

THE SOFT N' PURE WHOLE HOUSE WATER PURIFICATION SYSTEM



HOW THE SYSTEM WORKS:

Stage 1: A fully automatic demand regeneration water conditioner not only softens the water, but also removes lead, iron, radium, and filters sediment.

Stage 2: The water then enters a compacted bed of steam activated carbon. This removes or reduces unpleasant taste and odors, and also chlorine, pesticides, THM's, PCB's, and other common chemicals that have been found in water supplies and have been defined as carcinogenic by the EPA. See below for a more extensive listing.

Stage 3: The water exits through a stainless steel disinfecting chamber which bombards bacteria, viruses, and harmful microorganisms with high levels of germicidal ultraviolet light and renders them harmless. This process of purification works without chemicals and leaves no residual in the water. Ultraviolet irradiation is now accepted by both the EPA and the FDA as a safe, effective method of sterilization.

---

*SWT's **Soft n' Pure Water Purification System** will remove completely, or reduce significantly, the following contaminants from water:*

Adipates(diethylhexyl)
Alachlor
Aldicarb
Aldicarb sulfone
Aldicarb sulfoxide
Atrazine
Benz (a) anthracine (PAH)
Benzene
Benzo (a) pyrene (PAH)
Benzo (b) floranthene (PAH)
Benzo (k) floranthene (PAH)
Beryllium
Butyl benzyl phthalate (PAE)
Cadmium
Carbofuran
Carbon tetrachloride
Chlordane
Chlorine
Chromium (+3)
Chrysene (PAH)
Dalapon
Di (2-ethylhexl) adipate
Dibenz (a,h) antracene
Dibromochloropropane
Dichlorobenzene (meta-)
Dichlorobenzene (ortho)
Dichlorobenzene (para-)
Dichloroethane (1,2-)
Dichloroethylene (1,1-)
Dichloroethylene (cis-1,2-)
Dichloroethylene (trans-1,2)
Dichloropropane
Diethylhexyl phthalate (PAE)
Dinoseb
Diquat
Endothall
Endrin
Ethylbenzene
Ethylene dibromide(EDB)
Glyphosate
Heptachlor
Heptachlor epoxide
Hextachlorobenzene
Hextachlorocyclopentadiene
Indo (1,2,3-c,d) pyrene (PAH)
Lidane
Mercury (organic complexes)
Methoxychlor
Monochlorobenzene
Organic color
Organics
Oxymal
Pentachlorophenal
Picloram
PCB's
Sediment
Simazine
Styrene
3,7,8-TCDD (dioxin)
2,4-D
2,4,5-TP (silvex)
TCB's
TCE's
Tetrachloroethylene
Thallium
THM's
Toluene
Toxaphene
Vinyl chloride
Xylenes

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 0103
EFFECTIVE
AUGUST 2005

RESIDENTIAL TREATMENT SYSTEMS

SOFT N' PURE™ SYSTEMS
ULTRAVIOLET, CARBON FILTER, & WATER SOFTENER



PATENTED PRODUCT

SWT's Soft n' Pure System *represents the vanguard in complete whole house residential water treatment systems. There isn't a more comprehensive way to treat every water outlet in the house for softening, dechlorination, taste & odor, and microbiological contaminants. This single treatment system utilizes ProSoft™ resins, ProActive™ carbons, and a 10 gpm Spectrum Biolyte™ Series UV chamber as the primary functioning stages. Available with the newest in computer monitoring technology for maximized efficiency.*

- **30,000 microwatts** of UV power
- Up to **33,000 grain softening capacity**
- **10 year warranty** on tank
- **5 year warranty** on valve
- All **international voltages** available
- **Corrosion-free** fiberglass tanks and Noryl valves
- Battery backup on electronic controls

Soft n' Pure Residential Water Purification System

Part Number	Controller	Softening Capacity / Regeneration		Reduces Chlorine, Taste & Odor	Ultraviolet Dosage µw•sec/cm²	Flow Rate GPM	Carbon Included
		10 Lbs. Salt / Cu.Ft.	15 Lbs. Salt / Cu.Ft.				
SNP-10C-NC	12 Day Clock Timer	29,000 gr.	33,000 gr.	No	30,000	10	None
SNP-10D-NC	Computer / Metered	29,000 gr.	33,000 gr.	No	30,000	10	None
SNP-10C	12 Day Clock Timer	29,000 gr.	33,000 gr.	Yes	30,000	10	1 Cu.Ft.
SNP-10D	Computer / Metered	29,000 gr.	33,000 gr.	Yes	30,000	10	1 Cu.Ft.

International voltages available at additional cost.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1091
EFFECTIVE
MARCH 2005

RESIDENTIAL TREATMENT SYSTEMS

NITRATE REMOVAL SYSTEMS



SWT's Nitrate Filter Systems are built utilizing SWT's ProSelect™ Nitrate Resin as the primary functioning layer. Now, there is a way to treat nitrate contaminated well water easily and safely. These new systems are controlled by a computerized chip that is programmed with the levels of nitrates and monitors the actual water usage patterns. It economically regenerates the unit only as needed and ensures the customer nitrate-free water at all times for the entire home. The computer adapts to a home water usage pattern and leaves a buffer to ensure there will be plenty of treated water available. All this at an economical price! Plus, these systems now feature SWT's revolutionary ***Cyclonic Distributor System***™ to provide full bed contact, less channeling, and superior backwashing.

- **Removes up to 50 ppm nitrate per gallon of water**
- Regenerates with chloride (salt)
- **Nitrates will not release back into the water** (even if the filter bed is full)
- **A fraction of the cost of digging a new well or linking up to city water main**
- **100% corrosion-free system** features NSF® listed wound fiberglass tank with reinforced polypropylene lining (150 psi operating pressure)
- **Fully programmable, energy efficient controller** uses less than $5.00 of electricity per year
- 10 year warranty on tank, 5 year warranty on valve

Computer Metered Nitrate Removal Systems

Part Number	Tank Size Inches	Nitrate Capacity with 10 lb salt/cu.ft. (PPM as NO_3)	Service Standard Flow Rate GPM	Service Peak Flow Rate GPM	Backwash 50% Exp. @ 50°F GPM	Standard Pipe Connection Inches
NO376P2-050	7 x 44	33,500 *	3	6	1.20	1
NO376P2-075	8 x 44	50,250 *	4	8	1.40	1
NO376P2-100	9 x 48	67,000 *	5	10	1.70	1
NO376P2-150	10 x 54	100,500 *	7.5	15	2.20	1
NO376P2-200	12 x 52	134,000 *	8 to10	20	2.50	1

* Conservative number with 4x safety factor built in. While higher capacities are attainable, Safe Water Technologies recommends these guidelines due to unforseen variables that are common in well water. SWT also recommends periodic resin cleaning with soda ash and/or resin cleaners to keep the bed as clean as possible.

International voltages available at additional cost. Duplex systems also available. Contact your SWT representative for details.

Bypass available — add $59.70 to list price (P/N: UA/BV1256).

Operating Pressure: 20 to 125 psi (1.4 to 8.6 bar) **Operating Temperature:** 36 to 120°F (2 to 48.9°C)

NOTE: Please specify nitrate and sulfate levels in order for SWT to properly program capacity.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1199
EFFECTIVE
APRIL 2023

NITRATE REMOVAL SYSTEMS

System capacity is rated for total nitrate capacity only. Allotment of up to 50% of total nitrate capacity may be consumed by other ions in the raw water. Before installing a nitrate system, ***SWT recommends a water analysis and factory consultation for proper equipment sizing and regeneration settings.***

More on nitrate removal

The science of nitrate removal is simple, but for obvious reasons, cannot be taken lightly. The two most often used technologies for nitrate reduction are Reverse Osmosis (RO) and Ion Exchange. Ion Exchange is a more recent technology. RO is much more costly per gallon of treated water, except for third faucet drinking water applications. RO is a more full-proof method with less maintenance responsibility to the homeowner, but impractical in whole house applications.

Up until recently, nitrate was an ion that once pulled from the water with a resin bed, had a very loose hold on the resin bead, and a competitive ion, such as sulfate, could come along and push an already held nitrate ion back into the water. It has only been recently that this problem has been overcome.

ProSelect™ Nitrate resin is one of the first of its kind of resin that will not allow a competing ion to displace a captive nitrate ion back into the water supply. However, the selective advantage of the resin bead to the nitrate is still minimal. This means it almost acts as a first-come, first-served competition with a slight preference going to the nitrate. Other ions in the raw water will not displace the nitrate back into the water stream, but nitrates will not always displace sulfates either. That is why in all nitrate applications, a water analysis should be done to determine the amount of nitrate in the water—you also need to know if there are sulfates present which will compete for room in the resin bed. Then size the system accordingly.

It is very easy to do. It only requires a little math. If for example you have 30 ppm of nitrate, and 10 ppm of sulfate, that means you have a total of 40 ppm fighting for room in the bed. 25% is sulfate, and 75% is nitrate. That means that in a one cubic foot nitrate system with a capacity of 67,000 ppm/10 lb. of salt regenerant, the bed will be completely exhausted after 16,750 ppm of sulfate and 50,250 ppm of nitrate. So your total nitrate capacity would be 50,250 ppm nitrate (75% of 67,000 ppm) or 1,675 gallons of water. (50,250 ppm of room divided by 30 ppm/gallon of water equals 1,675 gallons before the bed is full.)

(Total bed capacity) – (% of sulfate to nitrate) = (Total nitrate capacity)

Still, some dealers like to reduce that number to err on the safe side. They may leave a 20% buffer to allow for an excess of water use.

Other things to remember:

- A nitrate system should always follow an iron filter or a water softener in any multi-tank treatment system.
- Iron will foul out a nitrate resin faster than a cation resin.
- Both a water softener and a nitrate removal system use salt (sodium chloride) to regenerate. However, the nitrate resin is using the chloride side of the salt for regeneration, as opposed to a water softener which uses the sodium side.
- Potassium chloride can be used, but remember, potassium chloride on average has 20% less chloride per lb. than salt. Control settings have to be adjusted accordingly.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1199
EFFECTIVE
APRIL 2023

RESIDENTIAL TREATMENT SYSTEMS

TANNIN & ORGANIC REMOVAL SYSTEMS



SWT's Tannin & Organic Removal Systems are built utilizing SWT's ProSelect™ Tannin-HP Resin as the primary functioning layer. Now, there is a way to treat tannins and organics more thoroughly than ever. These systems are controlled by a computerized chip that meters actual water usage patterns. It economically regenerates the unit only as needed and ensures the customer tannin-free water for the entire home. The computer adapts to a home water usage pattern and leaves a buffer to ensure there will be plenty of treated water available. All this at an economical price! Plus, these systems feature SWT's revolutionary **Cyclonic Distributor System**™ to provide full bed contact, less channeling, and superior backwashing.

- **Removes tannins, organic iron, and heme iron**
- Regenerates with chloride (salt)
- **Tannins will not release back into the water** (even if the system bed is full)
- **Reduces color** and improves the taste of water
- **A fraction of the cost of digging a new well or linking up to city water main**
- **100% corrosion-free system** features NSF® listed wound fiberglass tank with reinforced polypropylene lining (150 psi operating pressure)
- **Fully programmable, energy efficient controller** uses less than $5.00 of electricity per year
- 10 year warranty on tank, 5 year warranty on valve

Computer Metered Tannin and Organic Removal Systems

Part Number	Tank Size Inches	Salt Needed Per Regeneration Lb	Service Standard Flow Rate GPM	Service Peak Flow Rate GPM	Estimated TOC Capacity PPM	Standard Pipe Connection Inches
TOC762P-050	7 x 44	5.5	3	6	5,000	1
TOC762P-075	8 x 44	7.5	4	8	7,000	1
TOC762P-100	9 x 48	10.0	5	10	10,000	1
TOC762P-150	10 x 54	15.0	7.5	15	15,000	1
TOC762P-200	12 x 52	20.0	8 to10	20	20,000	1

0.5% solution of soda ash helps regeneration in case of iron.
International voltages available at additional cost.
Duplex systems available. Contact your SWT representative for details.
Bypass available — add $59.70 to list price (P/N: UA/BV1256).
Operating Pressure: 20 to 125 psi (1.4 to 8.6 bar) **Operating Temperature:** 36 to 120°F (2 to 48.9°C)
NOTE: Please specify operating pressure at installation in order for SWT to properly program brine refill time.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1200
EFFECTIVE
FEBRUARY 2024

TANNIN & ORGANIC REMOVAL SYSTEMS

What are tannins?

Simply put, anything once alive can be considered organic. Tannins are dissolved, decayed organic matter in the water, and generally not a health risk. This occurs primarily in river or surface water, but can also occur in wells on occasion. We have heard of estimates of 12,000 different types of common tannins. Most people drink a form of tannin every day in the guise of tea or coffee.

Tannin, in abundance, will generally cause a yellow or brownish tinge to the water supply. It comes from decayed vegetation or animal matter, and is carbon based—as is all life forms. This is significant in that carbon tends to deplete oxygen, and tannin-laden waters will reduce the amount of free oxygen in water.

Tannins can also prevent iron from precipitating, and tannins in water are responsible for many failures of iron removal filter systems. Sometimes organic will bind with iron (called heme iron) and will cause the iron to pass through an oxidation process while remaining in solution. The best way to remove the iron in cases such as this is to treat the iron as an organic, and remove it with tannin resin.

How are tannins measured?

Unfortunately, not very well in simple tests. There are so many variations of tannins that they are hard to define and measure with standard testing. Some companies offer Lignin Test Kits, or more advanced labs have a TOC (Total Organic Carbon) test, but neither test is foolproof.

How do tannin resins (sometimes called organic scavengers) work?

Would you believe no one has all the answers to this question? Tannin resins are made in many different variations. Some work on an ion exchange principal, and some work through adsorption. Some even work as a mechanical filter. Most tannin resins work using more than one method. SWT has tried a variety of resin designs before choosing a resin that seems to give us the best results in the field.

We designed our resin and systems with an eye on why most other tannin systems fail. We built a resin that would not fall apart in southern climates, that could withstand iron, and could be easily cleaned because it had to be used in heme iron applications. As technology advanced, we found a resin that actually pulled organic from the water in an additional method separate from its ion exchange capability.

How to size a residential tannin removal system

Since there is no accurate, cost effective way to measure tannins, there is no absolute rule with unit sizing other than trial and error for your part of the country, or having a familiarity with the local water supply. Many mild cases of tannin contamination (light to no color) can be treated with as little as 1/3 of a foot of tannin resin. In areas where there is greater than 2 ppm of iron in addition to the tannins, more resin is required. If you can't see the bottom of the tub, install at least a one cubic foot system, if not larger.

The non-scientific formula

A little bit of tannin = a little media. (More tannins need more media.)

Recommended regeneration

Valves should be set to regenerate every 1,000 gallons or seven days (whichever comes first). SWT also recommends the periodic use of soda ash and/or resin cleaners for particularly bad wells.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1200
EFFECTIVE
FEBRUARY 2024

RESIDENTIAL SEDIMENT FILTERS

SWT FILTEREASE™ FILTERS


TECH SERIES FILTER


LOGIX SERIES FILTER

SWT's Residential Sediment Filters *are built utilizing SWT's FilterEase™ filter media. These filters are designed to remove ferric iron, silt, and turbidity, and are preferred when water flow rates and pressures are limited. Sediment filtration as low as 10 to 20 micron is common. Plus, these systems feature SWT's revolutionary* ***Cyclonic Distributor System***™ *to provide full bed contact, less channeling, and superior backwashing (see reverse side).*

- **Better filtration** than sand — Nominal **20 micron** (or better) filtration
- **50% less water for backwashing** than sand filters
- **Fully programmable, energy efficient controller** uses less than $5.00 of electricity per year
- **100% corrosion-free** system
- Choice of **piston driven (Tech Series)** or **cam driven (Logix Series) valves**

Part Number	Tank Size Inches	Service Flow Rate*		Backwash 40% Exp. @ 60°F GPM (LPM)	Standard Connection Size
		Standard GPM (LPM)	Peak GPM (LPM)		
Tech Series Automatic Backwashing FilterEase Filters					
FFA075C	8 x 44	3-6 (11-23)	6 (23)	3.5 (13.3)	1 inch Brass Sweat
FFA100C	9 x 48	4-7 (15-26)	8 (30)	4.5 (17.0)	1 inch Brass Sweat
FFA150C	10 x 54	4-9 (15-34)	12 (45)	5.0 (18.9)	1 inch Brass Sweat
FFA200C	12 x 52	5-10 (19-38)	15 (57)	8.0 (30.3)	1 inch Brass Sweat
FFA250C	13 x 54	6-12 (23-45)	18 (68)	9.0 (34.1)	1 inch Brass Sweat
FFA300C	13 x 65	6-12 (23-45)	18 (68)	9.0 (34.1)	1 inch Brass Sweat
FFA350C	14 x 65	7-14 (26-53)	21 (80)	10.0 (37.9)	1 inch Brass Sweat
Logix Series Automatic Backwashing FilterEase Filters					
FFA075L	8 x 44	3-6 (11-23)	6 (23)	3.5 (13.3)	1 inch Copper Tube
FFA100L	9 x 48	4-7 (15-26)	8 (30)	4.5 (17.0)	1 inch Copper Tube
FFA150L	10 x 54	4-9 (15-34)	12 (45)	5.0 (18.9)	1 inch Copper Tube
FFA200L	12 x 52	5-10 (19-38)	15 (57)	8.0 (30.3)	1 inch Copper Tube
FFA250L	13 x 54	6-12 (23-45)	18 (68)	9.0 (34.1)	1 inch Copper Tube
FFA300L	13 x 65	6-12 (23-45)	18 (68)	9.0 (34.1)	1 inch Copper Tube
FFA350L	14 x 65	7-14 (26-53)	21 (80)	10.0 (37.9)	1 inch Copper Tube

* For superior filtration, reduce flow rates by 1/3 of the standard flow rate specification.

Tank jackets available, see reverse side. International voltages available at additional cost.

All systems have other piping connections available. See the Control Valve Price Lists for more details.

Operating Pressure: 20 to 125 psi (1.4 to 8.6 bar) **Operating Temperature:** 36 to 120°F (2 to 48.9°C)

All pressure vessels are wound fiberglass composite tanks with copolymer polypropylene liner and are NSF® listed.

Duplex systems available, call for details. 10 year warranty on tank, 5 year warranty on valve.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1213
EFFECTIVE
JANUARY 2014

RESIDENTIAL SEDIMENT FILTERS

SWT FILTEREASE™ FILTERS



Operates Without Electricity

Manual FilterEase Filters

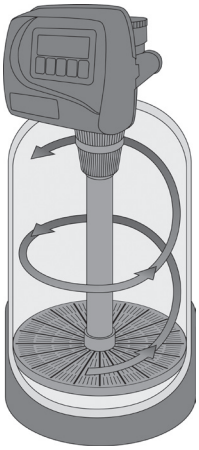
Part Number	Tank Size Inches	Service Flow Rate*		Backwash 40% Exp. @ 60°F GPM (LPM)	Standard Connection Size
		Standard GPM (LPM)	VOC Reduct GPM (LPM)		
CFM075F	8 x 44	4-6 (15-23)	< 2 (8)	3.5 (13.3)	1 inch Brass MNPT
CFM100F	9 x 48	5-8 (19-30)	< 2 (8)	4.5 (17.0)	1 inch Brass MNPT
CFM150F	10 x 54	7-9 (26-34)	< 3 (11)	5.0 (18.9)	1 inch Brass MNPT
CFM200F	12 x 52	10 (38)	< 4 (15)	8.0 (30.3)	1 inch Brass MNPT
CFM250F	13 x 54	12.5 (47)	< 5 (19)	9.0 (34.1)	1 inch Brass MNPT
CFM300F	13 x 65	15 (57)	< 6 (23)	9.0 (34.1)	1 inch Brass MNPT
CFM350F	14 x 65	17.5 (66)	< 6.5 (25)	10.0 (37.9)	1 inch Brass MNPT

* For superior filtration, reduce flow rates by 1/3 of the standard flow rate specification.

Options

RG-TJ0844EC . . . Chrome Tank Jacket, 8 x 44 inch
RG-TJ0948EC . . . Chrome Tank Jacket, 9 x 48 inch
RG-TJ1054EC . . . Chrome Tank Jacket, 10 x 54 inch
RG-TJ1252EC . . . Chrome Tank Jacket, 12 x 52 inch

By Request . . . . Substitute 3/4 inch Copper Fittings
By Request . . . . Substitute 3/4 or 1 inch PVC Socket Fittings
By Request . . . . Substitute 3/4 or 1 inch PVC NPT Fittings
By Request . . . . Substitute 3/4 or 1 inch Brass NPT Fittings



SWT's Water Treatment Systems Include the Revolutionary CYCLONIC DISTRIBUTOR SYSTEM™

- Up to 30% less backwash flow rate is required...conserving water for the customer.
- Distributor plate is designed for more than 6,500 lb load capacity.
- Reduces system pressure loss while increasing flow and efficiency through the bed.
- Available for 7, 8, 9, 10, 12, 13, 14, and 16 inch systems.

SWT's Cyclonic Distributor System (CDS) is a built-in bottom plate distributor which offers significant advantages over standard distribution systems — from the elimination of gravel underbedding (reducing overall cost and shipping weight) to the permanent attachment of the riser tube and distributor plate (eliminating rebedding when servicing the valve).

This environmentally friendly design offers the most efficient service and backwashing characteristics available — reducing the amount of water to drain in backwash, while increasing the overall filtration capacity of a system.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1213
EFFECTIVE
JANUARY 2014

RESIDENTIAL SEDIMENT FILTERS

SWT FILTEREASE-HD™ FILTERS


TECH SERIES FILTER


LOGIX SERIES FILTER

SWT's Residential Sediment Filters are built utilizing SWT's FilterEase-HD filter media. These filters are designed to remove ferric iron, silt, and turbidity, and are preferred when higher backwash rates (if available) are desired for cleaning iron and silt from the filter bed. Sediment filtration as low as 10 to 20 micron is common. Plus, these systems feature SWT's revolutionary **Cyclonic Distributor System**™ to provide full bed contact, less channeling, and superior backwashing (see reverse side).

- **Better filtration** than sand — Nominal **20 micron** (or better) filtration
- **50% less water for backwashing** than sand filters
- **Fully programmable, energy efficient controller** uses less than $5.00 of electricity per year
- **100% corrosion-free** system
- Choice of **piston driven (Tech Series)** or **cam driven (Logix Series) valves**

Part Number	Tank Size Inches	Service Flow Rate*		Backwash 40% Exp. @ 60°F GPM (LPM)	Standard Connection Size
		Standard GPM (LPM)	Peak GPM (LPM)		
Tech Series Automatic Backwashing FilterEase-HD Filters					
FHA075C	8 x 44	3-6 (11-23)	6 (23)	5.0 (18.9)	1 inch Brass Sweat
FHA100C	9 x 48	4-7 (15-26)	8 (30)	7.0 (26.5)	1 inch Brass Sweat
FHA150C	10 x 54	4-9 (15-34)	12 (45)	8.0 (30.3)	1 inch Brass Sweat
FHA200C	12 x 52	5-10 (19-38)	15 (57)	12.0 (45.4)	1 inch Brass Sweat
FHA250C	13 x 54	6-12 (23-45)	18 (68)	15.0 (56.8)	1 inch Brass Sweat
FHA300C	13 x 65	6-12 (23-45)	18 (68)	15.0 (56.8)	1 inch Brass Sweat
FHA350C	14 x 65	7-14 (26-53)	21 (80)	15.0 (56.8)	1 inch Brass Sweat
Logix Series Automatic Backwashing FilterEase-HD Filters					
FHA075L	8 x 44	3-6 (11-23)	6 (23)	5.0 (18.9)	1 inch Copper Tube
FHA100L	9 x 48	4-7 (15-26)	8 (30)	7.0 (26.5)	1 inch Copper Tube
FHA150L	10 x 54	4-9 (15-34)	12 (45)	8.0 (30.3)	1 inch Copper Tube
FHA200L	12 x 52	5-10 (19-38)	15 (57)	12.0 (45.4)	1 inch Copper Tube
FHA250L	13 x 54	6-12 (23-45)	18 (68)	15.0 (56.8)	1 inch Copper Tube
FHA300L	13 x 65	6-12 (23-45)	18 (68)	15.0 (56.8)	1 inch Copper Tube
FHA350L	14 x 65	7-14 (26-53)	21 (80)	15.0 (56.8)	1 inch Copper Tube

* For superior filtration, reduce flow rates by 1/3 of the standard flow rate specification.

Tank jackets available, see reverse side. International voltages available at additional cost.

All systems have other piping connections available. See the Control Valve Price Lists for more details.

Operating Pressure: 20 to 125 psi (1.4 to 8.6 bar) **Operating Temperature:** 36 to 120°F (2 to 48.9°C)

All pressure vessels are wound fiberglass composite tanks with copolymer polypropylene liner and are NSF® listed.

Duplex systems available, call for details. 10 year warranty on tank, 5 year warranty on valve.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1311
EFFECTIVE
JANUARY 2014

RESIDENTIAL SEDIMENT FILTERS

SWT FILTEREASE-HD™ FILTERS



Operates Without Electricity

Manual FilterEase-HD Filters

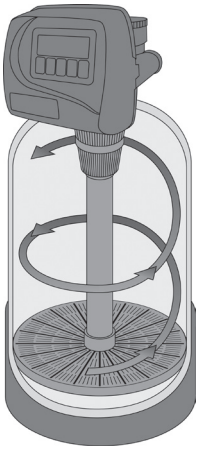
Part Number	Tank Size Inches	Service Flow Rate *		Backwash 40% Exp. @ 60°F GPM (LPM)	Standard Connection Size
		Standard GPM (LPM)	Peak GPM (LPM)		
FHM075F	8 x 44	3-6 (11-23)	6 (23)	5.0 (18.9)	1 inch Brass MNPT
FHM100F	9 x 48	4-7 (15-26)	8 (30)	7.0 (26.5)	1 inch Brass MNPT
FHM150F	10 x 54	4-9 (15-34)	12 (45)	8.0 (30.3)	1 inch Brass MNPT
FHM200F	12 x 52	5-10 (19-38)	15 (57)	12.0 (45.4)	1 inch Brass MNPT
FHM250F	13 x 54	6-12 (23-45)	18 (68)	15.0 (56.8)	1 inch Brass MNPT
FHM300F	13 x 65	6-12 (23-45)	18 (68)	15.0 (56.8)	1 inch Brass MNPT
FHM350F	14 x 65	7-14 (26-53)	21 (80)	15.0 (56.8)	1 inch Brass MNPT

* For superior filtration, reduce flow rates by 1/3 of the standard flow rate specification.

Options

RG-TJ0844EC . . . Chrome Tank Jacket, 8 x 44 inch
RG-TJ0948EC . . . Chrome Tank Jacket, 9 x 48 inch
RG-TJ1054EC . . . Chrome Tank Jacket, 10 x 54 inch
RG-TJ1252EC . . . Chrome Tank Jacket, 12 x 52 inch

By Request . . . . Substitute 3/4 inch Copper Fittings
By Request . . . . Substitute 3/4 or 1 inch PVC Socket Fittings
By Request . . . . Substitute 3/4 or 1 inch PVC NPT Fittings
By Request . . . . Substitute 3/4 or 1 inch Brass NPT Fittings



SWT's Water Treatment Systems Include the Revolutionary CYCLONIC DISTRIBUTOR SYSTEM™

- Up to 30% less backwash flow rate is required...conserving water for the customer.
- Distributor plate is designed for more than 6,500 lb load capacity.
- Reduces system pressure loss while increasing flow and efficiency through the bed.
- Available for 7, 8, 9, 10, 12, 13, 14, and 16 inch systems.

SWT's Cyclonic Distributor System (CDS) is a built-in bottom plate distributor which offers significant advantages over standard distribution systems — from the elimination of gravel underbedding (reducing overall cost and shipping weight) to the permanent attachment of the riser tube and distributor plate (eliminating re-bedding when servicing the valve).

This environmentally friendly design offers the most efficient service and backwashing characteristics available — reducing the amount of water to drain in backwash, while increasing the overall filtration capacity of a system.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1311
EFFECTIVE
JANUARY 2014

RESIDENTIAL CARBON FILTERS

SWT GRANULAR ACTIVATED CARBON FILTERS
(FOR TASTE, ODOR, CHLORINE, COLOR, & CHEMICAL REDUCTION)


TECH SERIES FILTER


LOGIX SERIES FILTER

SWT's Residential Point-of-Entry Carbon Filters are built utilizing SWT's ProActive™ carbon — the best grade of non-viscous, coal based, virgin, steam activated carbon available. These filters are designed to be high quality, taste, odor, chlorine, color, and chemical reduction filters. Plus, these systems feature SWT's revolutionary **Cyclonic Distributor System**™ to provide full bed contact, less channeling, and superior backwashing (see reverse side).

- **Acid washed, coconut shell, and catalytic carbons** also available on request
- **100% corrosion-free** system
- **Energy efficient digital controller** uses less than $5.00 of electricity per year
- **Fully programmable** cycle times
- **Excellent sediment filtration and low pressure drops**
- Choice of **piston driven (Tech Series)** or **cam driven (Logix Series) valves**

Part Number	Tank Size Inches	GAC Mesh Size	Service Flow Rate*		Backwash 40% Exp. @ 50°F GPM (LPM)	Standard Connection Size
			Standard GPM (LPM)	VOC Reduction GPM (LPM)		
Tech Series Automatic Backwashing Carbon Filters						
CFA075C	8 x 44	12 x 40	4-6 (15-23)	< 2 (8)	3.5 (13.3)	1 inch Brass Sweat
CFA100C	9 x 48	12 x 40	5-8 (19-30)	< 2 (8)	4.5 (17.0)	1 inch Brass Sweat
CFA150C	10 x 54	12 x 40	7-9 (26-34)	< 3 (11)	5.0 (18.9)	1 inch Brass Sweat
CFA200C	12 x 52	12 x 40	10 (38)	< 4 (15)	8.0 (30.3)	1 inch Brass Sweat
CFA250C	13 x 54	12 x 40	12.5 (47)	< 5 (19)	9.0 (34.1)	1 inch Brass Sweat
CFA300C	13 x 65	12 x 40	15 (57)	< 6 (23)	9.0 (34.1)	1 inch Brass Sweat
CFA350C	14 x 65	12 x 40	17.5 (66)	< 6.5 (25)	10.0 (37.9)	1 inch Brass Sweat
Logix Series Automatic Backwashing Carbon Filters						
CFA075L	8 x 44	12 x 40	4-6 (15-23)	< 2 (8)	3.5 (13.3)	1 inch Copper Tube
CFA100L	9 x 48	12 x 40	5-8 (19-30)	< 2 (8)	4.5 (17.0)	1 inch Copper Tube
CFA150L	10 x 54	12 x 40	7-9 (26-34)	< 3 (11)	5.0 (18.9)	1 inch Copper Tube
CFA200L	12 x 52	12 x 40	10 (38)	< 4 (15)	8.0 (30.3)	1 inch Copper Tube
CFA250L	13 x 54	12 x 40	12.5 (47)	< 5 (19)	9.0 (34.1)	1 inch Copper Tube
CFA300L	13 x 65	12 x 40	15 (57)	< 6 (23)	9.0 (34.1)	1 inch Copper Tube
CFA350L	14 x 65	12 x 40	17.5 (66)	< 6.5 (25)	10.0 (37.9)	1 inch Copper Tube

* For superior filtration, reduce flow rates by 1/3 of the standard flow rate specification.

Tank jackets available, see reverse side. International voltages available at additional cost.

All systems have other piping connections available. See the Control Valve Price Lists for more details.

Operating Pressure: 20 to 125 psi (1.4 to 8.6 bar) **Operating Temperature:** 36 to 120°F (2 to 48.9°C)

All pressure vessels are wound fiberglass composite tanks with copolymer polypropylene liner and are NSF® listed.

Duplex systems available, call for details. 10 year warranty on tank, 5 year warranty on valve.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1212
EFFECTIVE
JANUARY 2014

RESIDENTIAL CARBON FILTERS

SWT GRANULAR ACTIVATED CARBON FILTERS
(FOR TASTE, ODOR, CHLORINE, COLOR, & CHEMICAL REDUCTION)



Operates Without Electricity

Manual Carbon Filters

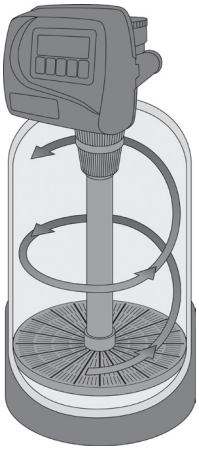
Part Number	Tank Size Inches	Service Flow Rate*		Backwash 40% Exp. @ 50°F GPM (LPM)	Standard Connection Size
		Standard GPM (LPM)	VOC Reduct GPM (LPM)		
CFM075F	8 x 44	4-6 (15-23)	< 2 (8)	3.5 (13.3)	1 inch Brass MNPT
CFM100F	9 x 48	5-8 (19-30)	< 2 (8)	4.5 (17.0)	1 inch Brass MNPT
CFM150F	10 x 54	7-9 (26-34)	< 3 (11)	5.0 (18.9)	1 inch Brass MNPT
CFM200F	12 x 52	10 (38)	< 4 (15)	8.0 (30.3)	1 inch Brass MNPT
CFM250F	13 x 54	12.5 (47)	< 5 (19)	9.0 (34.1)	1 inch Brass MNPT
CFM300F	13 x 65	15 (57)	< 6 (23)	9.0 (34.1)	1 inch Brass MNPT
CFM350F	14 x 65	17.5 (66)	< 6.5 (25)	10.0 (37.9)	1 inch Brass MNPT

* For superior filtration, reduce flow rates by 1/3 of the standard flow rate specification.

Options

RG-TJ0844EC . . . Chrome Tank Jacket, 8 x 44 inch
RG-TJ0948EC . . . Chrome Tank Jacket, 9 x 48 inch
RG-TJ1054EC . . . Chrome Tank Jacket, 10 x 54 inch
RG-TJ1252EC . . . Chrome Tank Jacket, 12 x 52 inch

By Request . . . . Substitute 3/4 inch Copper Fittings
By Request . . . . Substitute 3/4 or 1 inch PVC Socket Fittings
By Request . . . . Substitute 3/4 or 1 inch PVC NPT Fittings
By Request . . . . Substitute 3/4 or 1 inch Brass NPT Fittings



SWT's Water Treatment Systems Include the Revolutionary
CYCLONIC DISTRIBUTOR SYSTEM™

- Up to 30% less backwash flow rate is required...conserving water for the customer.
- Distributor plate is designed for more than 6,500 lb load capacity.
- Reduces system pressure loss while increasing flow and efficiency through the bed.
- Available for 7, 8, 9, 10, 12, 13, 14, and 16 inch systems.

SWT's Cyclonic Distributor System (CDS) is a built-in bottom plate distributor which offers significant advantages over standard distribution systems — from the elimination of gravel underbedding (reducing overall cost and shipping weight) to the permanent attachment of the riser tube and distributor plate (eliminating rebedding when servicing the valve).

This environmentally friendly design offers the most efficient service and backwashing characteristics available — reducing the amount of water to drain in backwash, while increasing the overall filtration capacity of a system.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1212
EFFECTIVE
JANUARY 2014

RESIDENTIAL CARBON FILTERS

SWT SUPERCAT™ GAC FILTERS
(FOR CHLORAMINES, MTBE, & VOC REDUCTION)


TECH SERIES FILTER


LOGIX SERIES FILTER

SWT's Residential Point-of-Entry SuperCat Carbon Filters are built utilizing SWT's ProActive™ SuperCat carbon — the best grade of highly reactive, steam activated, coconut shell carbon available. These filters are designed to be 30% more reactive than other catalyzing carbon filters. They are specifically designed to break down monochloramines that pass through standard carbon filters. Plus, these systems feature SWT's revolutionary **Cyclonic Distributor System**™ to provide full bed contact, less channeling, and superior backwashing (see reverse side).

- **100% corrosion-free** system
- **Energy efficient digital controller** uses less than $5.00 of electricity per year
- **Programmable** cycle times
- **Excellent sediment filtration and low pressure drops**
- Choice of **piston driven (Tech Series)** or **cam driven (Logix Series) valves**

Part Number	Tank Size Inches	GAC Mesh Size	Service Flow Rate *		Backwash 40% Exp. @ 50°F GPM (LPM)	Standard Connection Size
			Chloramines Reduction GPM (LPM)	MTBE, VOC & Pesticides Reduction GPM (LPM)		
Tech Series Automatic Backwashing SuperCat Carbon Filters						
SCFA150C-1240	10 x 54	12 x 40	3-4 (11-15)	< 3 (11)	3.2 (12.1)	1 inch Brass Sweat
SCFA200C-1240	12 x 52	12 x 40	4-6 (15-23)	< 4 (15)	4.2 (15.9)	1 inch Brass Sweat
SCFA300C-1240	13 x 65	12 x 40	5-9 (19-34)	< 5 (19)	5.3 (20.1)	1 inch Brass Sweat
Logix Series Automatic Backwashing SuperCat Carbon Filters						
SCFA150L-1240	10 x 54	12 x 40	3-4 (11-15)	< 3 (11)	3.5 (13.2)	1 inch Copper Tube
SCFA200L-1240	12 x 52	12 x 40	4-6 (15-23)	< 4 (15)	4.1 (15.5)	1 inch Copper Tube
SCFA300L-1240	13 x 65	12 x 40	5-9 (19-34)	< 5 (19)	5.0 (18.9)	1 inch Copper Tube

* For superior filtration, reduce flow rates by 1/3 of the standard flow rate specification.

Tank jackets available, see reverse side. International voltages available at additional cost.

All systems have other piping connections available. See the Control Valve Price Lists for more details.

Operating Pressure: 20 to 125 psi (1.4 to 8.6 bar) **Operating Temperature:** 36 to 120°F (2 to 48.9°C)

All pressure vessels are wound fiberglass composite tanks with copolymer polypropylene liner and are NSF® listed.

Duplex systems available, call for details. 10 year warranty on tank, 5 year warranty on valve.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE:www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1312
EFFECTIVE
JUNE 2014

RESIDENTIAL CARBON FILTERS

SWT SUPERCAT™ GAC FILTERS
(FOR CHLORAMINES, MTBE, & VOC REDUCTION)



Operates Without Electricity

Manual SuperCat Carbon Filters

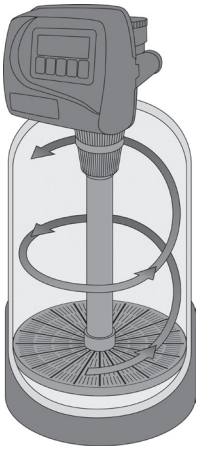
Part Number	Tank Size Inches	Service Flow Rate *		Backwash 40% Exp. @ 50°F GPM (LPM)	Standard Connection Size
		Chloramines Reduction GPM (LPM)	MTBE, VOC & Pesticides Reduction GPM (LPM)		
SCFM150F-1240	10 x 54	3-4 (11-15)	< 3 (11)	3.2 (12.1)	1 inch Brass MNPT
SCFM200F-1240	12 x 52	4-6 (15-23)	< 4 (15)	4.2 (15.9)	1 inch Brass MNPT
SCFM300F-1240	13 x 65	5-9 (19-34)	< 5 (19)	5.3 (20.1)	1 inch Brass MNPT

* For superior filtration, reduce flow rates by 1/3 of the standard flow rate specification.

Options

RG-TJ0844EC. . . Chrome Tank Jacket, 8 x 44 inch
RG-TJ0948EC. . . Chrome Tank Jacket, 9 x 48 inch
RG-TJ1054EC. . . Chrome Tank Jacket, 10 x 54 inch
RG-TJ1252EC. . . Chrome Tank Jacket, 12 x 52 inch

By Request . . . . Substitute 3/4 inch Copper Fittings
By Request . . . . Substitute 3/4 or 1 inch PVC Socket Fittings
By Request . . . . Substitute 3/4 or 1 inch PVC NPT Fittings
By Request . . . . Substitute 3/4 or 1 inch Brass NPT Fittings



SWT's Water Treatment Systems Include the Revolutionary CYCLONIC DISTRIBUTOR SYSTEM™

- Up to 30% less backwash flow rate is required...conserving water for the customer.
- Distributor plate is designed for more than 6,500 lb load capacity.
- Reduces system pressure loss while increasing flow and efficiency through the bed.
- Available for 7, 8, 9, 10, 12, 13, 14, and 16 inch systems.

SWT's Cyclonic Distributor System (CDS) is a built-in bottom plate distributor which offers significant advantages over standard distribution systems — from the elimination of gravel underbedding (reducing overall cost and shipping weight) to the permanent attachment of the riser tube and distributor plate (eliminating re-bedding when servicing the valve).

This environmentally friendly design offers the most efficient service and backwashing characteristics available — reducing the amount of water to drain in backwash, while increasing the overall filtration capacity of a system.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1312
EFFECTIVE
JUNE 2014

RESIDENTIAL METALS FILTERS

SWT METALEASE™ FILTERS


TECH SERIES FILTER


LOGIX SERIES FILTER

SWT's Residential Iron, Hydrogen Sulfide, Manganese Filters *are built utilizing SWT's MetalEase filter media as the primary layer. These chemical-free filters are designed to remove dissolved metals (such as iron), silt, and turbidity from water. Vigorous backwashing keeps the bed clean. Plus, these systems feature SWT's revolutionary* ***Cyclonic Distributor System***™ *to provide full bed contact, less channeling, and superior backwashing (see reverse side).*

- Removes up to **10 ppm iron, 5 ppm hydrogen sulfide, 5 ppm manganese**
- **Reduces other heavy metals** such as copper, zinc, lead, etc.
- **No chemicals required**
- **100% corrosion-free** system
- **Energy efficient controller** uses less than $5.00 of electricity per year
- Choice of **piston driven (Tech Series)** or **cam driven (Logix Series) valves**
- All **international voltages** available

Part Number	Tank Size Inches	Service Flow Rate*		Backwash 30% Exp. @ 60°F GPM (LPM)	Standard Connection Size
		Standard GPM (LPM)	Peak GPM (LPM)		
Tech Series Automatic Backwashing MetalEase Filters					
MFA062C-018	8 x 44	3-5 (11-19)	6 (23)	7 (27)	1 inch Brass Sweat
MFA075C-025	9 x 48	4-6 (15-23)	8 (30)	9 (34)	1 inch Brass Sweat
MFA113C-027	10 x 54	6-8 (23-30)	10 (38)	12 (45)	1 inch Brass Sweat
MFA150C-040	12 x 52	8-10 (30-38)	11 (42)	15 (57)	1 inch Brass Sweat
MFA200C-045	13 x 54	9 (34)	13 (49)	20 (76)	1 inch Brass Sweat
MFA250C-053	14 x 65	11 (42)	15 (57)	22 (83)	1 inch Brass Sweat
Logix Series Automatic Backwashing MetalEase Filters					
MFA062L-018	8 x 44	3-5 (11-19)	6 (23)	7 (27)	1 inch Copper Tube
MFA075L-025	9 x 48	4-6 (15-23)	8 (30)	9 (34)	1 inch Copper Tube
MFA113L-027	10 x 54	6-8 (23-30)	10 (38)	12 (45)	1 inch Copper Tube
MFA150L-040	12 x 52	8-10 (30-38)	11 (42)	15 (57)	1 inch Copper Tube
MFA200L-045	13 x 54	9 (34)	13 (49)	20 (76)	1 inch Copper Tube
MFA250L-053	14 x 65	11 (42)	15 (57)	22 (83)	1 inch Copper Tube

* For superior filtration, reduce flow rates by 1/3 of the standard flow rate specification.

Tank jackets available, see reverse side. International voltages available at additional cost.

All systems have other piping connections available. Contact your SWT representative for more details.

Operating Pressure: 20 to 125 psi (1.4 to 8.6 bar) **Operating Temperature:** 36 to 120°F (2 to 48.9°C)

All pressure vessels are wound fiberglass composite tanks with copolymer polypropylene liner and are NSF® listed.

Duplex systems available, call for details. 10 year warranty on tank, 5 year warranty on valve.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1211
EFFECTIVE
JANUARY 2014

RESIDENTIAL METALS FILTERS

SWT METALEASE™ FILTERS



Operates Without Electricity

Manual MetalEase Filters

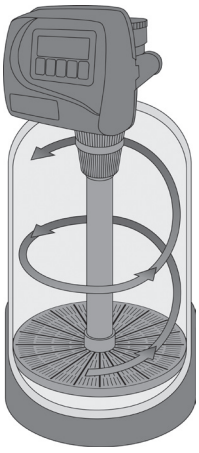
Part Number	Tank Size Inches	Service Flow Rate*		Backwash 30% Exp. @ 60°F GPM (LPM)	Standard Connection Size
		Standard GPM (LPM)	Peak GPM (LPM)		
MFM062F-018	8 x 44	3-5 (11-19)	6 (23)	7 (27)	1 inch Brass MNPT
MFM075F-025	9 x 48	4-6 (15-23)	8 (30)	9 (34)	1 inch Brass MNPT
MFM113F-027	10 x 54	6-8 (23-30)	10 (38)	12 (45)	1 inch Brass MNPT
MFM150F-040	12 x 52	8-10 (30-38)	11 (42)	15 (57)	1 inch Brass MNPT
MFM200F-045	13 x 54	9 (34)	13 (49)	20 (76)	1 inch Brass MNPT
MFM250F-053	14 x 65	11 (42)	15 (57)	22 (83)	1 inch Brass MNPT

* For superior filtration, reduce flow rates by 1/3 of the standard flow rate specification.

Options

RG-TJ0844EC. . . Chrome Tank Jacket, 8 x 44 inch
RG-TJ0948EC. . . Chrome Tank Jacket, 9 x 48 inch
RG-TJ1054EC. . . Chrome Tank Jacket, 10 x 54 inch
RG-TJ1252EC. . . Chrome Tank Jacket, 12 x 52 inch

By Request . . . . Substitute 3/4 inch Copper Fittings
By Request . . . . Substitute 3/4 or 1 inch PVC Socket Fittings
By Request . . . . Substitute 3/4 or 1 inch PVC NPT Fittings
By Request . . . . Substitute 3/4 or 1 inch Brass NPT Fittings



SWT's Water Treatment Systems Include the Revolutionary CYCLONIC DISTRIBUTOR SYSTEM™

- Up to 30% less backwash flow rate is required...conserving water for the customer.
- Distributor plate is designed for more than 6,500 lb load capacity.
- Reduces system pressure loss while increasing flow and efficiency through the bed.
- Available for 7, 8, 9, 10, 12, 13, 14, and 16 inch systems.

SWT's Cyclonic Distributor System (CDS) is a built-in bottom plate distributor which offers significant advantages over standard distribution systems — from the elimination of gravel underbedding (reducing overall cost and shipping weight) to the permanent attachment of the riser tube and distributor plate (eliminating rebedding when servicing the valve).

This environmentally friendly design offers the most efficient service and backwashing characteristics available — reducing the amount of water to drain in backwash, while increasing the overall filtration capacity of a system.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1211
EFFECTIVE
JANUARY 2014

RESIDENTIAL ARSENIC FILTERS

SWT METALEASE-AS™ FILTERS


TECH SERIES FILTER


LOGIX SERIES FILTER

Now with more active oxidation than standard MetalEase!

SWT's Residential Arsenic Filters are built utilizing SWT's MetalEase-AS (Advanced Structure) filter media as the primary layer. These chemical-free filters are designed to remove arsenic and additional dissolved metals from water. Vigorous backwashing keeps the bed clean. Plus, these systems feature SWT's revolutionary **Cyclonic Distributor System**™ to provide full bed contact, less channeling, and superior backwashing (see reverse side).

- Reduces **arsenic, lead, iron, manganese, hydrogen sulfide, copper, zinc, gross-alpha/beta emitters (radioactive particles), and more**
- **No chemicals required**
- **100% corrosion-free** system
- **Energy efficient controller** uses less than $5.00 of electricity per year
- Choice of **piston driven (Tech Series)** or **cam driven (Logix Series) valves**

Part Number	Tank Size Inches	Service Flow Rate *		Backwash 30% Exp. @ 60°F GPM (LPM)	Standard Connection Size
		Standard GPM (LPM)	Peak GPM (LPM)		
Tech Series Automatic Backwashing MetalEase-AS Filters					
MFA062C-018-AS	8 x 44	3-5 (11-19)	6 (23)	7 (27)	1 inch Brass Sweat
MFA075C-025-AS	9 x 48	4-6 (15-23)	8 (30)	9 (34)	1 inch Brass Sweat
MFA113C-027-AS	10 x 54	6-8 (23-30)	10 (38)	12 (45)	1 inch Brass Sweat
MFA150C-040-AS	12 x 52	8-10 (30-38)	11 (42)	15 (57)	1 inch Brass Sweat
MFA200C-045-AS	13 x 54	9 (34)	13 (49)	20 (76)	1 inch Brass Sweat
MFA250C-053-AS	14 x 65	11 (42)	15 (57)	22 (83)	1 inch Brass Sweat
Logix Series Automatic Backwashing MetalEase-AS Filters					
MFA062L-018-AS	8 x 44	3-5 (11-19)	6 (23)	7 (27)	1 inch Copper Tube
MFA075L-025-AS	9 x 48	4-6 (15-23)	8 (30)	9 (34)	1 inch Copper Tube
MFA113L-027-AS	10 x 54	6-8 (23-30)	10 (38)	12 (45)	1 inch Copper Tube
MFA150L-040-AS	12 x 52	8-10 (30-38)	11 (42)	15 (57)	1 inch Copper Tube
MFA200L-045-AS	13 x 54	9 (34)	13 (49)	20 (76)	1 inch Copper Tube
MFA250L-053-AS	14 x 65	11 (42)	15 (57)	22 (83)	1 inch Copper Tube

* For superior filtration, reduce flow rates by 1/3 of the standard flow rate specification.

NOTE: Most applications need to remove arsenic-3 before treatment of arsenic-5 can begin. AS (arsenic-3) and AS-5 (arsenic-5) cartridges are available for pilot testing water.

Tank jackets available, see reverse side. International voltages available at additional cost.

All systems have other piping connections available. Contact your SWT representative for more details.

Operating Pressure: 20 to 125 psi (1.4 to 8.6 bar) **Operating Temperature:** 36 to 120°F (2 to 48.9°C)

All pressure vessels are wound fiberglass composite tanks with copolymer polypropylene liner and are NSF® listed.

Duplex systems available, call for details. 10 year warranty on tank, 5 year warranty on valve.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1336
EFFECTIVE
JULY 2022

RESIDENTIAL ARSENIC FILTERS

SWT METALEASE-AS™ FILTERS



Operates Without Electricity

Manual MetalEase-AS Filters

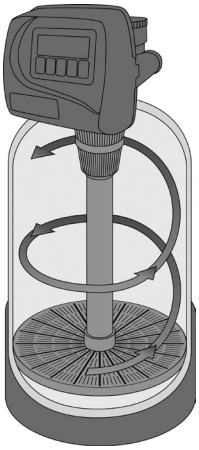
Part Number	Tank Size Inches	Service Flow Rate*		Backwash 30% Exp. @ 60°F GPM (LPM)	Standard Connection Size
		Standard GPM (LPM)	Peak GPM (LPM)		
MFM075F-AS	8 x 44	3-5 (11-19)	6 (23)	7 (27)	1 inch Brass MNPT
MFM113F-AS	9 x 48	4-6 (15-23)	8 (30)	9 (34)	1 inch Brass MNPT
MFM150F-AS	10 x 54	6-8 (23-30)	10 (38)	12 (45)	1 inch Brass MNPT
MFM200F-AS	12 x 52	8-10 (30-38)	11 (42)	15 (57)	1 inch Brass MNPT
MFM250F-AS	13 x 54	9 (34)	13 (49)	20 (76)	1 inch Brass MNPT
MFM350F-AS	14 x 65	11 (42)	15 (57)	22 (83)	1 inch Brass MNPT

* For superior filtration, reduce flow rates by 1/3 of the standard flow rate specification.

Options

RG-TJ0844EC . . . . Chrome Tank Jacket, 8 x 44 inch
RG-TJ0948EC . . . . Chrome Tank Jacket, 9 x 48 inch
RG-TJ1054EC . . . . Chrome Tank Jacket, 10 x 54 inch
RG-TJ1252EC . . . . Chrome Tank Jacket, 12 x 52 inch

By Request . . . . Substitute 3/4 inch Copper Fittings
By Request . . . . Substitute 3/4 or 1 inch PVC Socket Fittings
By Request . . . . Substitute 3/4 or 1 inch PVC NPT Fittings
By Request . . . . Substitute 3/4 or 1 inch Brass NPT Fittings



SWT's Water Treatment Systems Include the Revolutionary CYCLONIC DISTRIBUTOR SYSTEM™

- Up to 30% less backwash flow rate is required...conserving water for the customer.
- Distributor plate is designed for more than 6,500 lb load capacity.
- Reduces system pressure loss while increasing flow and efficiency through the bed.
- Available for 7, 8, 9, 10, 12, 13, 14, and 16 inch systems.

SWT's Cyclonic Distributor System (CDS) is a built-in bottom plate distributor which offers significant advantages over standard distribution systems — from the elimination of gravel underbedding (reducing overall cost and shipping weight) to the permanent attachment of the riser tube and distributor plate (eliminating rebedding when servicing the valve).

This environmentally friendly design offers the most efficient service and backwashing characteristics available — reducing the amount of water to drain in backwash, while increasing the overall filtration capacity of a system.

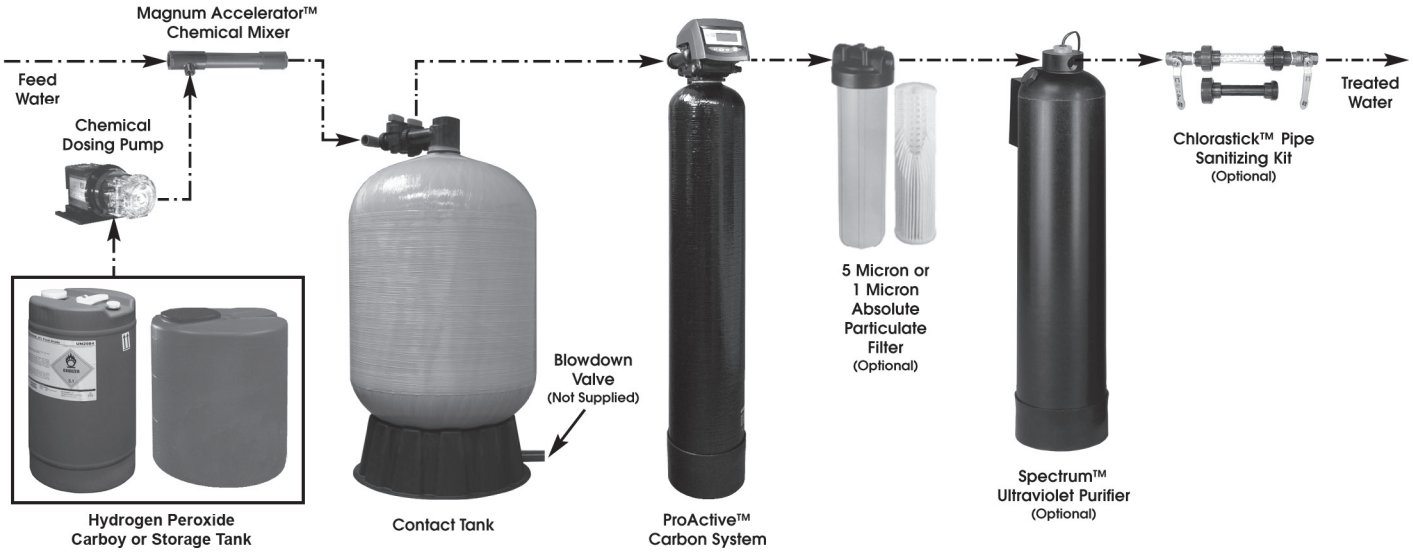
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1336
EFFECTIVE
JULY 2022

HYDROGEN PEROXIDE SYSTEMS

SWT POINT-OF-ENTRY IRON & HYDROGEN SULFIDE SYSTEM



SWT's Hydrogen Peroxide (H2O2) Dosing Systems *provide a modern, safe alternative to old-fashioned chlorination systems. This improved method is used to cover a wide range of well water related concerns. There is no other water treatment system available for the whole house that compares. A fully adjustable state-of-the-art self priming peristaltic pump delivers proper chemical dosing for easy, but unsurpassed, accuracy for optimal cost savings. The chemical/taste reduction portion of the system utilizes ProActive GAC carbon as the primary layer. These carbon units are designed to remove chlorine, taste, odor, and chemical contaminates from the water stream.*

Hydrogen Peroxide Dosing System Includes:

- Magnum Accelerator chemical mixer
- Adjustable peristaltic chemical dosing pump
- Hydrogen peroxide storage tank or carboy[1]
- 40 gallon contact tank[2]
- 1.5 cu.ft. ProActive carbon system with bypass
- Corrosion resistant construction

Available Options:

- 20 inch Big Blue™ pleated post-filter
- 10 gpm ultraviolet purifier
- Chlorastick pipe sanitizing kit

Hydrogen Peroxide Dosing System[3]

Part Number	Description	Standard Flow Rate GPM (LPM)	Backwash 40% Exp. @ 50°F GPM (LPM)	Standard Connection Size
HPS150L	Hydrogen Peroxide Dosing System[4]	7–9 (26–34)	4.9 (18.6)	1 inch

Available Options

Part Number	Description	Standard Flow Rate GPM (LPM)	Standard Connection Size
SWT10000S/1	Spectrum Ultraviolet Purifier[4]	10 (38)	1" FNPT Union
BBF-211005	20 inch Big Blue with 5 micron Pleated Filter	20 (75)	1" FNPT
BBF-211000	20 inch Big Blue with 1 micron Absolute Cyst Reduction Filter	12 (45)	1" FNPT
APS-CSA-1	Chlorastick Pipe Sanitizing System	—	1" FNPT

NOTES:

1 Carboys are available for pick up only.
2 Systems available without a contact tank.
3 Interconnecting piping not included.
4 International voltages available.

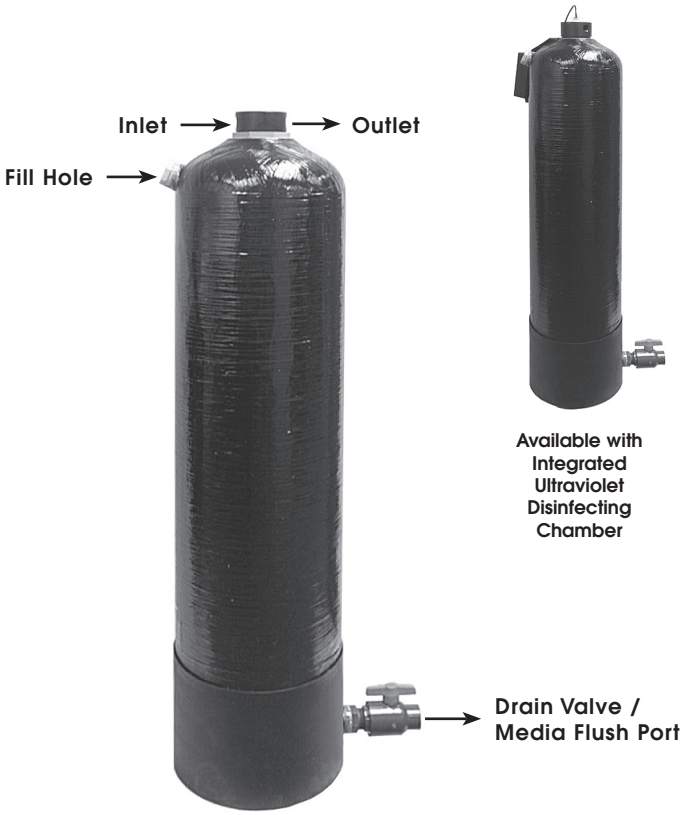
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1266
EFFECTIVE
OCTOBER 2015

CUSTOM CARBON SYSTEMS

SWT CUSTOM GAC FILTER SYSTEMS
(FOR CHLORAMINES, RADON, VOC, BOD, ETC. REDUCTION)



SWT's Custom GAC Filter Systems with SWT's exclusive drain and media discharge ports offer versatile solutions to many health-risk and pollution problems. Designed for ease-of-use and easy carbon change-outs, these hard-working and customizable filters can be used where regular GAC filters are not enough. Safe Water Technologies' new contamination removal units are manufactured with a choice of special carbon media—sized and designed for optimum removal of chloramines, chlorine, VOC, BOD, radon, etc. At the same time these units can be used for bacteria and microorganism control as well. They also improve color, taste, odor, and the clarity of the water. SWT's Custom Carbon Systems are perfect for both residential and commercial use.

Applications

- Municipal induced mono-chloramines removal
- Chlorine and hydrogen peroxide removal
- Wastewater clean-up (BOD reduction)
- Gas and oil leaks
- Volatile organic and chemical compounds
- Radon removal
- Color removal
- Ultraviolet disinfecting
- Sediment filtration
- Excellent for both pre and post RO and DI filtration

Features

- No need to disconnect plumbing to change out carbon or UV lamp
- Exclusive drain and carbon discharge ports
- Carbon refill ports
- Additional UV disinfecting chamber can be added to the unit (30,000 µW-sec/cm² @ 9,000 hours) for post carbon bacteria sterilization
- Custom sizes and configurations available
- Available with coal, coconut, acid washed, and catalytic carbons in a variety of mesh sizes
- All international voltages available

Available as both backwashing and non-backwashing systems. Both styles feature the option of our patented UV technology for bacteria applications. SWT's exclusive carbon-bed flush port design, drain, refill port, corrosion-proof tank, and a choice of connections are included.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1281
EFFECTIVE
JULY 2010

CUSTOM CARBON SYSTEMS

SWT CUSTOM GAC FILTER SYSTEMS
(FOR CHLORAMINES, RADON, VOC, BOD, ETC. REDUCTION)

Media vs. Application Cross Reference Chart

	Bituminous Coal	Acid-Washed Coal	Catalytic Coal	Coconut Shell	Acid-Washed Coconut Shell *	Catalytic Coconut Shell
Chlorine — Residential	X	X	X	X	X	X
Chlorine — Pre RO		X				
Chlorine — Medical					X	
Mono-Chlorimines						X
Radon	X					
VOC	X	X				
BOD	X	X				
H_2O_2				X		
Taste and Odor	X	X	X	X	X	X
Oil and Gas	X		X			
Pesticides	X	X				
Sediment (Mesh Size Dependent)	X	X	X	X	X	X
Medical / Pharmaceutical		X			X	
Organic Color					X	X
Sulfur			X			X
Bacteria / Microorganisms	Add UV	Add UV	Add UV	Add UV	Add UV	Add UV

* Certified USP grade available.

Industry Flow Rate Guidelines (Application, Contamination Level, and GAC Mesh Size Dependent)

Part Number *	Tank Size Inches	Mono-Chloromines GPM (LPM)	Chlorine GPM (LPM)	Pesticides, VOCs GPM (LPM)	Radon GPM (LPM)	Oil, Gas, BOD GPM (LPM)	Sulfur w/ H_2O_2 Inj. GPM (LPM)
Non-Backwashing Systems							
MCFN175	10 x 47	4 (15) †	10 (38) †	< 3 (11) †	4 (15) †	1.5 (5.7) †	6 (23) †
MCFN250	12 x 42	5 (19) †	12.5 (47) †	< 5 (19) †	6 (23) †	2.1 (7.9) †	8 (30) †
MCFN300	12 x 48	6 (23) †	15 (57) †	< 6 (23) †	8 (30) †	2.5 (9.5) †	11 (42) †
MCFN400	13 x 54	8 (30) †	20 (76)	< 8 (30) †	10 (38) †	3.2 (12) †	14 (53)
MCFN500	14 x 65	10 (38) †	25 (95)	< 10 (38) †	12.5 (47)	4.0 (15) †	18 (68)
MCFN600	16 x 65	12 (45) †	30 (114)	< 14 (53) †	18 (68)	5.0 (19) †	21 (80)
MCFN900	20 x 62	18 (68)	45 (170)	< 20 (76) †	25 (95)	8.0 (30) †	32 (121)
MCFN1500	24 x 71	30 (114)	90 (341)	< 28 (106) †	35 (133)	11.2 (42) †	50 (189)
MCFN2200	30 x 72	44 (167)	120 (454)	< 40 (151)	50 (189)	16.0 (61)	70 (265)
Automatic Backwashing Systems							
MCFA175	12 x 42	4 (15) †	10 (38) †	< 3 (11) †	4 (15) †	1.5 (5.7) †	6 (23) †
MCFA250	12 x 48	5 (19) †	12.5 (47) †	< 5 (19) †	6 (23) †	2.1 (7.9) †	8 (30) †
MCFA300	13 x 54	6 (23)	15 (57)	< 6 (23)	8 (30)	2.5 (9.5)	11 (42)
MCFA400	14 x 65	8 (30)	20 (76)	< 8 (30)	10 (38)	3.2 (12)	14 (53)
MCFA500	16 x 65	10 (38)	25 (95)	< 10 (38)	12.5 (47)	4.0 (15)	18 (68)
MCFA600	20 x 62	12 (45)	30 (114)	< 14 (53)	18 (68)	5.0 (19)	21 (80)
MCFA900	24 x 71	18 (68)	45 (170)	< 20 (76)	25 (95)	8.0 (30)	32 (121)
MCFA1500	30 x 72	30 (114)	90 (341)	< 28 (106)	35 (133)	11.2 (42)	50 (189)

* Part Number is for systems with catalytic carbon.

† Integrated UV purifier available. UV dosage rated at 30,000 µW-sec/cm² at 10 gpm after 9,000 hrs.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1281
EFFECTIVE
JULY 2010

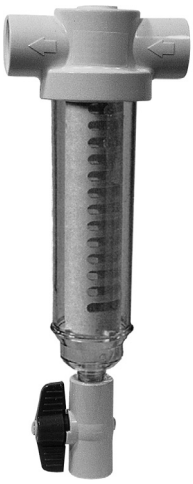
Section 5

Commercial & Industrial Water Treatment Systems

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

SEDIMENT FILTRATION

INLINE CENTRIFUGAL SEDIMENT FILTERS



Spin Down Sediment Filter



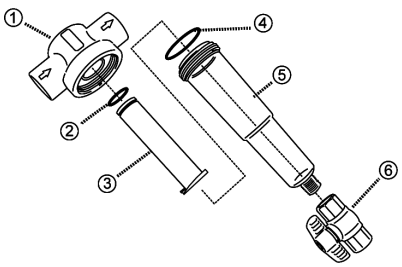
Sediment Trapper Filter

Spin Down Sediment Filters *make solid particle removal simple and economical. Unlike other centrifugal filter/separators which are limited to removing particles no finer than 200 mesh (approx. 85 micron), Spin Down FIlters use durable screen elements available in nine different sizes, from 24 mesh (711 micron) to 1000 mesh (15 micron), to handle a wider variety of applications.* **Sediment Trapper Filters** *offer a larger storage area (less maintenance time) and a unique element that separates the sediment and traps it beneath the element where it collects until flushed away.*

- Easily flush sediment from filter by simply opening purge valve
- Sediment is visible through clear cover indicating need for flushing
- Clear cover easily removed for total cleaning
- No tools required (hand tighten only—using tools voids warranty)
- Cleanable and reusable polyester or stainless steel filter screens
- No down time

SCREEN SIZES

Mesh	Microns	Opening	
		inches	mm
24	711	0.028	0.711
30	533	0.021	0.533
40	381	0.015	0.381
60	254	0.010	0.254
100	152	0.006	0.152
140	104	0.004	0.102
200	74	0.0029	0.073
250	61	0.0024	0.061
500	30	0.0012	0.030
1000	15	0.0006	0.0152



ORDERING INFORMATION

Part Number Matrix: **UR (CS) – (MS) (SM) – F**

(CS) Connection Size

34 = 3/4 inch FPT

1 = 1 inch Socket

15 = 1-1/2 inch Socket

2 = 2 inch Socket

(MS) Mesh Size

Polyester Screens:

24 100 1000
30 140
40 250
60 500

SS Screens:

30 140 500
60 200 1000
100 250

(SM) Screen Material

Spin Down Filters:

none = Polyester

SS = Stainless Steel

Sediment Trapper Filters:

ST = Polyester

STSS = Stainless Steel

Examples:

UR34-100-F = Spin Down Filter with 3/4 inch FPT connections and 100 mesh polyester screen

UR1-60STSS-F = Sediment Trapper Filter with 1 inch socket connections and 60 mesh stainless steel screen

REPLACEMENT PARTS AVAILABLE

(See illustration left)

1. Body
2. Element O-ring
3. Element
4. Cover O-ring
5. Cover
6. Purge Valve

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1358
EFFECTIVE
MARCH 2025

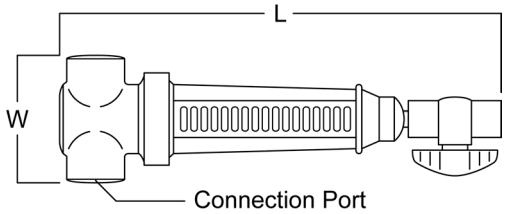
SEDIMENT FILTRATION

INLINE CENTRIFUGAL SEDIMENT FILTERS

MESH SELECTION

Material in Water	Application	Mesh Size
Shale, shell	General Use	24
Debris	General use	24, 30, 40
Pipe scale, coarse sand	Sprinkler systems, faucet aerators, sand sensitive valves	40, 60
Fine sand, grit from new wells	Drip irrigation systems, faucet aerators, sand sensitive valves	100, 140
	Poultry growers, watering devices	100
	Fogger nozzles	140
Very fine sand and grit	Pre-treatment	250, 500
	Pre-treatment, ultra water systems, RO, etc.	1000
Algae	Grows in presence of light under clear filter cover	Use Sun Shield

NOTE: In general, use the coarsest screen deemed necessary to filter the material you want removed. This will result in longer runs between blow-downs.



SPIN DOWN SEDIMENT FILTER SPECIFICATIONS

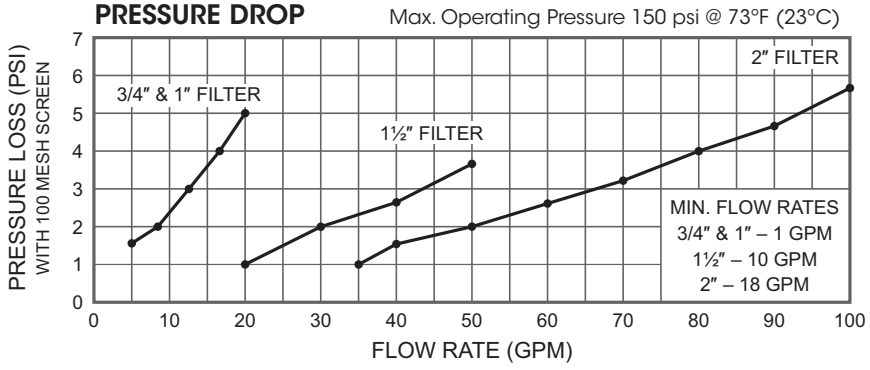
Part Size	Length	Width	Flow Capacity
3/4 inch	11-3/8 inch	5 inch	1 to 25 gpm
1 inch	11-3/8 inch	5 inch	1 to 25 gpm
1-1/2 inch	15-3/8 inch	5-1/4 inch	10 to 50 gpm
2 inch	17-7/8 inch	5-1/2 inch	18 to 100 gpm

SEDIMENT TRAPPER FILTER SPECIFICATIONS

Part Size	Length	Width	Flow Capacity
3/4 inch	14-3/8 inch	5 inch	1 to 25 gpm
1 inch	14-3/8 inch	5 inch	1 to 25 gpm
1-1/2 inch	15-3/8 inch	5-1/4 inch	10 to 50 gpm
2 inch	17-7/8 inch	5-1/2 inch	18 to 100 gpm

PRESSURE DROP

Max. Operating Pressure 150 psi @ 73°F (23°C)



NOTE: These filters are designed for general use in applications with water temperatures up to 100°F.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1358
EFFECTIVE
MARCH 2025

SEDIMENT FILTRATION

INLINE CENTRIFUGAL SEDIMENT FILTERS FOR HOT WATER APPLICATIONS



Hot Water Spin Down Sediment Filter

Hot Water Sediment Trapper Filter

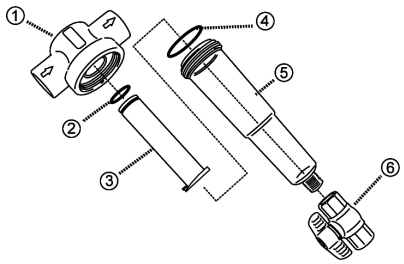
Hot Water Spin Down Filters make solid particle removal simple and economical. These inline centrifugal filters provide the same efficient and powerful sediment filtration as our Spin Down filters, while adding resistance to high temperatures (up to 200°F). Additionally, the Hot Water Filter's thermoplastic construction allows for increased chemical resistance. **Hot Water Sediment Trapper Filters** offer a larger storage area (less maintenance time) and a unique element that separates the sediment and traps it beneath the element where it collects until flushed away.

- Easily flush sediment from filter by simply opening purge valve
- Clear cover easily removed for total cleaning
- No tools required (hand tighten only—using tools voids warranty)
- Sediment is visible through clear cover indicating need for flushing
- Cleanable and reusable stainless steel filter screen
- Designed for hot water applications up to 200°F (93°C)

SCREEN SIZES

Mesh	Microns	Opening	
		inches	mm
30	533	0.021	0.533
60	254	0.010	0.254
100	152	0.006	0.152
140	104	0.004	0.102
200	74	0.0029	0.073

NOTE: See Mesh Selection table on next page for mesh size recommendations.



REPLACEMENT PARTS AVAILABLE

1. Body
2. Element O-ring
3. Element
4. Cover O-ring
5. Cover
6. Purge Valve

APPLICATIONS

Geothermal Systems, Cooling Towers, Hot Water Heaters, Hydronic Radiant Floor Heating Systems, Industrial (Machine Coolant and Cutting Fluids), Spas/Jacuzzis

ORDERING INFORMATION

UR34-(*)HT-F 3/4 inch FPT Hot Water Spin Down Filter

UR34-(*)STHT-F 3/4 inch FPT Hot Water Sediment Trapper Filter

UR12-(*)HT-F 1-1/4 inch FPT Hot Water Spin Down Filter

UR15-(*)HT-F 1-1/2 inch FPT Hot Water Spin Down Filter

(*) = Mesh Size: 30, 60, 100, 140, 200

Examples:

UR12-100HT-F = Hot Water Spin Down Filter with 1-1/4 inch FPT connections and 100 mesh high temperature stainless steel screen

UR34-60STHT-F = Hot Water Sediment Trapper Filter with 3/4 inch FPT connections and 60 mesh high temperature stainless steel screen

MATERIALS OF CONSTRUCTION

Body: Polypropylene with Stainless Steel support ring

Cover: Heat/chemical resistant HP polymer

Element: Polypropylene with Stainless Steel screen

Purge Valve: CPVC

O-rings: EPDM

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1357
EFFECTIVE
JULY 2025

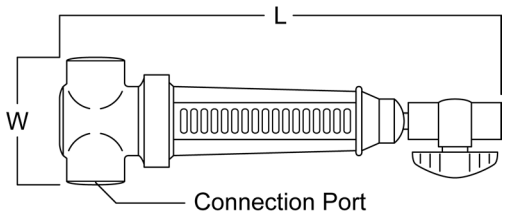
SEDIMENT FILTRATION

INLINE CENTRIFUGAL SEDIMENT FILTERS FOR HOT WATER APPLICATIONS

MESH SELECTION

Material in Water	Application	Mesh Size
Shale, shell	General Use	24
Debris	General use	24, 30, 40
Pipe scale, coarse sand	Sprinkler systems, faucet aerators, sand sensitive valves	40, 60
Fine sand, grit from new wells	Drip irrigation systems, faucet aerators, sand sensitive valves	100, 140
	Poultry growers, watering devices	100
	Fogger nozzles	140
Very fine sand and grit	Pre-treatment	250, 500
	Pre-treatment, ultra water systems, RO, etc.	1000
Algae	Grows in presence of light under clear filter cover	Use Sun Shield

NOTE: In general, use the coarsest screen deemed necessary to filter the material you want removed. This will result in longer runs between blow-downs.



HOT WATER SPIN DOWN FILTER SPECIFICATIONS

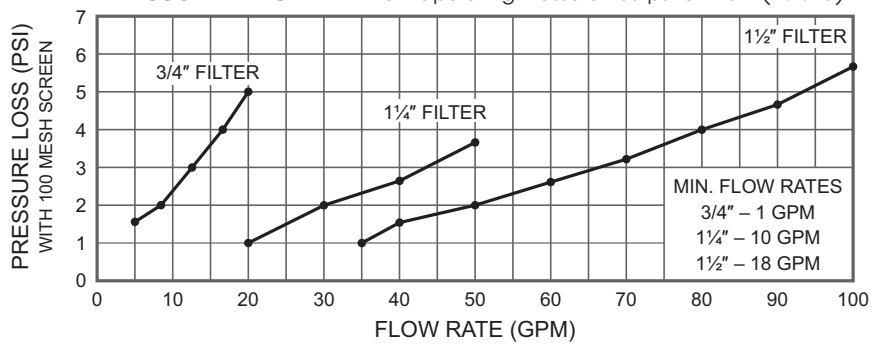
Part Size	Length	Width	Flow Capacity
3/4 inch	11-3/8 inch	5 inch	1 to 25 gpm
1-1/4 inch	15-3/8 inch	5-1/4 inch	10 to 50 gpm
1-1/2 inch	17-7/8 inch	5-1/2 inch	18 to 100 gpm

HOT WATER SEDIMENT TRAPPER SPECIFICATIONS

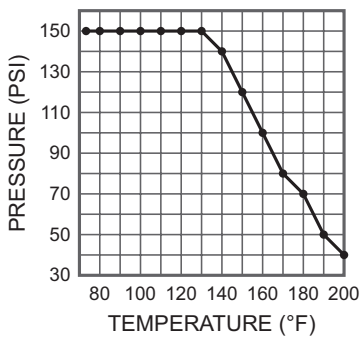
Part Size	Length	Width	Flow Capacity
3/4 inch	14-3/8 inch	5 inch	1 to 25 gpm

PRESSURE DROP

Max. Operating Pressure 150 psi @ 120°F (48.8°C)



TEMP/PRESSURE



NOTE: These filters are specially designed for use in applications with water temperatures up to 200°F.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1357
EFFECTIVE
JULY 2025

SEDIMENT FILTRATION

INLINE CENTRIFUGAL SEDIMENT FILTERS
CHEMICAL RESISTANT



Chemical Resistant Sediment Trapper Filter



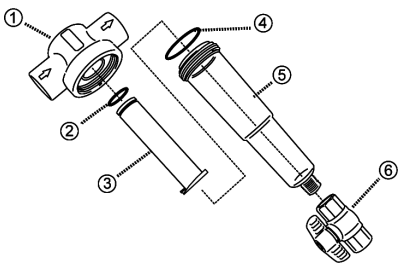
Chemical Resistant Spin Down Sediment Filter

Chemical Resistant Spin Down Sediment Filters *feature a chemically resistant cover for use in applications with potentially corrosive and damaging chemicals. These filters utilize centrifugal force to separate sediment from water. Sediment accumulation can be seen through the clear cover and easily discharged through the bottom flush valve.* **Chemical Resistant Sediment Trapper Filters** *offer a larger storage area and a unique element that separates the sediment and traps it beneath the element where it collects until flushed away.* **Uses include** *reclaimed water, laboratory, industrial, landscaping, livestock, agriculture, greenhouses, drip irrigation, and more.*

- Easily flush sediment from filter by simply opening purge valve
- Sediment is visible through clear cover indicating need for flushing
- Clear cover easily removed for total cleaning
- No tools required (hand tighten only—using tools voids warranty)
- Cleanable and reusable polyester or stainless steel filter screens

SCREEN SIZES

Mesh	Microns	Opening	
		inches	mm
24	711	0.028	0.711
30	533	0.021	0.533
40	381	0.015	0.381
60	254	0.010	0.254
100	152	0.006	0.152
140	104	0.004	0.102
200	74	0.0029	0.073
250	61	0.0024	0.061
500	30	0.0012	0.030
1000	15	0.0006	0.0152



ORDERING INFORMATION

Part Number Matrix: **UR (CS) – (MS) (SM) CR – F**

(CS) Connection Size

34 = 3/4 inch FPT

1 = 1 inch Socket

15 = 1-1/2 inch Socket

2 = 2 inch Socket

(MS) Mesh Size

Polyester Screens:

24 100 1000
30 140
40 250
60 500

SS Screens:

30 140 500
60 200 1000
100 250

(SM) Screen Material

Spin Down Filters:

none = Polyester

SS = Stainless Steel

Sediment Trapper Filters:

ST = Polyester

STSS = Stainless Steel

Examples:

UR34-100CR-F = Chemical Resistant Spin Down Filter with 3/4 inch FPT connections and 100 mesh polyester screen

UR1-60STSSCR-F = Chemical Resistant Sediment Trapper Filter with 1 inch socket connections and 60 mesh stainless steel screen

REPLACEMENT PARTS AVAILABLE

(See illustration left)

1. Body
2. Element O-ring
3. Element
4. Cover O-ring
5. Cover
6. Purge Valve

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1359
EFFECTIVE
MARCH 2025

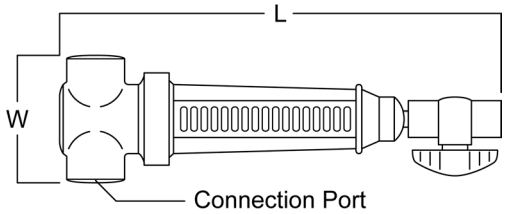
SEDIMENT FILTRATION

INLINE CENTRIFUGAL SEDIMENT FILTERS
CHEMICAL RESISTANT

MESH SELECTION

Material in Water	Application	Mesh Size
Shale, shell	General Use	24
Debris	General use	24, 30, 40
Pipe scale, coarse sand	Sprinkler systems, faucet aerators, sand sensitive valves	40, 60
Fine sand, grit from new wells	Drip irrigation systems, faucet aerators, sand sensitive valves	100, 140
	Poultry growers, watering devices	100
	Fogger nozzles	140
Very fine sand and grit	Pre-treatment	250, 500
	Pre-treatment, ultra water systems, RO, etc.	1000
Algae	Grows in presence of light under clear filter cover	Use Sun Shield

NOTE: In general, use the coarsest screen deemed necessary to filter the material you want removed. This will result in longer runs between blow-downs.



CHEMICAL RESISTANT SPIN DOWN FILTER SPECIFICATIONS

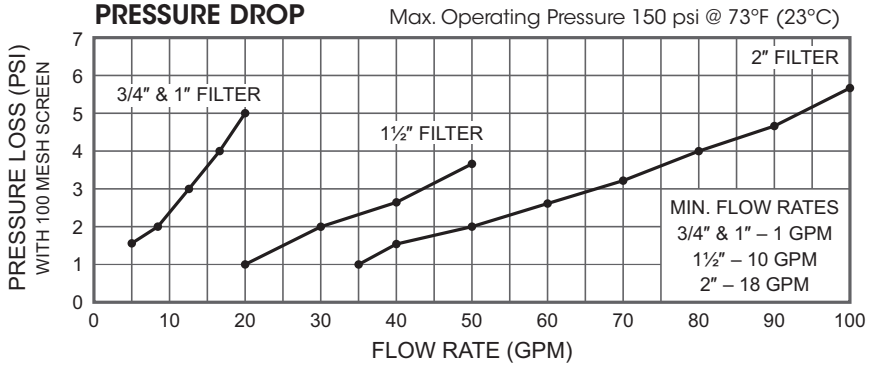
Part Size	Length	Width	Flow Capacity
3/4 inch	11-3/8 inch	5 inch	1 to 25 gpm
1 inch	11-3/8 inch	5 inch	1 to 25 gpm
1-1/2 inch	15-3/8 inch	5-1/4 inch	10 to 50 gpm
2 inch	17-7/8 inch	5-1/2 inch	18 to 100 gpm

CHEMICAL RESISTANT SEDIMENT TRAPPER SPECIFICATIONS

Part Size	Length	Width	Flow Capacity
3/4 inch	14-3/8 inch	5 inch	1 to 25 gpm
1 inch	14-3/8 inch	5 inch	1 to 25 gpm
1-1/2 inch	15-3/8 inch	5-1/4 inch	10 to 50 gpm
2 inch	17-7/8 inch	5-1/2 inch	18 to 100 gpm

PRESSURE DROP

Max. Operating Pressure 150 psi @ 73°F (23°C)



NOTE: These filters are specially designed for use in chemical applications with water temperatures up to 100°F.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1359
EFFECTIVE
MARCH 2025

SEDIMENT FILTRATION

AUTOMATIC FLUSH VALVE



The Automatic Flush Valve (AFV) is designed for use with SWT's Inline Centrifugal Sediment Filters when manual flushing is inconvenient, impractical, or undesirable. The AFV makes sediment filter maintenance easy and automatic. Simply attach the AFV to the centrifugal filter's purge valve, program a cycle time, and the filter will automatically flush at the selected time interval.

Specifications

Adjustable Cycle Time	1 minute to 14 days
Non-Adjustable Flush Time	7 seconds
Flush Volume	3.1 gal/cycle @ 80 psi
Working Pressure	200 psig
Ambient Temperature	35°F to 165°F
Voltage	12 VDC
Current	0.83 amps
Enclosure	Nema 4
Valve Construction	Lead-free brass NSF/ANSI 372
Seals	Reinforced Teflon
Full-Port Ball Valve	1/2 inch NPT
Power Adapter	120 VAC, 20 ft cord

Order Information

Part Number	Description
UR-AFV	Automatic Flush Valve
UR-AFV-HOSE KIT	AFV Hose Kit — includes (2) 1/2 inch barb x 1/2 inch MNPT hose fittings; (2) SAE size 8 stainless steel worm drive clamps; (1) 24 inch length of 1/2 inch braid reinforced flexible PVC tubing (rated at 215 psi)
UR-AFV-VLV	Replacement brass valve only

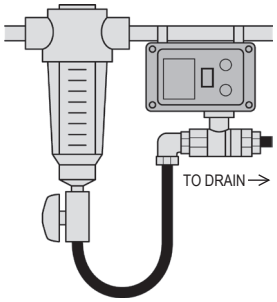
Installation

The automatic flush valve must be mounted to a supportive base. DO NOT suspend the AFV directly from the inline centrifugal sediment filter. The automatic flush valve has six holes on the back of the unit. The four larger holes are used for securing the faceplate to the unit. The two smaller holes are used to mount the unit directly to a supportive base. Remove the faceplate to mount the unit to a base.

This unit may be mounted horizontally or vertically. Vertical installation is recommended for optimum performance. All necessary connections and tubing are provided in the AFV Hose Kit (P/N UR-AFV-HOSE KIT). If purchasing from another source, please make sure that 1/2 inch braid reinforced flexible PVC tubing with a 215 psi rating is used.

1. Wrap thread seal tape around threads of barb fitting male end before threading into pvc and brass ball valves.
2. Secure flexible tubing to barb fittings at hose end with clamps.

WARNING: *Do not apply electrical power to the unit unless the unit is fully assembled and mounted. Always disconnect power source before working on this unit. The valve is under pressure. Discharge of fluids will occur during any cycling of the valve when unit is installed.*



Suggested Installation

Operation

Plug the cord set into a proper power source. The automatic flush valve will cycle and the timing sequence will begin. To change the timing sequence, simply change the code setting (0-9) 1 minute to 14 days, and the timer will reset. The purge button may be used to cycle the unit at any time. Flush time is 7 seconds and cannot be adjusted.

Maintenance

Periodic maintenance is recommended to ensure long, dependable service from the automatic flush valve. Check power cord for breaks in the outer jacket or damage to the plug. The valve should be checked for leakage at the downstream side and all connections from the valve to the filter.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1462
EFFECTIVE
JULY 2020

AUTOMATIC FLUSH VALVE

Troubleshooting

Symptom	Possible Causes	Corrective Actions
Valve does not cycle.	Proper power is not reaching unit. Timer set improperly.	Check that power cord is plugged into the proper power source. Check power source. Push purge button. Reset timer.
Ball valve leaks at discharge side.	Excessive seat damage from debris.	Push purge button to flush valve. Replace ball valve.
Unit cycles but does not discharge water.	No pressure upstream. Valve or line clogged with debris.	Check that system is pressurized. Disconnect power. Remove ball valve and check for blockage in the valve and the line.
Immediate purge required.	On-demand purge needed.	Press purge button once. Cycle time is not disrupted.

General Safety Information

Do not apply electrical power to the unit unless the unit is fully assembled and mounted. Failure to do so could result in personal injury and/or damage to the unit. Disconnect the power source and depressurize the system before working on the unit. Failure to do so could result in personal injury. The discharge side of the ball valve must be directed to a safe area for collecting water and debris.

WARNING

The motorized drive unit case is not capable of supporting any loads. Do not attempt to use the unit as a step. This will cause damage to the unit and could cause personal injury. Do not use in hazardous locations.

CAUTIONS

- It is recommended that eye protection be worn while servicing the system. Failure to do so could result in personal injury.
- Do not use the case as leverage when mounting this unit or tightening fittings. Use the wrenching flats on the valve body.
- It is highly recommended that a surge protector be used to prevent damage to the AFV.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1462
EFFECTIVE
JULY 2020

DEIONIZERS

iEx™ COMMERCIAL D.I. SYSTEMS

Safe Water Technologies begins development of new product line.

iEx™ D.I. Systems
now available from SWT.



New top mounted valving and new GE controls make deionized water production easy and cost effective. These two column (one cation and one anion in series) systems are now available in five introductory flow rates and capacities, and include a monitoring system and sequential regeneration.

Applications

- TDS Reduction
- Carwashes
- Boiler Feed
- Cooling Towers
- Process Water
- Silica Reduction*
- Laboratory
- Plating and Chemical

* Contact SWT for details.

Accessories

- Neutralization Stations and Tanks
- Low Flow Recirculation Loop
- Deluxe Monitoring System with Audible Alarm
- Drum Heater
- Regeneration Chemical Float

iEx Commercial D.I. Systems Specifications

Tank Size Inches	Pipe Size Inches	Service Flow GPM	System Capacity**
18 x 65	1-1/2	10 to 20	90,000 gr.
21 x 62	1-1/2	14 to 28	108,000 gr.
24 x 72	1-1/2	20 to 40	180,000 gr.
30 x 72	2	30 to 60	270,000 gr.
36 x 72	2	40 to 70	360,000 gr.

** Assumes 100% chloride.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1314
EFFECTIVE
NOVEMBER 2007

COMMERCIAL WATER SOFTENERS

SWT COMMERCIAL ELECTRONIC TIME CLOCK CONTROLLED WATER SOFTENERS



Safe Water Technologies' Commercial Water Softeners *are built utilizing SWT's ProSoft™ resin as the primary layer. These cationic ion exchange systems are designed to remove calcium and magnesium (hardness), and a host of other cations from the water. SWT takes care of the little extras such as: machined PVC distribution systems, oversized brine tanks, safety floats standard in 16 inch or larger systems, and an anthracite underbedding for less channeling.*

- **Electronic Time Clock**
- **100% corrosion proof** plastic systems
- **Energy efficient** controller uses less than $5.00 of electricity per year
- Tanks feature **150 PSI operating pressure**
- **10 year warranty** on tank
- All **international voltages** available

Electronic Time Clock Systems with Professional Programming

Part Number	Tank Size Inches	CaCO3 Capacity			Service Flow Rate		Backwash 50% Exp. @ 60°F GPM (LPM)	Standard Connection Size
		@ 6 lb/cu.ft. Grains	@ 10 lb/cu.ft. Grains	@ 15 lb/cu.ft. Grains	Standard GPM (LPM)	Peak GPM (LPM)		
WSC741P2-20	12 X 52	47,600	60,400	68,800	10 (37.9)	20 (75.7)	3.5 (13.6)	1 inch Copper Tube
WSC741P2-25	13 x 54	59,500	75,500	86,000	12 (45.5)	24 (90.9)	4.1 (15.5)	1 inch Copper Tube
WSC741P2-30	14 x 65	71,400	90,600	103,200	15 (56.9)	25 (94.6)	4.5 (17.0)	1 inch Copper Tube
WSC741P2-40	16 X 65	95,200	120,800	137,600	20 (75.7)	25 (94.6)	5.0 (18.9)	1 inch Copper Tube
WSC741P2-50	18 X 65	119,000	151,000	172,000	*25 (94.6)	25 (94.6)	7.0 (26.5)	1 inch Copper Tube
WSC741P2-60	21 X 54	142,000	181,200	206,400	*25 (94.6)	25 (94.6)	9.0 (37.1)	1 inch Copper Tube
WSC741P2-70	21 X 69	166,600	211,400	240,800	*25 (94.6)	25 (94.6)	9.0 (37.1)	1 inch Copper Tube
WSC742-40	16 x 65	95,200	120,800	137,600	20 (75.8)	33 (125)	5.0 (18.9)	1-1/2 inch MNPT
WSC742-50	18 x 65	119,000	151,000	172,000	25 (94.8)	50 (190)	7.0 (26.5)	1-1/2 inch MNPT
WSC742-60	21 x 54	142,800	181,200	206,400	30 (114)	60 (227)	9.0 (37.1)	1-1/2 inch MNPT
WSC742-70	21 x 69	166,600	211,400	240,800	35 (133)	70 (265)	9.0 (37.1)	1-1/2 inch MNPT
WSC742-95	24 x 72	226,100	286,900	326,800	45 (171)	90 (341)	12.0 (45.4)	1-1/2 inch MNPT
WSC742-140	30 x 72	333,200	422,800	481,600	70 (265)	100 (379)	19.0 (71.9)	1-1/2 inch MNPT
WSC742-180	36 x 72	428,400	543,600	619,200	90 (341)	100 (379)	27.0 (102.2)	1-1/2 inch MNPT

* 15 psid @ 25 gpm

Operating capacity based on influent of 400 ppm as $CaCO_3$ with a ratio of 2 parts calcium to 1 part magnesium.

1-1/2 inch systems have a 2 inch inlet/outlet option available.

1-1/2 and 2 inch systems have a no-untreated-water bypass option available.

Operating pressure: 25 to 150 psi (1.7 to 10.3 bar) **Operating temperature:** 36 to 120°F (2 to 48.9°C)

All pressure vessels are wound fiberglass, reinforced polyethylene or polypropylene copolymer, and are NSF® listed.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1141
EFFECTIVE
NOVEMBER 2012

COMMERCIAL WATER SOFTENERS

SWT COMMERCIAL COMPUTER CONTROLLED WATER SOFTENERS



Single Tank Systems available with Tech Series Valves (left) or Logix Series Valves (far left)

Twin Alternating Systems available with Logix Series Valves (right)



Safe Water Technologies' Commercial Water Softeners *are built utilizing SWT's ProSoft™ resin as the primary layer. These cationic ion exchange systems are designed to remove calcium and magnesium (hardness), and a host of other cations from the water. SWT takes care of the little extras such as: machined PVC distribution systems, oversized brine tanks, safety float for 16 inch or larger systems, and an anthracite underbedding for less channeling.*

- **Single tank or twin alternating systems** available
- **100% corrosion proof** plastic systems
- **Energy efficient, computerized controller** monitors and adjusts to actual water usage
- **Saves up to 60%** in salt cost and usage
- All **international voltages** available
- 10 year warranty on tanks, 5 year warranty on valves

Computer Metered Systems with Professional Programming and Water Use Averaging

Part Number	Tank Size Inches	CaCO3 Capacity			Service Flow Rate		Backwash 50% Exp. @ 60°F GPM (LPM)	Standard Connection Size
		@ 6 lb/cu.ft. Grains	@ 10 lb/cu.ft. Grains	@ 15 lb/cu.ft. Grains	Standard GPM (LPM)	Peak GPM (LPM)		
WSC761P2-20	12 X 52	47,600	60,400	68,800	10 (37.9)	20 (75.7)	3.5 (13.6)	1 inch Copper Tube
WSC761P2-25	13 x 54	59,500	75,500	86,000	12 (45.5)	24 (90.9)	4.1 (15.5)	1 inch Copper Tube
WSC761P2-30	14 x 65	71,400	90,600	103,200	15 (56.9)	25 (94.6)	4.5 (17.0)	1 inch Copper Tube
WSC761P2-40	16 X 65	95,200	120,800	137,600	20 (75.7)	25 (94.6)	5.0 (18.9)	1 inch Copper Tube
WSC761P2-50	18 X 65	119,000	151,000	172,000	25 (94.6)	25 (94.6)	7.0 (26.5)	1 inch Copper Tube
WSC761P2-60	21 X 62	142,000	181,200	206,400	25 (94.6)	25 (94.6)	9.0 (37.1)	1 inch Copper Tube
WSC762-40	16 x 65	95,200	120,800	137,600	20 (75.8)	33 (125)	5.0 (18.9)	1-1/2 inch MNPT
WSC762-50	18 x 65	119,000	151,000	172,000	25 (94.8)	50 (190)	7.0 (26.5)	1-1/2 inch MNPT
WSC762-60	21 x 62	142,800	181,200	206,400	30 (114)	60 (227)	9.0 (37.1)	1-1/2 inch MNPT
WSC762-70	21 x 62	166,600	211,400	240,800	35 (133)	70 (265)	9.0 (37.1)	1-1/2 inch MNPT
WSC762-95	24 x 72	226,100	286,900	326,800	45 (171)	90 (341)	12.0 (45.4)	1-1/2 inch MNPT
WSC762-140	30 x 72	333,200	422,800	481,600	70 (265)	100 (379)	19.0 (71.9)	1-1/2 inch MNPT
WSC762-180	36 x 72	428,400	543,600	619,200	90 (341)	100 (379)	27.0 (102.2)	1-1/2 inch MNPT

Operating capacity based on influent of 400 ppm as $CaCO_3$ with a ratio of 2 parts calcium to 1 part magnesium.
1-1/2 inch systems have a 2 inch inlet/outlet option available.
1-1/2 and 2 inch systems have a no-untreated-water bypass option available.
Operating pressure: 25 to 150 psi (1.7 to 10.3 bar) **Operating temperature:** 36 to 120°F (2 to 48.9°C)
All pressure vessels are wound fiberglass, reinforced polyethylene or polypropylene copolymer, and are NSF® listed.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1142
EFFECTIVE
NOVEMBER 2012

COMMERCIAL WATER SOFTENERS

TECH SERIES TWIN ALTERNATING SOFTENERS
(1 INCH FULLY PORTED VALVING)



NOTE: This system is available as a twin alternating system only. A twin parallel configuration is not an option.

SWT's Tech Series Twin Alternating System provides continuous soft water all day. Everyday! One tank is always in service, while the other tank is in regeneration or standby. Plus, the system backwashes with softened water to eliminate hardness carryover. Tech systems feature the newest in computer monitoring technology for maximized efficiency, and SWT's **Cyclonic Distributor System**™ to provide full bed contact, less channeling, and superior backwashing (see reverse side).

- **100% corrosion-free** system
- **Energy efficient controller** uses less than $5.00 of electricity per year
- **Optional double backwash feature** offers optimum regeneration, cleaning ability, and efficiency
- **Downflow or upflow** brining regeneration
- **10 year warranty** on tanks, **5 year warranty** on valves
- All units include **internal bypass, brine tank, and (2) brine pickups with air check assembly**
- **Safety floats and chrome finish tank jackets** available
- **Made in USA**

Computer Metered Systems with Professional Level Programming

Part Number	Tank Size Inches	Softening Capacity * Grains / Lb of Salt			System Service Flow Rate		Max. Valve Flow Rate @ 15 psid	Standard Connection Size
		6 lb/cu.ft.	10 lb/cu.ft.	15 lb/cu.ft.	Standard	Peak		
WSCEETA-100	9 x 48	23,800	30,200	34,400	5 GPM	10 GPM	27 GPM	1 inch Brass Sweat
WSCEETA-150	10 x 54	35,700	45,300	51,600	7.5 GPM	15 GPM	27 GPM	1 inch Brass Sweat
WSCEETA-200	12 x 52	47,600	60,400	68,800	10 GPM	20 GPM	27 GPM	1 inch Brass Sweat
WSCEETA-250	13 x 54	59,500	75,500	86,000	12.5 GPM	25 GPM	27 GPM	1 inch Brass Sweat
WSCEETA-300	13 x 65	71,400	90,600	103,200	15 GPM	27 GPM	27 GPM	1.25 inch Brass Sweat
WSCEETA-350	14 x 65	83,300	105,700	120,400	17.5 GPM	27 GPM	27 GPM	1.25 inch Brass Sweat
WSCEETA-400	16 x 65	95,200	120,800	137,600	20 GPM	27 GPM	27 GPM	1.25 inch Brass Sweat
WSCEETA-500	18 x 65	119,000	151,000	172,000	25 GPM	27 GPM	27 GPM	1.25 inch Brass Sweat
WSCEETA-700	21 x 62	166,600	211,400	240,800	27 GPM	27 GPM	27 GPM	1.25 inch Brass Sweat

* Operating capacities based on influent of 400 ppm as $CaCO_3$ with a ratio of 2 parts calcium to 1 part magnesium at 2.0 gpm/cu.ft. flow rate. Capacities include 10% safety factor.

Operating Pressure: 20 to 125 psi **Operating Water Temperature:** 40 to 110ºF

Valve Service Cv = 7.28

Applications: RO pretreatment, restaurants, spraying systems, laundromats, car washes, boiler feed

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1236
EFFECTIVE
MARCH 2015

COMMERCIAL WATER SOFTENERS

TECH SERIES TWIN ALTERNATING SOFTENERS
(1 INCH FULLY PORTED VALVING)

OPTIONAL CHROME TANK JACKET



No unsightly exposed tank neck

Durable textured black cover

Made of high-impact polystyrene for exceptional strength and durability

Fully insulated to add protection to the tank and eliminate condensation

Attractive high gloss chrome finish

Light weight and easy to install

Resists UV degradation

Options

TANK JACKETS

Chrome Tank Jacket, 9 x 48 inch (P/N RG-TJ0948EC)
Chrome Tank Jacket, 10 x 54 inch (P/N RG-TJ1054EC)
Chrome Tank Jacket, 12 x 52 inch (P/N RG-TJ1252EC)

BRINE TANKS SUBSTITUTIONS (BY REQUEST)

Brine Tank, 18 x 33 inch, Black
Brine Tank, 18 x 40 inch, Black

FITTINGS SUBSTITUTIONS (BY REQUEST)

1 inch PVC Male NPT Elbow Assembly
3/4 x 1 inch PVC Solvent Elbow Assembly
3/4 inch Brass Sweat Assembly LF
1.25 inch Plastic Male NPT Assembly
1 inch Plastic Male BSPT Assembly
1.25 & 1.5 inch PVC Solvent Assembly
1.25 inch Plastic Male BSPT Assembly
1.25 & 1.5 inch Brass Sweat Assembly LF
3/4 inch SharkBite® Assembly LF
1 inch SharkBite® Assembly LF
3/4 inch Plastic Male BSPT Assembly
3/4 inch John Guest® Elbow Assembly
1 inch PVC Male BSPT Elbow Assembly
1 inch John Guest® Straight Assembly
Vertical 90 degree Adapter Assembly

Grid plates and alternate packaging for individual shipment are also available. Call for details.

Notes:

A black 15 x 17 x 33 inch brine tank with injection molded lid is standard. Substitutions are available on request. See "Options" above.

Brass sweat installation fittings are standard on all units. Substitutions are available on request. See "Options" above.

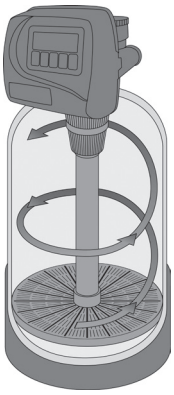
All units are supplied with ProSoft™ Premium 8% crosslink resin. Resin substitutions are available on request at extra cost.

Resin ratings are as follows:

	CROSSLINK	$CaCO_3$ CAP @ 15 lb/cu.ft.
ProSoft™ Gold	7%	32,000
ProSoft™ Premium	8%	33,000
ProSoft™ Fine Mesh	8%	34,600
ProSoft™ Heavy Duty	10%	35,600
ProSoft™ High Porosity	12%	28,000

In basic terms, crosslinkage refers to the resin beads' physical strength or ability to withstand chemical attack from chlorine, resin bed cleaners, and caustics used in DI applications.

SWT's Water Treatment Systems Include CYCLONIC DISTRIBUTOR SYSTEM™



- Up to 30% less backwash flow rate is required...conserving water for the customer.
- Distributor plate is designed for more than 6,500 lb load capacity.
- Reduces system pressure loss while increasing flow and efficiency through the bed.
- Available for 7, 8, 9, 10, 12, 13, 14, and 16 inch systems.

This environmentally friendly design offers the most efficient service and backwashining characteristics available — reducing the amount of water to drain in backwash, while increasing the overall filtration capacity of a system.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1236
EFFECTIVE
MARCH 2015

COMMERCIAL FILTEREASE™ FILTERS

SWT POINT-OF-ENTRY SEDIMENT FILTERS



Safe Water Technologies' Commercial Sediment Filters *are built utilizing SWT's FilterEase™ filter media. These filters are designed to remove ferric iron, silt, and turbidity, and are preferred when water flow rates and pressures are limited. Sediment filtration down to the 10 to 20 micron level is common. SWT takes care of the little extras such as: machined PVC distribution systems and anthracite underbedding to prevent channeling.*

- **50% less water** required for backwashing than sand filters
- Nominal **20 micron** (or better) filtration
- **100% corrosion-free system** features wound fiberglass tank with polyethylene lining (150 PSI operating pressure, 10 year warranty)
- **Fully programmable, energy efficient controller** uses less than $5.00 of electricity per year
- All **international voltages** available

Part Number	Tank Size Inches	Service Flow Rate*		Backwash 40% Exp. @ 60°F GPM (LPM)	Standard Connection Size
		Standard GPM (LPM)	Peak GPM (LPM)		
Tech Series Automatic Backwashing FilterEase Filters					
FFA350C	14 x 65	7-14 (26-53)	21 (80)	10 (38)	1 inch Brass Sweat
FFA400C	16 x 65	7-20 (26-76)	25 (95)	15 (57)	1-1/4 inch MNPT
FFA500C	18 x 65	9-25 (34-95)	38 (144)	20 (76)	1-1/4 inch MNPT
FFA600C	21 x 54	10-30 (38-114)	45 (171)	24 (91)	1-1/2 inch MNPT
FFA950C	24 x 72	16-45 (61-171)	65 (246)	31 (117)	1-1/2 inch MNPT
Logix Series Automatic Backwashing FilterEase Filters					
FFA350L	14 x 65	7-14 (26-53)	21 (80)	10 (38)	1 inch Copper Tube
FFA400L	16 x 65	7-20 (26-76)	25 (95)	15 (57)	1-1/2 inch MNPT
FFA500L	18 x 65	9-25 (34-95)	38 (144)	20 (76)	1-1/2 inch MNPT
FFA600L	21 x 54	10-30 (38-114)	45 (171)	24 (91)	1-1/2 inch MNPT
FFA950L	24 x 72	16-45 (61-171)	65 (246)	31 (117)	1-1/2 inch MNPT**
FFA1400L	30 x 72	20-60 (76-227)	75 (284)	50 (189)	1-1/2 inch MNPT**
FFA2000L	36 x 72	35-70 (133-265)	95 (360)	70 (265)	1-1/2 inch MNPT**

* For superior filtration, reduce flow rates by 1/3 of the standard flow rate specification.

** Available with 2 inch MNPT connections.

International voltages available at additional cost. Contact your SWT representative for details.

All systems have other piping connections available. Contact your SWT representative for details.

1-1/2 and 2 inch systems have a no-unfiltered-water bypass option available at additional cost.

Operating pressure: 25 to 125 psi (1.7 to 8.6 bar) **Operating temperature:** 36 to 120°F (2 to 48.9°C)

All pressure vessels are wound fiberglass, reinforced polyethylene or polypropylene copolymer, and are NSF® listed.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1105
EFFECTIVE
NOVEMBER 2009

COMMERCIAL FILTEREASE-HD™ FILTERS

SWT POINT-OF-ENTRY SEDIMENT FILTERS



Safe Water Technologies' Commercial Sediment Filters *are built utilizing SWT's FilterEase-HD™ filter media. These filters are designed to remove ferric iron, silt, and turbidity, and are preferred when higher backwash rates (if available) are desired for cleaning iron and silt from the filter bed. Sediment filtration down to the 10 to 20 micron level is common. SWT takes care of the little extras such as: machined PVC distribution systems and gravel underbedding to prevent channeling.*

- **50% less water** required for backwashing than sand filters
- Nominal **20 micron** (or better) filtration
- **100% corrosion-free system** features wound fiberglass tank with polyethylene lining (150 PSI operating pressure, 10 year warranty)
- **Fully programmable, energy efficient controller** uses less than $5.00 of electricity per year
- All **international voltages** available

Part Number	Tank Size Inches	Service Flow Rate*		Backwash 40% Exp. @ 60°F GPM (LPM)	Standard Connection Size
		Standard GPM (LPM)	Peak GPM (LPM)		
Tech Series Automatic Backwashing FilterEase-HD Filters					
FHA350C	14 x 65	7-14 (26-53)	24 (91)	15 (57)	1 inch Brass Sweat
FHA400C	16 x 65	7-20 (26-76)	25 (95)	20 (76)	1-1/4 inch MNPT
FHA500C	18 x 65	9-25 (34-95)	38 (144)	26 (98)	1-1/4 inch MNPT
FHA600C	21 x 54	10-30 (38-114)	45 (171)	36 (136)	1-1/2 inch MNPT
FHA950C	24 x 72	16-45 (61-171)	65 (246)	47 (178)	1-1/2 inch MNPT
Logix Series Automatic Backwashing FilterEase-HD Filters					
FHA350L	14 x 65	7-14 (26-53)	24 (91)	15 (57)	1 inch Copper Tube
FHA400L	16 x 65	7-20 (26-76)	25 (95)	20 (76)	1-1/2 inch MNPT
FHA500L	18 x 65	9-25 (34-95)	38 (144)	26 (98)	1-1/2 inch MNPT
FHA600L	21 x 54	10-30 (38-114)	45 (171)	36 (136)	1-1/2 inch MNPT**
FHA950L	24 x 72	16-45 (61-171)	65 (246)	47 (178)	1-1/2 inch MNPT**
FHA1400L	30 x 72	20-60 (76-227)	75 (284)	70 (265)	1-1/2 inch MNPT**

* For superior filtration, reduce flow rates by 1/3 of the standard flow rate specification.

** Available with 2 inch MNPT connections.

International voltages available at additional cost. Contact your SWT representative for details.

All systems have other piping connections available. Contact your SWT representative for details.

1-1/2 and 2 inch systems have a no-unfiltered-water bypass option available at additional cost.

Operating pressure: 25 to 125 psi (1.7 to 8.6 bar)

Operating temperature: 36 to 120°F (2 to 48.9°C)

All pressure vessels are wound fiberglass, reinforced polyethylene or polypropylene copolymer, and are NSF® listed.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1105
EFFECTIVE
SEPTEMBER 2009

COMMERCIAL CARBON FILTERS

SWT POINT-OF-ENTRY CARBON FILTERS



Safe Water Technologies' Commercial Carbon Filters *are built utilizing SWT's ProActive™ carbon — the best grade of non-viscous, coal based, virgin, steam activated carbon available. These filters are designed to be high quality, taste, odor, chlorine, color, and chemical reduction filters. Plus, SWT takes care of the little extras such as machined distribution systems and anthracite underbedding to prevent channeling.*

- **Acid washed, coconut shell, and catalytic carbons** also available
- **100% corrosion-free system** features wound fiberglass tank with polyethylene lining (150 psi operating pressure, 10 year warranty)
- **Fully programmable, energy efficient controller** uses less than $5.00 of electricity per year
- All **international voltages** available

Part Number	Tank Size Inches	GAC Mesh Size	Service Flow Rate*		Backwash 40% Exp. @ 50°F GPM (LPM)	Standard Connection Size
			Standard GPM (LPM)	VOC Reduction GPM (LPM)		
Tech Series Automatic Backwashing Carbon Filters						
CFA350C	14 x 65	12 x 40	17.5 (66)	< 6.5 (25)	10 (38)	1 inch Brass Sweat
CFA400C	16 x 65	12 x 40	20 (76)	< 8 (30)	15 (57)	1-1/4 inch MNPT
CFA500C	18 x 65	12 x 40	25 (95)	< 10 (38)	18 (68)	1-1/4 inch MNPT
CFA600C	21 x 62	12 x 40	30 (114)	< 12 (45)	24 (91)	1-1/2 inch MNPT
CFA950C	24 x 72	12 x 40	45 (171)	< 20 (76)	38 (144)	1-1/2 inch MNPT
CFA1400C	30 x 72	12 x 40	60 (227)	< 30 (114)	60 (227)	1-1/2 inch MNPT
Logix Series Automatic Backwashing Carbon Filters						
CFA350L	14 x 65	12 x 40	17.5 (66)	< 6.5 (25)	10 (38)	1 inch Copper Tube
CFA400L	16 x 65	12 x 40	17.5 (66)	< 8 (30)	15 (57)	1 inch Copper Tube
CFA500L	18 x 65	12 x 40	25 (95)	< 10 (38)	18 (68)	1-1/2 inch MNPT
CFA600L	21 x 62	12 x 40	30 (114)	< 12 (45)	24 (91)	1-1/2 inch MNPT**
CFA950L	24 x 72	12 x 40	45 (171)	< 20 (76)	38 (144)	1-1/2 inch MNPT**
CFA1400L	30 x 72	12 x 40	60 (227)	< 30 (114)	60 (227)	1-1/2 inch MNPT**

* For superior filtration, reduce flow rates by 1/3 of the standard flow rate specification.

** Available with 2 inch MNPT connections.

International voltages available at additional cost. Contact your SWT representative for details.

All systems have other piping connections available. Contact your SWT representative for details.

1-1/2 and 2 inch systems have a no-unfiltered-water bypass option available at additional cost.

Operating pressure: 25 to 125 psi (1.7 to 8.6 bar)

Operating temperature: 36 to 120°F (2 to 48.9°C)

All pressure vessels are wound fiberglass, reinforced polyethylene or polypropylene copolymer, and are NSF® listed.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1103
EFFECTIVE
MARCH 2010

COMMERCIAL CARBON FILTERS

SWT POINT-OF-ENTRY CARBON FILTERS

Non-Backwashing Carbon Filters



Part Number	Tank Size Inches	Mesh Size	Service Flow Rate*		Backwash Rate	Standard Connection Size
			Chlorine, Taste & Odor GPM (LPM)	VOC Reduction GPM (LPM)		
CFN016	6 x 12	20 x 50	0.7 (3)	< 0.3 (1)	N/A	3/4 inch FNPT
CFN025	6 x 18	20 x 50	1 (4)	< 0.5 (2)	N/A	3/4 inch FNPT
CFN050	7 x 35	12 x 40	4 (15)	< 1.0 (4)	N/A	3/4 inch FNPT
CFN075	7 x 44	12 x 40	4-6 (15-23)	< 1.5 (6)	N/A	3/4 inch FNPT
CFN100	8 x 44	12 x 40	5-8 (19-30)	< 2.0 (8)	N/A	3/4 inch FNPT
CFN150	9 x 48	12 x 40	7-9 (26-34)	< 2.0 (8)	N/A	3/4 inch FNPT
CFN200	10 x 54	12 x 40	10 (38)	< 3.0 (11)	N/A	1 inch FNPT
CFN250	12 x 52	12 x 40	12 (45)	< 4.0 (15)	N/A	1 inch FNPT

* For superior filtration, reduce flow rates by 1/3 of the standard flow rate specification.
Operating pressure: 20 to 150 psi (1.4 to 10.3 bar)
Operating temperature: 36 to 120°F (2 to 48.9°C)
All pressure vessels are wound fiberglass, reinforced polyethylene or polypropylene copolymer, and are NSF® listed. Bituminous GAC is standard. Coconut shell or catalytic carbons are available upon request.

Manual Backwashing Carbon Filters



Part Number	Tank Size Inches	Mesh Size	Service Flow Rate*		Backwash 40% Exp. @ 50°F GPM (LPM)	Standard Connection Size
			Chlorine, Taste & Odor GPM (LPM)	VOC Reduction GPM (LPM)		
CFM050	7 x 44	12 x 40	4 (15)	< 1.5 (6)	2.5 (10)	3/4 inch FNPT
CFM075	8 x 44	12 x 40	4-6 (15-23)	< 2.0 (8)	3.5 (13)	3/4 inch FNPT
CFM100	9 x 48	12 x 40	5-8 (19-30)	< 2.0 (8)	4.5 (17)	3/4 inch FNPT
CFM150	10 x 54	12 x 40	7-9 (26-34)	< 3.0 (11)	5.0 (19)	3/4 inch FNPT
CFM200	12 x 52	12 x 40	10 (38)	< 4.0 (15)	7.0 (27)	3/4 inch FNPT

* For superior filtration, reduce flow rates by 1/3 of the standard flow rate specification.
Operating pressure: 20 to 150 psi (1.4 to 10.3 bar)
Operating temperature: 36 to 120°F (2 to 48.9°C)
All pressure vessels are wound fiberglass, reinforced polyethylene or polypropylene copolymer, and are NSF® listed. Bituminous GAC is standard. Coconut shell or catalytic carbons are available upon request.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1103
EFFECTIVE
MARCH 2010

COMMERCIAL METALEASE™ FILTERS

SWT POINT-OF-ENTRY IRON, MANGANESE & HYDROGEN SULFIDE FILTERS



SWT's Commercial Iron, Hydrogen Sulfide, and Manganese Filters *are built utilizing SWT's MetalEase filtration media. These chemical-free filters are designed to remove metals along with sediment and turbidity from water. Vigorous backwashing keeps the bed clean. SWT takes care of the little extras such as machined PVC distribution systems and garnet underbedding to prevent channeling.*

- Removes up to **10 ppm iron**
- Removes up to **5 ppm hydrogen sulfide**
- Removes up to **5 ppm manganese**
- **Reduces other heavy metals** such as copper, zinc, lead, etc.
- **No chemicals required**
- **100% corrosion-free system** features wound fiberglass tank with polyethylene lining (150 psi operating pressure, 10 year warranty)
- **Fully programmable, energy efficient controller** uses less than $5.00 of electricity per year
- All **international voltages** available

Part Number	Tank Size Inches	Service Flow Rate*		Backwash 30% Exp. @ 60°F GPM (LPM)	Standard Connection Size
		Standard GPM (LPM)	Peak GPM (LPM)		
Tech Series Automatic Backwashing MetalEase Filters					
MFA250C-053	14 x 65	11 (42)	15 (57)	22 (83)	1 inch Brass Sweat
MFA350C-068	16 x 65	14 (53)	20 (76)	29 (110)	1-1/4 inch MNPT
MFA400C-088	18 x 65	17 (64)	25 (95)	32 (121)	1-1/4 inch MNPT
MFA600C-125	21 x 62	25 (95)	35 (132)	50 (189)	1-1/2 inch MNPT
Logix Series Automatic Backwashing MetalEase Filters					
MFA250L-053	14 x 65	11 (42)	15 (57)	22 (83)	1 inch Copper Tube
MFA350L-068	16 x 65	14 (53)	20 (76)	29 (110)	1-1/2 inch MNPT
MFA400L-088	18 x 65	17 (64)	25 (95)	35 (132)	1-1/2 inch MNPT
MFA600L-125	21 x 62	25 (95)	35 (132)	50 (189)	1-1/2 inch MNPT**
MFA800L-200	24 x 72	35 (132)	50 (189)	65 (246)	1-1/2 inch MNPT**
MFA1200L-300	30 x 72	50 (189)	75 (284)	90 (341)	1-1/2 inch MNPT**

* For superior filtration, reduce flow rates by 1/3 of the standard flow rate specification.

** Available with 2 inch MNPT connections.

International voltages available at additional cost. Contact your SWT representative for details.

All systems have other piping connections available. Contact your SWT representative for details.

1-1/2 and 2 inch systems have a no-unfiltered-water bypass option available at additional cost.

Operating pressure: 25 to 125 psi (1.7 to 8.6 bar)

Operating temperature: 36 to 120°F (2 to 48.9°C)

All pressure vessels are wound fiberglass, reinforced polyethylene or polypropylene copolymer, and are NSF® listed.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1087
EFFECTIVE
SEPTEMBER 2009

INDUSTRIAL SYSTEMS

INDUSTRIAL SOFTENERS AND FILTER SYSTEMS



Safe Water Technologies manufactures easy to install, and easy to operate, industrial-sized softeners and filters. We specialize in flow rates up to 500 gpm. SWT's systems utilize a choice of either metal or plastic diaphragm valves.

Steel tanks with NSF approved liners and primers, or filament wound polyglass tanks for caustic environments are both available. Special steel tanks with rubber linings for caustic acid are also available.

All systems utilize the SWT Pro Series™ of resins, carbon, and filtration media. Let SWT show you how we can save you and your customers money with advanced controls that leave the options open for series, parallel, or sequential operation.

These systems are custom built to your specific request, or custom designed for individual applications. Available with flanged or NPT connections. Variations are too numerous to list.

- 3, 4, & 5 Tank Systems
- Carbon Filters
- NEMA Enclosures
- Turbidity Filtration
- Softeners
- Diaphragm Valve Nests
- Plastic Valves
- Sequential Backwash
- Duplex Systems
- Piping up to 4 inch
- Steel Tanks
- NSF Approved Coatings
- All Voltages
- Multi-layer Filters
- Flow to 500 gpm
- Systems up to 150 psi
- Sand Filters
- FilterEase™ or MetalEase™
- Garnet
- Gravel
- Anthracite
- Quick Lead Times
- Metal Valves
- Twin Alternating Systems

Contact your SWT representative today for more information and pricing, or take a few moments to fill out the water analysis on the other side of this sheet and fax or email it back to us.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1157
EFFECTIVE
MARCH 1999

INDUSTRIAL SYSTEMS

INDUSTRIAL SOFTENERS AND FILTER SYSTEMS

Fill out completely and return to SWT for quotation.

Customer: _____ **Tel:** _____ **Fax:** _____

Contact: _____ **Email:** _____

Job Name/Reference: _____ **Site Location:** _____

System Application: _____

_____

Type of System: ___ Single Tank ___ Twin Alt. ___ Duplex ___ Triplex ___ Quad ___ Other _____

Tank Type: ___ Steel, L&P ___ 304 Stainless Steel ___ 316L Stainless Steel

___ Polyglass/ FRP ___ Other _____

Tank Coding: ___ Coded ___ Non-coded

Tank PSI Rating: ___ 100 PSI ___ 125 PSI ___ 150 PSI **Door Height or Dia. Restrictions:** _____

Avail. Elec.: ___ 120/60 ___ 240/60 ___ 240/50 **Elec. Type:** ___ 1 Phase ___ 3 Phase

Max. Water Temp.: _____ ºF **Min. Water Temp.:** _____ ºF **Pipe Size:** _____ **Avail. PSI:** _____

Service Flow Requirements: **Low:** _____ GPM **Normal Operating:** _____ GPM **Peak Flow:** _____ GPM

Water Usage: _____ GPD **Hours Per Day in Service:** _____ **Days Per Week in Service:** _____

Required Water Usage from 12:00 A.M. to 4:00 A.M.: _____ **Untreated Water Bypass Allowed?** ___ Yes ___ No

Water Source: ___ Well ___ Surface ___ Municipal ___ Private ___ Other: _____

Water Analysis: (Attach copy or fill out below)

pH: _____ PPM	TDS: _____ PPM	Hardness: _____ PPM/Gr	Chlorine: _____ PPM	Chloramines: _____ PPM
Sulfur: _____ PPM	Ferric Iron: _____ PPM	Ferrous Iron: _____ PPM	Heme Iron: _____ PPM	Total Iron: _____ PPM
Lead: _____ PPM	Copper: _____ PPM	Arsenic: _____ PPD	Fluoride: _____ PPM	Manganese: _____ PPM
Silica: _____ PPM	Sulfides: _____ PPM	Nitrates: _____ PPM	TSS: _____ NTU	Alkalinity ($CaCO^3$): _____ PPM
Tannins: _____ NTU	TOC: _____ PPM	Radon: _____ PPM	Uranium: _____ PPM	Radionuclides: _____ pC/L
VOCs: _____ PPM	MTBE: _____ PPM	Hydrocarbons: _____ PPM	Pesticides: _____ PPM	Tri-Halomethane: _____ PPM
Bacteria: _____ CFU	Other (Explain): _____			

Are there any other factors that may affect the performance of a system?
(i.e.: Oil in the water, brackish water, salt air, or
caustic environment that could cause corrosion): _____

_____

Are there any special product water requirements? _____

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1157
EFFECTIVE
MARCH 1999

INDUSTRIAL WATER SOFTENERS

WATER SOFTENERS WITH STEEL TANKS

SWT Water Softeners with STEEL TANKS (FDA Lined & Primed), Aquamatic Diaphragm Valves, Time Initiated Backwash

Part Number	Flow Rate Superior GPM (LPM)	Flow Rate Standard GPM (LPM)	Flow Rate Peak GPM (LPM)	Flow Rate @ 5 PSI Drop GPM (LPM)	Capacity @ 6 lb/cu.ft. Grains	Capacity @ 15 lb/cu.ft Grains	Resin Quantity Cu.Ft. (Liters)	Bed Surface Area Sq. Ft.	Backwash Rate GPM (LPM)	Tank Size Inches	Brine Tank Size Inches	Diaphragm Valve Size
WSC15P-2460	20 (76)	35 (132)	100 (379)	65 (246)	225,000	325,000	10 (283)	3.1	16 (61)	24 x 60	24 x 48	1.5" Composite
WSC20P-2460	20 (76)	35 (132)	100 (379)	125 (473)	225,000	325,000	10 (283)	3.1	16 (61)	24 x 60	24 x 48	2" Composite
WSC15C-3060	30 (114)	55 (208)	70 (265)	50 (189)	360,000	520,000	16 (453)	4.9	25 (95)	30 x 60	30 x 42	1.5" Cast Iron
WSC15P-3060	30 (114)	55 (208)	100 (379)	65 (246)	360,000	520,000	16 (453)	4.9	25 (95)	30 x 60	30 x 42	1.5" Composite
WSC20C-3060	30 (114)	55 (208)	135 (511)	80 (303)	360,000	520,000	16 (453)	4.9	25 (95)	30 x 60	30 x 42	2" Cast Iron
WSC20P-3060	30 (114)	55 (208)	150 (568)	125 (473)	360,000	520,000	16 (453)	4.9	25 (95)	30 x 60	30 x 42	2" Composite
WSC20C-3660	40 (152)	70 (265)	135 (511)	80 (303)	520,000	747,500	23 (651)	7.0	35 (132)	36 x 60	30 x 60	2" Cast Iron
WSC20P-3660	40 (152)	70 (265)	200 (757)	125 (473)	520,000	747,500	23 (651)	7.0	35 (132)	36 x 60	30 x 60	2" Composite
WSC25C-3660	40 (152)	70 (265)	200 (757)	115 (435)	520,000	747,500	23 (651)	7.0	35 (132)	36 x 60	30 x 60	2.5" Cast Iron
WSC30C-3660	40 (152)	70 (265)	200 (757)	200 (757)	520,000	747,500	23 (651)	7.0	35 (132)	36 x 60	30 x 60	3" Cast Iron
WSC30P-3660	40 (152)	70 (265)	200 (757)	280 (1060)	520,000	747,500	23 (651)	7.0	35 (132)	36 x 60	30 x 60	3" Composite
WSC20P-4260	60 (227)	115 (435)	180 (681)	130 (492)	720,000	1,040,000	32 (906)	9.6	48 (182)	42 x 60	39 x 48	2" Composite
WSC25C-4260	60 (227)	115 (435)	200 (757)	120 (454)	720,000	1,040,000	32 (906)	9.6	48 (182)	42 x 60	39 x 48	2.5" Cast Iron
WSC30C-4260	60 (227)	115 (435)	300 (1136)	190 (719)	720,000	1,040,000	32 (906)	9.6	48 (182)	42 x 60	39 x 48	3" Cast Iron
WSC30P-4260	60 (227)	115 (435)	300 (1136)	280 (1060)	720,000	1,040,000	32 (906)	9.6	48 (182)	42 x 60	39 x 48	3" Composite
WSC20P-4860	80 (303)	140 (530)	180 (681)	130 (492)	990,000	1,430,000	44 (1246)	12.6	63 (238)	48 x 60	50 x 60	2" Composite
WSC25C-4860	80 (303)	140 (530)	200 (757)	120 (454)	990,000	1,430,000	44 (1246)	12.6	63 (238)	48 x 60	50 x 60	2.5" Cast Iron
WSC30C-4860	80 (303)	140 (530)	330 (1249)	210 (795)	990,000	1,430,000	44 (1246)	12.6	63 (238)	48 x 60	50 x 60	3" Cast Iron
WSC30P-4860	80 (303)	140 (530)	400 (1514)	300 (1136)	990,000	1,430,000	44 (1246)	12.6	63 (238)	48 x 60	50 x 60	3" Composite
WSC30C-5460	100 (379)	175 (662)	330 (1249)	200 (757)	1,237,500	1,787,500	55 (1557)	15.9	80 (303)	54 x 60	60 x 60	3" Cast Iron
WSC30P-5460	100 (379)	175 (662)	440 (1666)	310 (1173)	1,237,500	1,787,500	55 (1557)	15.9	80 (303)	54 x 60	60 x 60	3" Composite
WSC40C-5460	100 (379)	175 (662)	500 (1893)	420 (1590)	1,237,500	1,787,500	55 (1557)	15.9	80 (303)	54 x 60	60 x 60	4" Cast Iron
WSC30C-6060	150 (568)	210 (795)	330 (1249)	210 (795)	1,485,000	2,145,000	66 (1869)	19.6	98 (371)	60 x 60	60 x 60	3" Cast Iron
WSC30P-6060	150 (568)	210 (795)	440 (1666)	310 (1173)	1,485,000	2,145,000	66 (1869)	19.6	98 (371)	60 x 60	60 x 60	3" Composite
WSC40C-6060	150 (568)	210 (795)	600 (2271)	310 (1173)	1,485,000	2,145,000	66 (1869)	19.6	98 (371)	60 x 60	60 x 60	4" Cast Iron

(Continued on next page.)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1271
EFFECTIVE
SEPTEMBER 2004

INDUSTRIAL WATER SOFTENERS

WATER SOFTENERS WITH STEEL TANKS

SWT Water Softeners with STEEL TANKS (FDA Lined & Primed), Aquamatic Diaphragm Valves, Time Initiated Backwash

Part Number	Flow Rate Superior GPM (LPM)	Flow Rate Standard GPM (LPM)	Flow Rate Peak GPM (LPM)	Flow Rate @ 5 PSI Drop GPM (LPM)	Capacity @ 6 lb/cu.ft. Grains	Capacity @ 15 lb/cu.ft Grains	Resin Quantity Cu.Ft. (Liters)	Bed Surface Area Sq. Ft.	Backwash Rate GPM (LPM)	Tank Size Inches	Brine Tank Size Inches	Diaphragm Valve Size
WSC30C-6660	180 (681)	265 (1003)	330 (1249)	210 (795)	1,912,000	2,762,500	85 (2407)	23.8	119 (450)	66 x 60	60 x 60	3" Cast Iron
WSC30P-6660	180 (681)	265 (1003)	440 (1666)	310 (1173)	1,912,000	2,762,500	85 (2407)	23.8	119 (450)	66 x 60	60 x 60	3" Composite
WSC40C-6660	180 (681)	265 (1003)	600 (2271)	440 (1666)	1,912,000	2,762,500	85 (2407)	23.8	119 (450)	66 x 60	60 x 60	4" Cast Iron
WSC30C-7260	220 (833)	315 (1192)	330 (1249)	210 (795)	2,250,000	3,250,000	100 (2832)	28.2	141 (534)	72 x 60	72 x 60	3" Cast Iron
WSC30P-7260	220 (833)	315 (1192)	440 (1666)	310 (1173)	2,250,000	3,250,000	100 (2832)	28.2	141 (534)	72 x 60	72 x 60	3" Composite
WSC40C-7260	220 (833)	315 (1192)	600 (2271)	440 (1666)	2,250,000	3,250,000	100 (2832)	28.2	141 (534)	72 x 60	72 x 60	4" Cast Iron
WSC60C-7260	220 (833)	315 (1192)	900 (3407)	900 (3407)	2,250,000	3,250,000	100 (2832)	28.2	141 (534)	72 x 60	72 x 60	6" Cast Iron

System is unassembled (for shipping purposes) and includes all necessary valves, tank, grades of media, underbedding, internal distributors/strainers, drain line flow controls, and the clock/timer/stager assembly mounted into a control box. External piping is not included. Customer may want to consider system additions of pressure gauges, sample cocks, vacuum breakers, flex connectors, bypass valves, shutoffs, etc.

Cast Iron Valve available connections: (FPT: 1.5 inch, 2 inch, 2.5 inch, 3 inch); (Flanged: 3 inch, 4 inch, 6 inch)

Plastic Valve available connections: (MPT: 1.5 inch); (Male Spigot Weld: 1.5 inch, 2 inch); (Female Socket Weld: 2 inch); (Flanged: 2 inch, 3 inch)

Recommended Service Flow Rates/Ranges are based on the cu.ft. of the tank/filter bed. Slower flow rate per cu.ft. = Better Filtration

- 2 gpm/cu.ft. = Superior Softening (less than 0.15 grain (3 ppm) of hardness leakage) with less than 2 psi drop
- 3.5 to 5 gpm/sq.ft. = Commercial Grade Softening (up to 1 grain (17 ppm) of hardness leakage) with less than 5 psi drop
- 5 to10 gpm/cu.ft. = Utility Softening
- Peak flow rates are based on 10 gpm/cu.ft. or greater than 12 psi loss, whichever occurs first.

System Flow Rates as listed are based on pressure drop curves of less than 2 psi drop through the service valves.

Backwash Rates for proper bed cleaning are best achieved at 3.8 gpm/cu.ft. at 60ºF. However, adjustments in the backwash rate may be necessary for different water temperatures. , Also allow backwash variations for valve sizes, pipe sizes, pump sizes, water availability, and unique applications.

Backwash Rates allow 50% bed expansion at 60ºF.

Valve Sizes and Tank Size Pairings for special flow rates and backwash rates may be substituted at customer request or are application dependent.

Operating Pressure: 100 psi (7 bar)

Maximum Temperature: 140ºF (60ºC)

Capacity based on 23 grains (400 ppm) of hardness as $CaCO_3$ at 2 to 4 gpm/cu.ft. (2 to 1 $CaCO_3$ to Mg ratio).

Hardness Leakage of less than 3 ppm (0.2 grains) at 6 lb. NaCL, and less than 1 ppm (0.1 grains) at 12 lb. NaCL. Total bed hardness capacity includes a 5% safety factor.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1271
EFFECTIVE
SEPTEMBER 2004

INDUSTRIAL WATER SOFTENERS

WATER SOFTENERS WITH COMPOSITE TANKS

SWT Water Softeners with COMPOSITE TANKS, Aquamatic Diaphragm Valves, Time Initiated Backwash

Part Number	Flow Rate Superior GPM (LPM)	Flow Rate Standard GPM (LPM)	Flow Rate Peak GPM (LPM)	Flow Rate @ 5 PSI Drop GPM (LPM)	Capacity @ 6 lb/cu.ft. Grains	Capacity @ 15 lb/cu.ft Grains	Resin Quantity Cu.Ft. (Liters)	Bed Surface Area Sq. Ft.	Backwash Rate GPM (LPM)	Tank Size Inches	Brine Tank Size Inches	Diaphragm Valve Size
WCC15P-2472	18 (68)	31 (117)	90 (341)	65 (246)	202,500	292,500	9 (255)	3.1	16 (61)	24 x 72	24 x 72	1.5" Composite
WCC20P-2472	18 (68)	31 (117)	90 (341)	125 (473)	202,500	292,500	9 (255)	3.1	16 (61)	24 x 72	24 x 72	2" Composite
WCC15C-3072	28 (106)	50 (189)	70 (265)	50 (189)	315,000	455,000	14 (396)	4.9	25 (95)	30 x 72	30 x 42	1.5" Cast Iron
WCC15P-3072	28 (106)	50 (189)	100 (379)	65 (246)	315,000	455,000	14 (396)	4.9	25 (95)	30 x 72	30 x 42	1.5" Composite
WCC20C-3072	28 (106)	50 (189)	135 (511)	80 (303)	315,000	455,000	14 (396)	4.9	25 (95)	30 x 72	30 x 42	2" Cast Iron
WCC20P-3072	28 (106)	50 (189)	140 (530)	125 (473)	315,000	455,000	14 (396)	4.9	25 (95)	30 x 72	30 x 42	2" Composite
WCC20C-3672	40 (151)	70 (265)	135 (511)	80 (303)	450,000	650,000	20 (566)	7.0	35 (132)	36 x 72	30 x 60	2" Cast Iron
WCC20P-3672	40 (151)	70 (265)	200 (757)	125 (473)	450,000	650,000	20 (566)	7.0	35 (132)	36 x 72	30 x 60	2" Composite
WCC25C-3672	40 (151)	70 (265)	200 (757)	115 (435)	450,000	650,000	20 (566)	7.0	35 (132)	36 x 72	30 x 60	2.5" Cast Iron
WCC30C-3672	40 (151)	70 (265)	200 (757)	200 (757)	450,000	650,000	20 (566)	7.0	35 (132)	36 x 72	30 x 60	3" Cast Iron
WCC30P-3672	40 (151)	70 (265)	200 (757)	280 (1060)	450,000	650,000	20 (566)	7.0	35 (132)	36 x 72	30 x 60	3" Composite
WCC20P-4272	50 (189)	90 (341)	180 (681)	130 (492)	562,500	812,500	25 (708)	9.6	48 (182)	42 x 72	39 x 48	2" Composite
WCC25C-4272	50 (189)	90 (341)	200 (757)	120 (454)	562,500	812,500	25 (708)	9.6	48 (182)	42 x 72	39 x 48	2.5" Cast Iron
WCC30C-4272	50 (189)	90 (341)	250 (946)	190 (719)	562,500	812,500	25 (708)	9.6	48 (182)	42 x 72	39 x 48	3" Cast Iron
WCC30P-4272	50 (189)	90 (341)	250 (946)	280 (1060)	562,500	812,500	25 (708)	9.6	48 (182)	42 x 72	39 x 48	3" Composite
WCC20P-4872	65 (246)	115 (435)	180 (681)	130 (492)	720,000	1,040,000	32 (906)	12.6	63 (238)	48 x 72	50 x 60	2" Composite
WCC25C-4872	65 (246)	115 (435)	200 (757)	120 (454)	720,000	1,040,000	32 (906)	12.6	63 (238)	48 x 72	50 x 60	2.5" Cast Iron
WCC30C-4872	65 (246)	115 (435)	320 (1211)	210 (795)	720,000	1,040,000	32 (906)	12.6	63 (238)	48 x 72	50 x 60	3" Cast Iron
WCC30P-4872	65 (246)	115 (435)	320 (1211)	300 (1136)	720,000	1,040,000	32 (906)	12.6	63 (238)	48 x 72	50 x 60	3" Composite
WCC30C-6367	80 (303)	135 (511)	330 (1249)	210 (795)	855,000	1,235,000	38 (1076)	19.6	98 (371)	63 x 67	60 x 60	3" Cast Iron
WCC30P-6367	80 (303)	135 (511)	380 (1438)	310 (1173)	855,000	1,235,000	38 (1076)	19.6	98 (371)	63 x 67	60 x 60	3" Composite
WCC40C-6367	80 (303)	135 (511)	380 (1438)	420 (1590)	855,000	1,235,000	38 (1076)	19.6	98 (371)	63 x 67	60 x 60	4" Cast Iron
WCC30C-6387	140 (530)	245 (927)	330 (1249)	210 (795)	1,575,000	2,275,000	70 (1982)	23.8	119 (450)	63 x 87	60 x 60	3" Cast Iron
WCC30P-6387	140 (530)	245 (927)	440 (1666)	310 (1173)	1,575,000	2,275,000	70 (1982)	23.8	119 (450)	63 x 87	60 x 60	3" Composite
WCC40C-6387	140 (530)	245 (927)	600 (2271)	440 (1666)	1,575,000	2,275,000	70 (1982)	23.8	119 (450)	63 x 87	60 x 60	4" Cast Iron

(Continued on next page.)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1272
EFFECTIVE
SEPTEMBER 2004

INDUSTRIAL WATER SOFTENERS

WATER SOFTENERS WITH COMPOSITE TANKS

System is unassembled (for shipping purposes) and includes all necessary valves, tank, grades of media, underbedding, internal distributors/ strainers, drain line flow controls, and the clock/timer/stager assembly mounted into a control box. External piping is not included. Customer may want to consider system additions of pressure gauges, sample cocks, vacuum breakers, flex connectors, bypass valves, shutoffs, etc.

Cast Iron Valve available connections: (FPT: 1.5 inch, 2 inch, 2.5 inch, 3 inch); (Flanged: 3 inch, 4 inch, 6 inch)

Plastic Valve available connections: (MPT: 1.5 inch); (Male Spigot Weld: 1.5 inch, 2 inch); (Female Socket Weld: 2 inch); (Flanged: 2 inch, 3 inch)

Recommended Service Flow Rates/Ranges are based on the cu.ft. of the tank/filter bed. Slower flow rate per cu.ft. = Better Filtration

- 2 gpm/cu.ft. = Superior Softening (less than 0.15 grain (3 ppm) of hardness leakage) with less than 2 psi drop
- 3.5 to 5 gpm/cu.ft. = Commercial Grade Softening (up to 1 grain (17 ppm) of hardness leakage) with less than 5 psi drop
- 5 to 10 gpm/cu.ft. = Utility Softening
- Peak flow rates are based on 10 gpm/cu.ft. or greater than 12 psi loss, whichever occurs first.

System Flow Rates as listed are based on pressure drop curves of less than 2 psi drop through the service valves.

Backwash Rates for proper bed cleaning are best achieved at 3.8 gpm/cu.ft at 60ºF. However, adjustments in the backwash rate may be necessary for different water temperatures. Also allow backwash variations for valve sizes, pipe sizes, pump sizes, water availability, and unique applications.

Backwash Rates allow 50% bed expansion at 60ºF.

Valve Sizes and Tank Size Pairings for special flow rates and backwash rates may be substituted at customer request or are application dependent.

Operating Pressure: 150 psi (10 bar)

Maximum Temperature: 140ºF (60ºC)

Capacity based on 23 grains (400 ppm) of hardness as $CaCO_3$ at 2 to 4 gpm/cu.ft. (2 to 1 $CaCO_3$ to Mg ratio).

Hardness Leakage of less than 3 ppm (0.2 grains) at 6 lb. NaCL, and less than 1 ppm (0.1 grains) at 12 lb. NaCL. Total bed hardness capacity includes a 5% safety factor.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1272
EFFECTIVE
SEPTEMBER 2002

INDUSTRIAL FILTRATION SYSTEMS

METALEASE™ FILTRATION SYSTEMS WITH STEEL TANKS

SWT MetalEase Filters with STEEL TANKS (FDA Lined & Primed), Aquamatic Diaphragm Valves, Time Initiated Backwash

Part Number	Recommended Flow Range GPM (LPM)	Flow Rate Superior GPM (LPM)	Flow Rate Standard GPM (LPM)	Flow Rate Peak GPM (LPM)	Flow Rate @ 5 PSI Drop GPM (LPM)	Bed Surface Area Sq. Ft.	Backwash Rate GPM (LPM)	Tank Size Inches	Diaphragm Valve Size
MESC15P-2460	15-45 (57-170)	15 (57)	30 (114)	45 (170)	30 (114)	3.1	60 (227)	24 x 60	1.5" Composite
MESC20P-2460	30-63 (114-239)	15 (57)	30 (114)	63 (239)	30 (114)	3.1	60 (227)	24 x 60	2" Composite
MESC15C-3060	25-75 (95-189)	25 (95)	50 (189)	75 (284)	40 (152)	4.9	100 (379)	30 x 60	1.5" Cast Iron
MESC15P-3060	25-75 (95-189)	25 (95)	50 (189)	75 (284)	50 (189)	4.9	100 (379)	30 x 60	1.5" Composite
MESC20C-3060	50-100 (189-379)	25 (95)	50 (189)	100 (379)	60 (227)	4.9	100 (379)	30 x 60	2" Cast Iron
MESC20P-3060	50-100 (189-379)	25 (95)	50 (189)	100 (379)	50 (189)	4.9	100 (379)	30 x 60	2" Composite
MESC20C-3660	35-105 (133-398)	35 (133)	70 (265)	105 (398)	60 (227)	7.0	140 (530)	36 x 60	2" Cast Iron
MESC20P-3660	35-105 (133-398)	35 (133)	70 (265)	105 (398)	70 (265)	7.0	140 (530)	36 x 60	2" Composite
MESC25C-3660	70-125 (265-474)	35 (133)	70 (265)	125 (474)	70 (265)	7.0	140 (530)	36 x 60	2.5" Cast Iron
MESC30C-3660	70-140 (265-530)	35 (133)	70 (265)	140 (530)	70 (265)	7.0	140 (530)	36 x 60	3" Cast Iron
MESC30P-3660	70-140 (265-530)	35 (133)	70 (265)	140 (530)	75 (284)	7.0	140 (530)	36 x 60	3" Composite
MESC20P-4260	45-145 (170-549)	50 (189)	95 (360)	145 (549)	90 (341)	9.6	195 (738)	42 x 60	2" Composite
MESC25C-4260	45-125 (170-474)	50 (189)	95 (360)	125 (474)	90 (341)	9.6	195 (738)	42 x 60	2.5" Cast Iron
MESC30C-4260	95-192 (360-727)	50 (189)	95 (360)	192 (727)	100 (379)	9.6	195 (738)	42 x 60	3" Cast Iron
MESC30P-4260	45-145 (170-549)	50 (189)	95 (360)	145 (549)	100 (379)	9.6	195 (738)	42 x 60	3" Composite
MESC20P-4860	65-145 (246-549)	65 (246)	125 (474)	145 (549)	100 (379)	12.6	255 (965)	48 x 60	2" Composite
MESC25C-4860	65-120 (246-455)	65 (246)	125 (474)	120 (455)	125 (474)	12.6	255 (965)	48 x 60	2.5" Cast Iron
MESC30C-4860	120-200 (455-758)	65 (246)	125 (474)	200 (758)	140 (530)	12.6	255 (965)	48 x 60	3" Cast Iron
MESC30P-4860	120-230 (455-871)	65 (246)	125 (474)	230 (871)	140 (530)	12.6	255 (965)	48 x 60	3" Composite
MESC30C-5460	80-205 (303-777)	80 (303)	160 (606)	205 (777)	160 (606)	15.9	320 (1211)	54 x 60	3" Cast Iron
MESC30P-5460	80-300 (303-1137)	80 (303)	160 (606)	300 (1137)	160 (606)	15.9	320 (1211)	54 x 60	3" Composite
MESC40C-5460	160-318 (606-1205)	80 (303)	160 (606)	318 (1205)	160 (606)	15.9	320 (1211)	54 x 60	4" Cast Iron
MESC30C-6060	100-205 (379-777)	100 (379)	200 (758)	205 (777)	175 (663)	19.6	395 (1495)	60 x 60	3" Cast Iron
MESC30P-6060	100-300 (379-1137)	100 (379)	200 (758)	300 (1137)	195 (739)	19.6	395 (1495)	60 x 60	3" Composite
MESC40C-6060	200-400 (758-1515)	100 (379)	200 (758)	400 (1515)	195 (739)	19.6	395 (1495)	60 x 60	4" Cast Iron

(Continued on next page.)

SAFE WATER TECHNOLOGIES, INC.
1168 ST. CHARLES STREET, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1267
EFFECTIVE
MARCH 2006

METALEASE™ FILTRATION SYSTEMS WITH STEEL TANKS

SWT MetalEase Filters with STEEL TANKS (FDA Lined & Primed), Aquamatic Diaphragm Valves, Time Initiated Backwash

Part Number	Recommended Flow Range GPM (LPM)	Flow Rate Superior GPM (LPM)	Flow Rate Standard GPM (LPM)	Flow Rate Peak GPM (LPM)	Flow Rate @ 5 PSI Drop GPM (LPM)	Bed Surface Area Sq. Ft.	Backwash Rate GPM (LPM)	Tank Size Inches	Diaphragm Valve Size
MESC30C-6660	120-200 (455-758)	120 (455)	200 (758)	200 (758)	180 (682)	23.8	480 (1817)	66 x 60	3" Cast Iron
MESC30P-6660	120-240 (455-909)	120 (455)	240 (909)	240 (909)	225 (852)	23.8	480 (1817)	66 x 60	3" Composite
MESC40C-6660	240-400 (909-1515)	120 (455)	240 (909)	400 (1515)	240 (909)	23.8	480 (1817)	66 x 60	4" Cast Iron
MESC30C-7260	140-205 (530-777)	140 (530)	205 (777)	205 (777)	180 (682)	28.2	565 (2139)	72 x 60	3" Cast Iron
MESC30P-7260	280-400 (1061-1515)	140 (530)	280 (1061)	400 (1515)	250 (947)	28.2	565 (2139)	72 x 60	3" Composite
MESC40C-7260	280-400 (1061-1515)	140 (530)	280 (1061)	400 (1515)	280 (1061)	28.2	565 (2139)	72 x 60	4" Cast Iron
MESC60C-7260	280-564 (1061-2137)	140 (530)	280 (1061)	564 (2137)	280 (1061)	28.2	565 (2139)	72 x 60	6" Cast Iron

System is unassembled (for shipping purposes) and includes all necessary valves, tank, grades of media, underbedding, internal distributors/strainers, drain line flow controls, and the clock/timer/stager assembly mounted into a control box. External piping is not included. Customer may want to consider system additions of pressure gauges, sample cocks, vacuum breakers, flex connectors, bypass valves, shutoffs, etc.

Cast Iron Valve available connections: (FPT: 1.5 inch, 2 inch, 2.5 inch, 3 inch); (Flanged: 3 inch, 4 inch, 6 inch)

Plastic Valve available connections: (MPT: 1.5 inch); (Male Spigot Weld: 1.5 inch, 2 inch); (Female Socket Weld: 2 inch); (Flanged: 2 inch, 3 inch)

Recommended Service Flow Rates/Ranges are based on the sq.ft. of the tank/filter bed. Slower flow rate per sq.ft. = Better Filtration

- 5 to 10 gpm/sq.ft. = Superior filtration (20 to 40 micron nominal) with less than 5 to 10 psi pressure drop
- 10 to 15 gpm/sq.ft. = High quality filtration (40 to 100 micron nominal) with up to 10 to 20 psi pressure drop
- 15 to 20 gpm/sq.ft. = Utility filtration only (no micron rating estimate) with up to 25 to 30 psi pressure drop

System Flow Rates as listed are based on pressure drop curves of less than 2 psi drop through the service valves.

Backwash Rates for proper bed cleaning are best achieved at 20 to 25 gpm per sq.ft. However, allow backwash variations to as low as 15 gpm/sq.ft. for valve sizes, pipe sizes, pump sizes, water availability, and unique applications.

Backwash Rates allow up to 5 psi loss through the backwash valves.

Backwash Flow Restrictors are included and can be provided to accommodate any desired backwash flow rates.

Valve Sizes and Tank Size Pairings for special flow rates and backwash rates may be substituted at customer request or are application dependent.

Operating Pressure: 100 psi (7 bar)

Maximum Temperature: 140°F (60°C)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1267
EFFECTIVE
MARCH 2006

INDUSTRIAL FILTRATION SYSTEMS

METALEASE™ FILTRATION SYSTEMS WITH COMPOSITE TANKS

SWT MetalEase Filters with COMPOSITE TANKS, Aquamatic Diaphragm Valves, Time Initiated Backwash

Part Number	Recommended Flow Range GPM (LPM)	Flow Rate Superior GPM (LPM)	Flow Rate Standard GPM (LPM)	Flow Rate Peak GPM (LPM)	Flow Rate @ 5 PSI Drop GPM (LPM)	Bed Surface Area Sq. Ft.	Backwash Rate GPM (LPM)	Tank Size Inches	Diaphragm Valve Size
MECC15P-2472	15-45 (57-170)	15 (57)	30 (114)	45 (170)	30 (114)	3.1	45 (170)	24 x 72	1.5" Composite
MECC20P-2472	30-63 (114-239)	15 (57)	30 (114)	63 (239)	30 (114)	3.1	45 (170)	24 x 72	2" Composite
MECC15C-3072	25-75 (95-189)	25 (95)	50 (189)	75 (284)	40 (152)	4.9	75 (284)	30 x 72	1.5" Cast Iron
MECC15P-3072	25-75 (95-189)	25 (95)	50 (189)	75 (284)	50 (189)	4.9	75 (284)	30 x 72	1.5" Composite
MECC20C-3072	50-100 (189-379)	25 (95)	50 (189)	100 (379)	60 (227)	4.9	75 (284)	30 x 72	2" Cast Iron
MECC20P-3072	50-100 (189-379)	25 (95)	50 (189)	100 (379)	50 (189)	4.9	75 (284)	30 x 72	2" Composite
MECC20C-3672	35-105 (133-398)	35 (133)	70 (265)	105 (398)	60 (227)	7.0	105 (398)	36 x 72	2" Cast Iron
MECC20P-3672	35-105 (133-398)	35 (133)	70 (265)	105 (398)	70 (265)	7.0	105 (398)	36 x 72	2" Composite
MECC25C-3672	70-125 (265-474)	35 (133)	70 (265)	125 (474)	70 (265)	7.0	105 (398)	36 x 72	2.5" Cast Iron
MECC30C-3672	70-140 (265-530)	35 (133)	70 (265)	140 (530)	70 (265)	7.0	105 (398)	36 x 72	3" Cast Iron
MECC30P-3672	70-140 (265-530)	35 (133)	70 (265)	140 (530)	75 (284)	7.0	105 (398)	36 x 72	3" Composite
MECC20P-4272	45-145 (170-549)	50 (189)	95 (360)	145 (549)	90 (341)	9.6	145 (549)	42 x 72	2" Composite
MECC25C-4272	45-125 (170-474)	50 (189)	95 (360)	125 (474)	90 (341)	9.6	145 (549)	42 x 72	2.5" Cast Iron
MECC30C-4272	95-192 (360-727)	50 (189)	95 (360)	192 (727)	100 (379)	9.6	145 (549)	42 x 72	3" Cast Iron
MECC30P-4272	45-145 (170-549)	50 (189)	95 (360)	145 (549)	100 (379)	9.6	145 (549)	42 x 72	3" Composite
MECC20P-4872	65-145 (246-549)	65 (246)	125 (474)	145 (549)	100 (379)	12.6	145 (549)	48 x 72	2" Composite
MECC25C-4872	65-120 (246-455)	65 (246)	125 (474)	120 (455)	125 (474)	12.6	190 (720)	48 x 72	2.5" Cast Iron
MECC30C-4872	120-200 (455-758)	65 (246)	125 (474)	200 (758)	140 (530)	12.6	190 (720)	48 x 72	3" Cast Iron
MECC30P-4872	120-230 (455-871)	65 (246)	125 (474)	230 (871)	140 (530)	12.6	190 (720)	48 x 72	3" Composite
MECC30C-6367	100-205 (379-777)	100 (379)	195 (739)	205 (777)	175 (663)	19.6	220 (833)	63 x 67	3" Cast Iron
MECC30P-6367	100-300 (379-1137)	100 (379)	195 (739)	300 (1137)	195 (739)	19.6	300 (1137)	63 x 67	3" Composite
MECC40C-6367	195-318 (739-1205)	100 (379)	195 (739)	400 (1515)	195 (739)	19.6	340 (1288)	63 x 67	4" Cast Iron

(Continued on next page.)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1265
EFFECTIVE
OCTOBER 2013

METALEASE™ FILTRATION SYSTEMS WITH COMPOSITE TANKS

SWT MetalEase Filters with COMPOSITE TANKS, Aquamatic Diaphragm Valves, Time Initiated Backwash

Part Number	Recommended Flow Range GPM (LPM)	Flow Rate Superior GPM (LPM)	Flow Rate Standard GPM (LPM)	Flow Rate Peak GPM (LPM)	Flow Rate @ 5 PSI Drop GPM (LPM)	Bed Surface Area Sq. Ft.	Backwash Rate GPM (LPM)	Tank Size Inches	Diaphragm Valve Size
MECC30C-6387	120-200 (455-758)	100 (379)	200 (758)	200 (758)	180 (682)	23.8	300 (1137)	63 x 87	3" Cast Iron
MECC30P-6387	120-240 (455-909)	100 (379)	240 (909)	240 (909)	225 (852)	23.8	420 (1591)	63 x 87	3" Composite
MECC40C-6387	240-400 (909-1515)	100 (379)	240 (909)	400 (1515)	240 (909)	23.8	420 (1591)	63 x 87	4" Cast Iron
MECC60C-6387	280-564 (1061-2137)	100 (379)	240 (909)	564 (2137)	280 (1061)	23.8	500 (1894)	63 x 87	6" Cast Iron

System is unassembled (for shipping purposes) and includes all necessary valves, tank, grades of media, underbedding, internal distributors/strainers, drain line flow controls, and the clock/timer/stager assembly mounted into a control box. External piping is not included. Customer may want to consider system additions of pressure gauges, sample cocks, vacuum breakers, flex connectors, bypass valves, shutoffs, etc.

Cast Iron Valve available connections: (FPT: 1.5 inch, 2 inch, 2.5 inch, 3 inch); (Flanged: 3 inch, 4 inch, 6 inch)

Plastic Valve available connections: (MPT: 1.5 inch); (Male Spigot Weld: 1.5 inch, 2 inch); (Female Socket Weld: 2 inch); (Flanged: 2 inch, 3 inch)

Recommended Service Flow Rates/Ranges are based on the sq.ft. of the tank/filter bed. Slower flow rate per sq.ft. = Better Filtration

- 5 to 10 gpm/sq.ft. = Superior filtration (20 to 40 micron nominal) with less than 5 to 10 psi pressure drop
- 10 to 15 gpm/sq.ft. = High quality filtration (40 to 100 micron nominal) with up to 10 to 20 psi pressure drop
- 15 to 20 gpm/sq.ft. = Utility filtration only (no micron rating estimate) with up to 25 to 30 psi pressure drop

System Flow Rates as listed are based on pressure drop curves of less than 2 psi drop through the service valves.

Backwash Rates for proper bed cleaning are best achieved at 20 to 25 gpm/sq.ft. However, allow backwash variations to as low as 15 gpm/sq.ft. for valve sizes, pipe sizes, pump sizes, water availability, and unique applications.

Backwash Rates allow up to 5 psi loss through the backwash valves.

Backwash Flow Restrictors are included and can be provided to accommodate any desired backwash flow rates.

Valve Sizes and Tank Size Pairings for special flow rates and backwash rates may be substituted at customer request or are application dependent.

Operating Pressure: 150 psi (10 bar)

Maximum Temperature: 140°F (60°C)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1265
EFFECTIVE
OCTOBER 2013

INDUSTRIAL FILTRATION SYSTEMS

MULTI-MEDIA FILTRATION SYSTEMS WITH STEEL TANKS

SWT Multi-Media Filters with STEEL TANKS (FDA Lined & Primed), Aquamatic Diaphragm Valves, Time Initiated Backwash

Part Number	Recommended Flow Range GPM (LPM)	Flow Rate Superior GPM (LPM)	Flow Rate Standard GPM (LPM)	Flow Rate Peak GPM (LPM)	Flow Rate @ 5 PSI Drop GPM (LPM)	Bed Surface Area Sq. Ft.	Backwash Rate GPM (LPM)	Tank Size Inches	Diaphragm Valve Size
MMSC15P-2460	15-45 (57-170)	15 (57)	30 (114)	45 (170)	30 (114)	3.1	45 (170)	24 x 60	1.5" Composite
MMSC20P-2460	30-63 (114-239)	15 (57)	30 (114)	63 (239)	30 (114)	3.1	45 (170)	24 x 60	2" Composite
MMSC15C-3060	25-75 (95-189)	25 (95)	50 (189)	75 (284)	40 (152)	4.9	75 (284)	30 x 60	1.5" Cast Iron
MMSC15P-3060	25-75 (95-189)	25 (95)	50 (189)	75 (284)	50 (189)	4.9	75 (284)	30 x 60	1.5" Composite
MMSC20C-3060	50-100 (189-379)	25 (95)	50 (189)	100 (379)	60 (227)	4.9	75 (284)	30 x 60	2" Cast Iron
MMSC20P-3060	50-100 (189-379)	25 (95)	50 (189)	100 (379)	50 (189)	4.9	75 (284)	30 x 60	2" Composite
MMSC20C-3660	35-105 (133-398)	35 (133)	70 (265)	105 (398)	60 (227)	7.0	105 (398)	36 x 60	2" Cast Iron
MMSC20P-3660	35-105 (133-398)	35 (133)	70 (265)	105 (398)	70 (265)	7.0	105 (398)	36 x 60	2" Composite
MMSC25C-3660	70-125 (265-474)	35 (133)	70 (265)	125 (474)	70 (265)	7.0	105 (398)	36 x 60	2.5" Cast Iron
MMSC30C-3660	70-140 (265-530)	35 (133)	70 (265)	140 (530)	70 (265)	7.0	105 (398)	36 x 60	3" Cast Iron
MMSC30P-3660	70-140 (265-530)	35 (133)	70 (265)	140 (530)	75 (284)	7.0	105 (398)	36 x 60	3" Composite
MMSC20P-4260	45-145 (170-549)	50 (189)	95 (360)	145 (549)	90 (341)	9.6	145 (549)	42 x 60	2" Composite
MMSC25C-4260	45-125 (170-474)	50 (189)	95 (360)	125 (474)	90 (341)	9.6	145 (549)	42 x 60	2.5" Cast Iron
MMSC30C-4260	95-192 (360-727)	50 (189)	95 (360)	192 (727)	100 (379)	9.6	145 (549)	42 x 60	3" Cast Iron
MMSC30P-4260	45-145 (170-549)	50 (189)	95 (360)	145 (549)	100 (379)	9.6	145 (549)	42 x 60	3" Composite
MMSC20P-4860	65-145 (246-549)	65 (246)	125 (474)	145 (549)	100 (379)	12.6	145 (549)	48 x 60	2" Composite
MMSC25C-4860	65-120 (246-455)	65 (246)	125 (474)	120 (455)	125 (474)	12.6	190 (720)	48 x 60	2.5" Cast Iron
MMSC30C-4860	120-200 (455-758)	65 (246)	125 (474)	200 (758)	140 (530)	12.6	190 (720)	48 x 60	3" Cast Iron
MMSC30P-4860	120-230 (455-871)	65 (246)	125 (474)	230 (871)	140 (530)	12.6	190 (720)	48 x 60	3" Composite
MMSC30C-5460	80-205 (303-777)	80 (303)	160 (606)	205 (777)	160 (606)	15.9	220 (833)	54 x 60	3" Cast Iron
MMSC30P-5460	80-300 (303-1137)	80 (303)	160 (606)	300 (1137)	160 (606)	15.9	230 (871)	54 x 60	3" Composite
MMSC40C-5460	160-318 (606-1205)	80 (303)	160 (606)	318 (1205)	160 (606)	15.9	230 (871)	54 x 60	4" Cast Iron
MMSC30C-6060	100-205 (379-777)	100 (379)	200 (758)	205 (777)	175 (663)	19.6	220 (833)	60 x 60	3" Cast Iron
MMSC30P-6060	100-300 (379-1137)	100 (379)	200 (758)	300 (1137)	195 (739)	19.6	300 (1137)	60 x 60	3" Composite
MMSC40C-6060	200-400 (758-1515)	100 (379)	200 (758)	400 (1515)	195 (739)	19.6	340 (1288)	60 x 60	4" Cast Iron

(Continued on next page.)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1269
EFFECTIVE
MARCH 2006

MULTI-MEDIA FILTRATION SYSTEMS WITH STEEL TANKS

SWT Multi-Media Filters with STEEL TANKS (FDA Lined & Primed), Aquamatic Diaphragm Valves, Time Initiated Backwash

Part Number	Recommended Flow Range GPM (LPM)	Flow Rate Superior GPM (LPM)	Flow Rate Standard GPM (LPM)	Flow Rate Peak GPM (LPM)	Flow Rate @ 5 PSI Drop GPM (LPM)	Bed Surface Area Sq. Ft.	Backwash Rate GPM (LPM)	Tank Size Inches	Diaphragm Valve Size
MMSC30C-6660	120-200 (455-758)	120 (455)	200 (758)	200 (758)	180 (682)	23.8	310 (1174)	66 x 60	3" Cast Iron
MMSC30P-6660	120-240 (455-909)	120 (455)	240 (909)	240 (909)	225 (852)	23.8	330 (1250)	66 x 60	3" Composite
MMSC40C-6660	240-400 (909-1515)	120 (455)	240 (909)	400 (1515)	240 (909)	23.8	360 (1364)	66 x 60	4" Cast Iron
MMSC30C-7260	140-205 (530-777)	140 (530)	205 (777)	205 (777)	180 (682)	28.2	300 (1137)	72 x 60	3" Cast Iron
MMSC30P-7260	280-400 (1061-1515)	140 (530)	280 (1061)	400 (1515)	250 (947)	28.2	420 (1591)	72 x 60	3" Composite
MMSC40C-7260	280-400 (1061-1515)	140 (530)	280 (1061)	400 (1515)	280 (1061)	28.2	420 (1591)	72 x 60	4" Cast Iron
MMSC60C-7260	280-564 (1061-2137)	140 (530)	280 (1061)	564 (2137)	280 (1061)	28.2	500 (1894)	72 x 60	6" Cast Iron

System is unassembled (for shipping purposes) and includes all necessary valves, tank, grades of media, underbedding, internal distributors/strainers, drain line flow controls, and the clock/timer/stager assembly mounted into a control box. External piping is not included. Customer may want to consider system additions of pressure gauges, sample cocks, vacuum breakers, flex connectors, bypass valves, shutoffs, etc.

Cast Iron Valve available connections: (FPT: 1.5 inch, 2 inch, 2.5 inch, 3 inch); (Flanged: 3 inch, 4 inch, 6 inch)

Plastic Valve available connections: (MPT: 1.5 inch); (Male Spigot Weld: 1.5 inch, 2 inch); (Female Socket Weld: 2 inch); (Flanged: 2 inch, 3 inch)

Recommended Service Flow Rates/Ranges are based on the sq.ft. of the tank/filter bed. Slower flow rate per sq.ft. = Better Filtration

- 5 to 10 gpm/sq.ft. = Superior filtration (20 to 40 micron nominal) with less than 5 to 10 psi pressure drop
- 10 to 15 gpm/sq.ft. = High quality filtration (40 to 100 micron nominal) with up to 10 to 20 psi pressure drop
- 15 to 20 gpm/sq.ft. = Utility filtration only (no micron rating estimate) with up to 25 to 30 psi pressure drop

System Flow Rates as listed are based on pressure drop curves of less than 2 psi drop through the service valves.

Backwash Rates for proper bed cleaning are best achieved at 20 to 25 gpm/sq.ft. However, allow backwash variations to as low as 15 gpm/sq.ft. for valve sizes, pipe sizes, pump sizes, water availability, and unique applications.

Backwash Rates allow up to 5 psi loss through the backwash valves.

Backwash Flow Restrictors are included and can be provided to accommodate any desired backwash flow rates.

Valve Sizes and Tank Size Pairings for special flow rates and backwash rates may be substituted at customer request or are application dependent.

Operating Pressure: 100 psi (7 bar)

Maximum Temperature: 140°F (60°C)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1269
EFFECTIVE
MARCH 2006

INDUSTRIAL FILTRATION SYSTEMS

MULTI-MEDIA FILTRATION SYSTEMS WITH COMPOSITE TANKS

SWT Multi-Media Filters with COMPOSITE TANKS, Aquamatic Diaphragm Valves, Time Initiated Backwash

Part Number	Recommended Flow Range GPM (LPM)	Flow Rate Superior GPM (LPM)	Flow Rate Standard GPM (LPM)	Flow Rate Peak GPM (LPM)	Flow Rate @ 5 PSI Drop GPM (LPM)	Bed Surface Area Sq. Ft.	Backwash Rate GPM (LPM)	Tank Size Inches	Diaphragm Valve Size
MMCC15P-2472	15-45 (57-170)	15 (57)	30 (114)	45 (170)	30 (114)	3.1	45 (170)	24 x 72	1.5" Composite
MMCC20P-2472	30-63 (114-239)	15 (57)	30 (114)	63 (239)	30 (114)	3.1	45 (170)	24 x 72	2" Composite
MMCC15C-3072	25-75 (95-189)	25 (95)	50 (189)	75 (284)	40 (152)	4.9	75 (284)	30 x 72	1.5" Cast Iron
MMCC15P-3072	25-75 (95-189)	25 (95)	50 (189)	75 (284)	50 (189)	4.9	75 (284)	30 x 72	1.5" Composite
MMCC20C-3072	50-100 (189-379)	25 (95)	50 (189)	100 (379)	60 (227)	4.9	75 (284)	30 x 72	2" Cast Iron
MMCC20P-3072	50-100 (189-379)	25 (95)	50 (189)	100 (379)	50 (189)	4.9	75 (284)	30 x 72	2" Composite
MMCC20C-3672	35-105 (133-398)	35 (133)	70 (265)	105 (398)	60 (227)	7.0	105 (398)	36 x 72	2" Cast Iron
MMCC20P-3672	35-105 (133-398)	35 (133)	70 (265)	105 (398)	70 (265)	7.0	105 (398)	36 x 72	2" Composite
MMCC25C-3672	70-125 (265-474)	35 (133)	70 (265)	125 (474)	70 (265)	7.0	105 (398)	36 x 72	2.5" Cast Iron
MMCC30C-3672	70-140 (265-530)	35 (133)	70 (265)	140 (530)	70 (265)	7.0	105 (398)	36 x 72	3" Cast Iron
MMCC30P-3672	70-140 (265-530)	35 (133)	70 (265)	140 (530)	75 (284)	7.0	105 (398)	36 x 72	3" Composite
MMCC20P-4272	45-145 (170-549)	50 (189)	95 (360)	145 (549)	90 (341)	9.6	145 (549)	42 x 72	2" Composite
MMCC25C-4272	45-125 (170-474)	50 (189)	95 (360)	125 (474)	90 (341)	9.6	145 (549)	42 x 72	2.5" Cast Iron
MMCC30C-4272	95-192 (360-727)	50 (189)	95 (360)	192 (727)	100 (379)	9.6	145 (549)	42 x 72	3" Cast Iron
MMCC30P-4272	45-145 (170-549)	50 (189)	95 (360)	145 (549)	100 (379)	9.6	145 (549)	42 x 72	3" Composite
MMCC20P-4872	65-145 (246-549)	65 (246)	125 (474)	145 (549)	100 (379)	12.6	145 (549)	48 x 72	2" Composite
MMCC25C-4872	65-120 (246-455)	65 (246)	125 (474)	120 (455)	125 (474)	12.6	190 (720)	48 x 72	2.5" Cast Iron
MMCC30C-4872	120-200 (455-758)	65 (246)	125 (474)	200 (758)	140 (530)	12.6	190 (720)	48 x 72	3" Cast Iron
MMCC30P-4872	120-230 (455-871)	65 (246)	125 (474)	230 (871)	140 (530)	12.6	190 (720)	48 x 72	3" Composite
MMCC30C-6367	100-205 (379-777)	100 (379)	195 (739)	205 (777)	175 (663)	19.6	220 (833)	63 x 67	3" Cast Iron
MMCC30P-6367	100-300 (379-1137)	100 (379)	195 (739)	300 (1137)	195 (739)	19.6	300 (1137)	63 x 67	3" Composite
MMCC40C-6367	195-318 (739-1205)	100 (379)	195 (739)	400 (1515)	195 (739)	19.6	340 (1288)	63 x 67	4" Cast Iron

(Continued on next page.)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1270
EFFECTIVE
MARCH 2006

MULTI-MEDIA FILTRATION SYSTEMS WITH COMPOSITE TANKS

SWT MetalEase Filters with COMPOSITE TANKS, Aquamatic Diaphragm Valves, Time Initiated Backwash

Part Number	Recommended Flow Range GPM (LPM)	Flow Rate Superior GPM (LPM)	Flow Rate Standard GPM (LPM)	Flow Rate Peak GPM (LPM)	Flow Rate @ 5 PSI Drop GPM (LPM)	Bed Surface Area Sq. Ft.	Backwash Rate GPM (LPM)	Tank Size Inches	Diaphragm Valve Size
MMCC30C-6387	120-200 (455-758)	100 (379)	200 (758)	200 (758)	180 (682)	23.8	300 (1137)	63 x 87	3" Cast Iron
MMCC30P-6387	120-240 (455-909)	100 (379)	240 (909)	240 (909)	225 (852)	23.8	420 (1591)	63 x 87	3" Composite
MMCC40C-6387	240-400 (909-1515)	100 (379)	240 (909)	400 (1515)	240 (909)	23.8	420 (1591)	63 x 87	4" Cast Iron
MMCC60C-6387	280-564 (1061-2137)	100 (379)	240 (909)	564 (2137)	280 (1061)	23.8	500 (1894)	63 x 87	6" Cast Iron

System is unassembled (for shipping purposes) and includes all necessary valves, tank, grades of media, underbedding, internal distributors/strainers, drain line flow controls, and the clock/timer/stager assembly mounted into a control box. External piping is not included. Customer may want to consider system additions of pressure gauges, sample cocks, vacuum breakers, flex connectors, bypass valves, shutoffs, etc.

Cast Iron Valve available connections: (FPT: 1.5 inch, 2 inch, 2.5 inch, 3 inch); (Flanged: 3 inch, 4 inch, 6 inch)

Plastic Valve available connections: (MPT: 1.5 inch); (Male Spigot Weld: 1.5 inch, 2 inch); (Female Socket Weld: 2 inch); (Flanged: 2 inch, 3 inch)

Recommended Service Flow Rates/Ranges are based on the sq.ft. of the tank/filter bed. Slower flow rate per sq.ft. = Better Filtration

- 5 to 10 gpm/sq.ft. = Superior filtration (20 to 40 micron nominal) with less than 5 to 10 psi pressure drop
- 10 to 15 gpm/sq.ft. = High quality filtration (40 to 100 micron nominal) with up to 10 to 20 psi pressure drop
- 15 to 20 gpm/sq.ft. = Utility filtration only (no micron rating estimate) with up to 25 to 30 psi pressure drop

System Flow Rates as listed are based on pressure drop curves of less than 2 psi drop through the service valves.

Backwash Rates for proper bed cleaning are best achieved at 20 to 25 gpm/sq.ft. However, allow backwash variations to as low as 15 gpm/sq.ft. for valve sizes, pipe sizes, pump sizes, water availability, and unique applications.

Backwash Rates allow up to 5 psi loss through the backwash valves.

Backwash Flow Restrictors are included and can be provided to accommodate any desired backwash flow rates.

Valve Sizes and Tank Size Pairings for special flow rates and backwash rates may be substituted at customer request or are application dependent.

Operating Pressure: 150 psi (10 bar)

Maximum Temperature: 140°F (60°C)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1270
EFFECTIVE
MARCH 2006

INDUSTRIAL FILTRATION SYSTEMS

FILTEREASE™ FILTRATION SYSTEMS WITH STEEL TANKS

SWT FilterEase Filters with STEEL TANKS (FDA Lined & Primed), Aquamatic Diaphragm Valves, Time Initiated Backwash

Part Number	Recommended Flow Range GPM (LPM)	Flow Rate High Quality GPM (LPM)	Flow Rate Standard GPM (LPM)	Flow Rate Peak GPM (LPM)	Flow Rate @ 5 PSI Drop GPM (LPM)	Bed Surface Area Sq. Ft.	Backwash Rate GPM (LPM)	Tank Size Inches	Diaphragm Valve Size
FSC15P-2460	21-60 (80-228)	21 (80)	30 (114)	60 (228)	30 (114)	3.1	31 (117)	24 x 60	1.5" Composite
FSC20P-2460	30-60 (114-228)	21 (80)	30 (114)	21 (80)	30 (114)	3.1	31 (117)	24 x 60	2" Composite
FSC15C-3060	35-80 (133-303)	35 (133)	50 (189)	80 (303)	40 (152)	4.9	49 (185)	30 x 60	1.5" Cast Iron
FSC15P-3060	35-80 (133-303)	35 (133)	50 (189)	80 (303)	50 (189)	4.9	49 (185)	30 x 60	1.5" Composite
FSC20C-3060	50-100 (189-379)	35 (133)	50 (189)	100 (379)	60 (227)	4.9	49 (185)	30 x 60	2" Cast Iron
FSC20P-3060	50-100 (189-379)	35 (133)	50 (189)	100 (379)	50 (189)	4.9	49 (185)	30 x 60	2" Composite
FSC20C-3660	35-105 (133-398)	50 (190)	70 (265)	105 (398)	60 (227)	7.0	70 (265)	36 x 60	2" Cast Iron
FSC20P-3660	50-125 (190-474)	50 (190)	70 (265)	125 (474)	70 (265)	7.0	70 (265)	36 x 60	2" Composite
FSC25C-3660	70-125 (265-474)	50 (190)	70 (265)	125 (474)	70 (265)	7.0	70 (265)	36 x 60	2.5" Cast Iron
FSC30C-3660	70-140 (265-530)	50 (190)	70 (265)	140 (530)	70 (265)	7.0	70 (265)	36 x 60	3" Cast Iron
FSC30P-3660	70-140 (265-530)	50 (190)	70 (265)	140 (530)	75 (284)	7.0	70 (265)	36 x 60	3" Composite
FSC20P-4260	65-145 (246-549)	65 (246)	95 (360)	145 (549)	90 (341)	9.6	96 (363)	42 x 60	2" Composite
FSC25C-4260	65-145 (246-549)	65 (246)	95 (360)	125 (474)	90 (341)	9.6	96 (363)	42 x 60	2.5" Cast Iron
FSC30C-4260	95-190 (360-720)	65 (246)	95 (360)	190 (720)	100 (379)	9.6	96 (363)	42 x 60	3" Cast Iron
FSC30P-4260	65-190 (246-720)	65 (246)	95 (360)	190 (720)	100 (379)	9.6	96 (363)	42 x 60	3" Composite
FSC20P-4860	85-145 (322-549)	85 (322)	125 (474)	145 (549)	100 (379)	12.6	126 (477)	48 x 60	2" Composite
FSC25C-4860	85-120 (322-455)	85 (322)	125 (474)	120 (455)	125 (474)	12.6	126 (477)	48 x 60	2.5" Cast Iron
FSC30C-4860	120-200 (455-758)	85 (322)	125 (474)	200 (758)	140 (530)	12.6	126 (477)	48 x 60	3" Cast Iron
FSC30P-4860	120-230 (455-871)	85 (322)	125 (474)	230 (871)	140 (530)	12.6	126 (477)	48 x 60	3" Composite
FSC30C-5460	105-205 (398-777)	105 (398)	160 (606)	205 (777)	160 (606)	15.9	159 (602)	54 x 60	3" Cast Iron
FSC30P-5460	105-300 (398-1137)	105 (398)	160 (606)	300 (1137)	160 (606)	15.9	159 (602)	54 x 60	3" Composite
FSC40C-5460	160-318 (606-1205)	105 (398)	160 (606)	318 (1205)	160 (606)	15.9	159 (602)	54 x 60	4" Cast Iron
FSC30C-6060	130-205 (493-777)	130 (493)	200 (758)	205 (777)	175 (663)	19.6	196 (742)	60 x 60	3" Cast Iron
FSC30P-6060	130-300 (493-1137)	130 (493)	200 (758)	300 (1137)	195 (739)	19.6	196 (742)	60 x 60	3" Composite
FSC40C-6060	200-400 (758-1515)	130 (493)	200 (758)	400 (1515)	195 (739)	19.6	196 (742)	60 x 60	4" Cast Iron

(Continued on next page.)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1293
EFFECTIVE
SEPTEMBER 2004

FILTEREASE™ FILTRATION SYSTEMS WITH STEEL TANKS

SWT FilterEase Filters with STEEL TANKS (FDA Lined & Primed), Aquamatic Diaphragm Valves, Time Initiated Backwash

Part Number	Recommended Flow Range GPM (LPM)	Flow Rate High Quality GPM (LPM)	Flow Rate Standard GPM (LPM)	Flow Rate Peak GPM (LPM)	Flow Rate @ 5 PSI Drop GPM (LPM)	Bed Surface Area Sq. Ft.	Backwash Rate GPM (LPM)	Tank Size Inches	Diaphragm Valve Size
FSC30C-6660	120-200 (455-757)	165 (625)	200 (758)	200 (758)	180 (682)	23.8	238 (901)	66 x 60	3" Cast Iron
FSC30P-6660	165-240 (625-909)	165 (625)	240 (909)	240 (909)	225 (852)	23.8	238 (901)	66 x 60	3" Composite
FSC40C-6660	240-400 (909-1515)	165 (625)	240 (909)	400 (1515)	240 (909)	23.8	238 (901)	66 x 60	4" Cast Iron
FSC30C-7260	200-205 (757-777)	200 (757)	205 (777)	205 (777)	180 (682)	28.2	282 (1067)	72 x 60	3" Cast Iron
FSC30P-7260	280-400 (1061-1515)	200 (757)	280 (1061)	400 (1515)	250 (947)	28.2	282 (1067)	72 x 60	3" Composite
FSC40C-7260	280-400 (1061-1515)	200 (757)	280 (1061)	400 (1515)	280 (1061)	28.2	282 (1067)	72 x 60	4" Cast Iron
FSC60C-7260	280-564 (1061-2137)	200 (757)	280 (1061)	564 (2137)	280 (1061)	28.2	282 (1067)	72 x 60	6" Cast Iron

System is unassembled (for shipping purposes) and includes all necessary valves, tank, grades of media, underbedding, internal distributors/strainers, drain line flow controls, and the clock/timer/stager assembly mounted into a control box. External piping is not included. Customer may want to consider system additions of pressure gauges, sample cocks, vacuum breakers, flex connectors, bypass valves, shutoffs, etc.

Cast Iron Valve available connections: (FPT: 1.5 inch, 2 inch, 2.5 inch, 3 inch); (Flanged: 3 inch, 4 inch, 6 inch)

Plastic Valve available connections: (MPT: 1.5 inch); (Male Spigot Weld: 1.5 inch, 2 inch); (Female Socket Weld: 2 inch); (Flanged: 2 inch, 3 inch)

Recommended Service Flow Rates/Ranges are based on the sq.ft. of the tank/filter bed. Slower flow rate per sq.ft. = Better Filtration

- 3.5 to 7 gpm/sq.ft. = Superior filtration (5 to 20 micron nominal) with less than 5 to 10 psi pressure drop
- 7 to 15 gpm/sq.ft. = High quality filtration (20 to 50 micron nominal) with up to 10 to 20 psi pressure drop
- 15 to 20 gpm/sq.ft. = Utility filtration only (no micron rating estimate) with up to 25 to 30 psi pressure drop

System Flow Rates as listed are based on pressure drop curves of less than 2 psi drop through the service valves.

Backwash Rates for proper bed cleaning are best achieved at 10 to 15 gpm/sq.ft. However, allow backwash variation to as low as 8 gpm/sq.ft. for valve sizes, pipe sizes, pump sizes, water availability, and unique applications.

Backwash Rates allow up to 25 psi loss through the backwash valves.

Backwash Flow Restrictors are included and can be provided to accommodate any desired backwash flow rates.

Valve Sizes and Tank Size Pairings for special flow rates and backwash rates may be substituted at customer request or are application dependent.

Operating Pressure: 100 psi (7 bar)

Maximum Temperature: 140°F (60°C)

Suggested Application Flow Rates:

- RO Pretreatment: 3.5 to 7 gpm/sq.ft.
- Drinking Water and Process: 8 to 12 gpm/sq.ft.
- Swimming Pool: 15 to 20 gpm/sq.ft.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1293
EFFECTIVE
SEPTEMBER 2004

INDUSTRIAL FILTRATION SYSTEMS

FILTEREASE™ FILTRATION SYSTEMS WITH COMPOSITE TANKS

SWT FilterEase Filters with COMPOSITE TANKS, Aquamatic Diaphragm Valves, Time Initiated Backwash

Part Number	Recommended Flow Range GPM (LPM)	Flow Rate High Quality GPM (LPM)	Flow Rate Standard GPM (LPM)	Flow Rate Peak GPM (LPM)	Flow Rate @ 5 PSI Drop GPM (LPM)	Bed Surface Area Sq. Ft.	Backwash Rate GPM (LPM)	Tank Size Inches	Diaphragm Valve Size
FCC15P-2472	21-60 (80-228)	21 (80)	30 (114)	60 (228)	30 (114)	3.1	31 (117)	24 x 72	1.5" Composite
FCC20P-2472	30-63 (114-239)	21 (80)	30 (114)	60 (228)	30 (114)	3.1	31 (117)	24 x 72	2" Composite
FCC15C-3072	35-80 (133-303)	35 (133)	50 (189)	80 (303)	40 (152)	4.9	49 (185)	30 x 72	1.5" Cast Iron
FCC15P-3072	35-80 (133-303)	35 (133)	50 (189)	80 (303)	50 (189)	4.9	49 (185)	30 x 72	1.5" Composite
FCC20C-3072	50-100 (189-379)	35 (133)	50 (189)	100 (379)	60 (227)	4.9	49 (185)	30 x 72	2" Cast Iron
FCC20P-3072	50-100 (189-379)	35 (133)	50 (189)	100 (379)	50 (189)	4.9	49 (185)	30 x 72	2" Composite
FCC20C-3672	50-105 (190-398)	50 (190)	70 (265)	105 (398)	60 (227)	7.0	70 (265)	36 x 72	2" Cast Iron
FCC20P-3672	50-125 (190-474)	50 (190)	70 (265)	125 (474)	70 (265)	7.0	70 (265)	36 x 72	2" Composite
FCC25C-3672	70-125 (265-474)	50 (190)	70 (265)	125 (474)	70 (265)	7.0	70 (265)	36 x 72	2.5" Cast Iron
FCC30C-3672	70-140 (265-530)	50 (190)	70 (265)	140 (530)	70 (265)	7.0	70 (265)	36 x 72	3" Cast Iron
FCC30P-3672	70-140 (265-530)	50 (190)	70 (265)	140 (530)	75 (284)	7.0	70 (265)	36 x 72	3" Composite
FCC20P-4272	65-145 (246-549)	65 (246)	95 (360)	145 (549)	90 (341)	9.6	96 (363)	42 x 72	2" Composite
FCC25C-4272	65-145 (246-549)	65 (246)	95 (360)	125 (474)	90 (341)	9.6	96 (363)	42 x 72	2.5" Cast Iron
FCC30C-4272	95-190 (360-720)	65 (246)	95 (360)	190 (720)	100 (379)	9.6	96 (363)	42 x 72	3" Cast Iron
FCC30P-4272	65-190 (246-720)	65 (246)	95 (360)	190 (720)	100 (379)	9.6	96 (363)	42 x 72	3" Composite
FCC20P-4872	85-145 (322-549)	85 (322)	125 (474)	145 (549)	100 (379)	12.6	126 (477)	48 x 72	2" Composite
FCC25C-4872	85-145 (322-549)	85 (322)	125 (474)	120 (455)	125 (474)	12.6	126 (477)	48 x 72	2.5" Cast Iron
FCC30C-4872	120-200 (455-758)	85 (322)	125 (474)	200 (758)	140 (530)	12.6	126 (477)	48 x 72	3" Cast Iron
FCC30P-4872	120-230 (455-871)	85 (322)	125 (474)	230 (871)	140 (530)	12.6	126 (477)	48 x 72	3" Composite
FCC30C-6367	135-205 (511-777)	135 (511)	195 (739)	205 (777)	175 (663)	19.6	196 (742)	63 x 67	3" Cast Iron
FCC30P-6367	135-300 (511-1137)	135 (511)	195 (739)	300 (1137)	195 (739)	19.6	196 (742)	63 x 67	3" Composite
FCC40C-6367	195-318 (739-1205)	135 (511)	195 (739)	400 (1515)	195 (739)	19.6	196 (742)	63 x 67	4" Cast Iron

(Continued on next page.)

SAFE WATER TECHNOLOGIES, INC.
1168 ST. CHARLES STREET, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1294
EFFECTIVE
SEPTEMBER 2004

FILTEREASE™ FILTRATION SYSTEMS WITH COMPOSITE TANKS

SWT FilterEase Filters with COMPOSITE TANKS, Aquamatic Diaphragm Valves, Time Initiated Backwash

Part Number	Recommended Flow Range GPM (LPM)	Flow Rate High Quality GPM (LPM)	Flow Rate Standard GPM (LPM)	Flow Rate Peak GPM (LPM)	Flow Rate @ 5 PSI Drop GPM (LPM)	Bed Surface Area Sq. Ft.	Backwash Rate GPM (LPM)	Tank Size Inches	Diaphragm Valve Size
FCC30C-6387	120-200 (455-758)	135 (511)	200 (758)	200 (758)	180 (682)	23.8	238 (901)	63 x 87	3" Cast Iron
FCC30P-6387	120-240 (455-909)	135 (511)	240 (909)	240 (909)	225 (852)	23.8	238 (901)	63 x 87	3" Composite
FCC40C-6387	240-400 (909-1515)	135 (511)	240 (909)	400 (1515)	240 (909)	23.8	238 (901)	63 x 87	4" Cast Iron
FCC60C-6387	280-564 (1061-2137)	135 (511)	240 (909)	564 (2137)	280 (1061)	23.8	238 (901)	63 x 87	6" Cast Iron

System is unassembled (for shipping purposes) and includes all necessary valves, tank, grades of media, underbedding, internal distributors/strainers, drain line flow controls, and the clock/timer/stager assembly mounted into a control box. External piping is not included. Customer may want to consider system additions of pressure gauges, sample cocks, vacuum breakers, flex connectors, bypass valves, shutoffs, etc.

Cast Iron Valve available connections: (FPT: 1.5 inch, 2 inch, 2.5 inch, 3 inch); (Flanged: 3 inch, 4 inch, 6 inch)

Plastic Valve available connections: (MPT: 1.5 inch); (Male Spigot Weld: 1.5 inch, 2 inch); (Female Socket Weld: 2 inch); (Flanged: 2 inch, 3 inch)

Recommended Service Flow Rates/Ranges are based on the sq.ft. of the tank/filter bed. Slower flow rate per sq.ft. = Better Filtration

- 3.5 to 7 gpm/sq.ft. = Superior filtration (5 to 20 micron nominal) with less than 5 to 10 psi pressure drop
- 7 to 15 gpm/sq.ft. = High quality filtration (25 to 50 micron nominal) with up to 10 to 20 psi pressure drop
- 15 to 20 gpm/sq.ft. = Utility filtration only (no micron rating estimate) with up to 25 to 30 psi pressure drop

System Flow Rates as listed are based on pressure drop curves of less than 2 psi drop through the service valves.

Backwash Rates for proper bed cleaning are best achieved at 10 to 15 gpm/sq.ft. However, allow backwash variation to as low as 8 gpm/sq.ft. for valve sizes, pipe sizes, pump sizes, water availability, and unique applications.

Backwash Rates allow up to 25 psi loss through the backwash valves.

Backwash Flow Restrictors are included and can be provided to accommodate any desired backwash flow rates.

Valve Sizes and Tank Size Pairings for special flow rates and backwash rates may be substituted at customer request or are application dependent.

Operating Pressure: 125 psi (8 bar)

Maximum Temperature: 140°F (60°C)

Suggested Application Flow Rates:

- RO Pretreatment: 3.5 to 7 gpm/sq.ft.
- Drinking Water and Process: 8 to 12 gpm/sq.ft.
- Swimming Pool: 15 to 20 gpm/sq.ft.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1294
EFFECTIVE
SEPTEMBER 2004

INDUSTRIAL CARBON FILTERS

ACTIVATED CARBON FILTRATION SYSTEMS WITH STEEL TANKS

SWT Carbon Filters with STEEL TANKS (FDA Lined & Primed), Aquamatic Diaphragm Valves, Time Initiated Backwash

Part Number	Flow Rate VOC Red. GPM (LPM)	Flow Rate Standard GPM (LPM)	Flow Rate Peak GPM (LPM)	Flow Rate @ 5 PSI Drop GPM (LPM)	Media Quantity Cu. Ft. (Liters)	Bed Surface Area Sq. Ft.	Backwash Rate GPM (LPM)	Tank Size Inches	Diaphragm Valve Size
CSC15P-2460	< 20 (76)	35 (132)	48 (182)	25 (95)	10 (283)	3.1	42 (159)	24 x 60	1.5" Composite
CSC20P-2460	< 20 (76)	35 (132)	48 (182)	25 (95)	30 (114)	3.1	42 (159)	24 x 60	2" Composite
CSC15C-3060	< 32 (121)	55 (208)	75 (284)	40 (151)	16 (453)	4.9	70 (265)	30 x 60	1.5" Cast Iron
CSC15P-3060	< 32 (121)	55 (208)	75 (284)	40 (151)	16 (453)	4.9	70 (265)	30 x 60	1.5" Composite
CSC20C-3060	< 32 (121)	55 (208)	75 (284)	40 (151)	16 (453)	4.9	70 (265)	30 x 60	2" Cast Iron
CSC20P-3060	< 32 (121)	55 (208)	75 (284)	40 (151)	16 (453)	4.9	70 (265)	30 x 60	2" Composite
CSC20C-3660	< 46 (174)	70 (265)	105 (397)	55 (208)	23 (651)	7.0	95 (360)	36 x 60	2" Cast Iron
CSC20P-3660	< 46 (174)	70 (265)	105 (397)	55 (208)	23 (651)	7.0	95 (360)	36 x 60	2" Composite
CSC25C-3660	< 46 (174)	70 (265)	105 (397)	55 (208)	23 (651)	7.0	95 (360)	36 x 60	2.5" Cast Iron
CSC30C-3660	< 46 (174)	70 (265)	105 (397)	55 (208)	23 (651)	7.0	95 (360)	36 x 60	3" Cast Iron
CSC30P-3660	< 46 (174)	70 (265)	105 (397)	55 (208)	23 (651)	7.0	95 (360)	36 x 60	3" Composite
CSC20P-4260	< 64 (242)	115 (435)	144 (545)	75 (284)	32 (906)	9.6	135 (511)	42 x 60	2" Composite
CSC25C-4260	< 64 (242)	115 (435)	144 (545)	75 (284)	32 (906)	9.6	135 (511)	42 x 60	2.5" Cast Iron
CSC30C-4260	< 64 (242)	115 (435)	144 (545)	75 (284)	32 (906)	9.6	135 (511)	42 x 60	3" Cast Iron
CSC30P-4260	< 64 (242)	115 (435)	144 (545)	75 (284)	32 (906)	9.6	135 (511)	42 x 60	3" Composite
CSC20P-4860	< 88 (333)	140 (530)	180 (681)	100 (379)	44 (1246)	12.6	170 (644)	48 x 60	2" Composite
CSC25C-4860	< 88 (333)	140 (530)	200 (757)	100 (379)	44 (1246)	12.6	170 (644)	48 x 60	2.5" Cast Iron
CSC30C-4860	< 88 (333)	140 (530)	200 (757)	100 (379)	44 (1246)	12.6	170 (644)	48 x 60	3" Cast Iron
CSC30P-4860	< 88 (333)	140 (530)	200 (757)	100 (379)	44 (1246)	12.6	170 (644)	48 x 60	3" Composite
CSC30C-5460	< 110 (416)	175 (662)	240 (908)	125 (473)	55 (1557)	15.9	220 (833)	54 x 60	3" Cast Iron
CSC30P-5460	< 110 (416)	175 (662)	240 (908)	125 (473)	55 (1557)	15.9	220 (833)	54 x 60	3" Composite
CSC40C-5460	< 110 (416)	175 (662)	240 (908)	125 (473)	55 (1557)	15.9	220 (833)	54 x 60	4" Cast Iron
CSC30C-6060	< 132 (757)	210 (795)	300 (1136)	150 (568)	66 (1869)	19.6	275 (1041)	60 x 60	3" Cast Iron
CSC30P-6060	< 132 (757)	210 (795)	300 (1136)	150 (568)	66 (1869)	19.6	275 (1041)	60 x 60	3" Composite
CSC40C-6060	< 132 (757)	210 (795)	300 (1136)	150 (568)	66 (1869)	19.6	275 (1041)	60 x 60	4" Cast Iron

(Continued on next page.)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1273
EFFECTIVE
MARCH 2004

INDUSTRIAL CARBON FILTERS

ACTIVATED CARBON FILTRATION SYSTEMS WITH STEEL TANKS

SWT Carbon Filters with STEEL TANKS (FDA Lined & Primed), Aquamatic Diaphragm Valves, Time Initiated Backwash

Part Number	Flow Rate VOC Red. GPM (LPM)	Flow Rate Standard GPM (LPM)	Flow Rate Peak GPM (LPM)	Flow Rate @ 5 PSI Drop GPM (LPM)	Media Quantity Cu. Ft. (Liters)	Bed Surface Area Sq. Ft.	Backwash Rate GPM (LPM)	Tank Size Inches	Diaphragm Valve Size
CSC30C-6660	< 170 (644)	265 (1003)	330 (1249)	190 (719)	85 (2407)	23.8	330 (1249)	66 x 60	3" Cast Iron
CSC30P-6660	< 170 (644)	265 (1003)	360 (1363)	190 (719)	85 (2407)	23.8	330 (1249)	66 x 60	3" Composite
CSC40C-6660	< 170 (644)	265 (1003)	360 (1363)	190 (719)	85 (2407)	23.8	330 (1249)	66 x 60	4" Cast Iron
CSC30C-7260	< 200 (757)	315 (1192)	330 (1249)	210 (795)	100 (2832)	28.2	330 (1249)	72 x 60	3" Cast Iron
CSC30P-7260	< 200 (757)	315 (1192)	400 (1514)	225 (852)	100 (2832)	28.2	390 (1476)	72 x 60	3" Composite
CSC40C-7260	< 200 (757)	350 (1325)	425 (1609)	225 (852)	100 (2832)	28.2	390 (1476)	72 x 60	4" Cast Iron
CSC60C-7260	< 200 (757)	350 (1325)	425 (1609)	225 (852)	100 (2832)	28.2	390 (1476)	72 x 60	6" Cast Iron

System is unassembled (for shipping purposes) and includes all necessary valves, tank, grades of media, underbedding, internal distributors/strainers, drain line flow controls, and the clock/timer/stager assembly mounted into a control box. External piping is not included. Customer may want to consider system additions of pressure gauges, sample cocks, vacuum breakers, flex connectors, bypass valves, shutoffs, etc.

Cast Iron Valve available connections: (FPT: 1.5 inch, 2 inch, 2.5 inch, 3 inch); (Flanged: 3 inch, 4 inch, 6 inch)

Plastic Valve available connections: (MPT: 1.5 inch); (Male Spigot Weld: 1.5 inch, 2 inch); (Female Socket Weld: 2 inch); (Flanged: 2 inch, 3 inch)

Recommended Service Flow Rates/Ranges are based on the cu.ft. of the tank/filter bed. Slower flow rate per cu.ft. = Better Filtration

- 0.8 gpm/cu.ft. is recommended for waste water cleanup (8 to 10 minutes contact time).
- 1.5 to 2 gpm/cu.ft. = Superior filtration and minor VOC levels with less than 2 psi pressure drop
- 3.5 to 5 gpm/cu.ft. = Commercial/residential de-chlorination, taste & odor control with less than 5 psi pressure drop
- 5 to 10 gpm/cu.ft. = Sporadic peak flow rates for non-critical light commercial and residential clean water de-chlorination, taste & odor control. Peak flow rates are more a function of the valving/bed psi loss and not a recommendation of the carbon's ability to perform at these rates.

System Flow Rates as listed are based on pressure drop curves of less than 2 psi drop through the service valves.

Backwash Rates for proper bed cleaning are best achieved at 14 gpm/sq.ft. However, water temperature variation may require backwash rate adjustment. Also allow service flow and backwash variations for valve sizes, pipe sizes, pump sizes, water availability, and unique applications.

Backwash Rates allow 40% bed expansion at 60°F.

Backwash Flow Restrictors are included and can be provided to accommodate any desired backwash flow rates.

Valve Sizes and Tank Size Pairings for special flow rates and backwash rates may be substituted at customer request or are application dependent. SWT GAC carbon filters use 8 x 30 mesh bituminous coal based granular activated carbon. Acid washed carbons and coconut shell carbons are available on request. 12 x 40 or 20 x 50 mesh carbons also available.

Operating Pressure: 100 psi (7 bar)

Maximum Temperature: 140°F (60°C)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1273
EFFECTIVE
MARCH 2004

INDUSTRIAL CARBON FILTERS

ACTIVATED CARBON FILTRATION SYSTEMS WITH COMPOSITE TANKS

SWT Carbon Filters with COMPOSITE TANKS, Aquamatic Diaphragm Valves, Time Initiated Backwash

Part Number	Flow Rate VOC Red. GPM (LPM)	Flow Rate Standard GPM (LPM)	Flow Rate Peak GPM (LPM)	Flow Rate @ 5 PSI Drop GPM (LPM)	Media Quantity Cu. Ft. (Liters)	Bed Surface Area Sq. Ft.	Backwash Rate GPM (LPM)	Tank Size Inches	Diaphragm Valve Size
CCC15P-2472	< 20 (76)	35 (132)	48 (182)	25 (95)	10 (283)	3.1	42 (159)	24 x 72	1.5" Composite
CCC20P-2472	< 20 (76)	35 (132)	48 (182)	25 (95)	30 (114)	3.1	42 (159)	24 x 72	2" Composite
CCC15C-3072	< 32 (121)	56 (212)	75 (284)	40 (151)	16 (453)	4.9	70 (265)	30 x 72	1.5" Cast Iron
CCC15P-3072	< 32 (121)	56 (212)	75 (284)	40 (151)	16 (453)	4.9	70 (265)	30 x 72	1.5" Composite
CCC20C-3072	< 32 (121)	56 (212)	75 (284)	40 (151)	16 (453)	4.9	70 (265)	30 x 72	2" Cast Iron
CCC20P-3072	< 32 (121)	56 (212)	75 (284)	40 (151)	16 (453)	4.9	70 (265)	30 x 72	2" Composite
CCC20C-3672	< 40 (151)	70 (265)	105 (397)	55 (208)	20 (566)	7.0	95 (360)	36 x 72	2" Cast Iron
CCC20P-3672	< 40 (151)	70 (265)	105 (397)	55 (208)	20 (566)	7.0	95 (360)	36 x 72	2" Composite
CCC25C-3672	< 40 (151)	70 (265)	105 (397)	55 (208)	20 (566)	7.0	95 (360)	36 x 72	2.5" Cast Iron
CCC30C-3672	< 40 (151)	70 (265)	105 (397)	55 (208)	20 (566)	7.0	95 (360)	36 x 72	3" Cast Iron
CCC30P-3672	< 40 (151)	70 (265)	105 (397)	55 (208)	20 (566)	7.0	95 (360)	36 x 72	3" Composite
CCC20P-4272	< 50 (189)	85 (322)	144 (545)	75 (284)	25 (708)	9.6	135 (511)	42 x 72	2" Composite
CCC25C-4272	< 50 (189)	85 (322)	144 (545)	75 (284)	25 (708)	9.6	135 (511)	42 x 72	2.5" Cast Iron
CCC30C-4272	< 50 (189)	85 (322)	144 (545)	75 (284)	25 (708)	9.6	135 (511)	42 x 72	3" Cast Iron
CCC30P-4272	< 50 (189)	85 (322)	144 (545)	75 (284)	25 (708)	9.6	135 (511)	42 x 72	3" Composite
CCC20P-4872	< 72 (273)	125 (473)	180 (681)	100 (379)	36 (1019)	12.6	170 (644)	48 x 72	2" Composite
CCC25C-4872	< 72 (273)	125 (473)	200 (757)	100 (379)	36 (1019)	12.6	170 (644)	48 x 72	2.5" Cast Iron
CCC30C-4872	< 72 (273)	125 (473)	200 (757)	100 (379)	36 (1019)	12.6	170 (644)	48 x 72	3" Cast Iron
CCC30P-4872	< 72 (273)	125 (473)	200 (757)	100 (379)	36 (1019)	12.6	170 (644)	48 x 72	3" Composite
CCC30C-6367	< 90 (341)	155 (587)	300 (1136)	150 (568)	45 (1274)	19.6	275 (1041)	63 x 67	3" Cast Iron
CCC30P-6367	< 90 (341)	155 (587)	300 (1136)	150 (568)	45 (1274)	19.6	275 (1041)	63 x 67	3" Composite
CCC40C-6367	< 90 (341)	155 (587)	300 (1136)	150 (568)	45 (1274)	19.6	275 (1041)	63 x 67	4" Cast Iron
CCC30C-6386	< 110 (416)	200 (757)	330 (1249)	190 (719)	55 (1557)	23.8	330 (1249)	63 x 86	3" Cast Iron
CCC30P-6386	< 110 (416)	200 (757)	330 (1249)	190 (719)	55 (1557)	23.8	330 (1249)	63 x 86	3" Composite
CCC40C-6386	< 110 (416)	200 (757)	330 (1249)	190 (719)	55 (1557)	23.8	330 (1249)	63 x 86	4" Cast Iron

(Continued on next page.)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1274
EFFECTIVE
MARCH 2004

INDUSTRIAL CARBON FILTERS

ACTIVATED CARBON FILTRATION SYSTEMS WITH COMPOSITE TANKS

System is unassembled (for shipping purposes) and includes all necessary valves, tank, grades of media, underbedding, internal distributors/ strainers, drain line flow controls, and the clock/timer/stager assembly mounted into a control box. External piping is not included. Customer may want to consider system additions of pressure gauges, sample cocks, vacuum breakers, flex connectors, bypass valves, shutoffs, etc.

Cast Iron Valve available connections: (FPT: 1.5 inch, 2 inch, 2.5 inch, 3 inch); (Flanged: 3 inch, 4 inch, 6 inch)

Plastic Valve available connections: (MPT: 1.5 inch); (Male Spigot Weld: 1.5 inch, 2 inch); (Female Socket Weld: 2 inch); (Flanged: 2 inch, 3 inch)

Recommended Service Flow Rates/Ranges are based on the cu.ft. of the tank/filter bed. Slower flow rate per cu.ft. = Better Filtration

- 0.8 gpm/cu.ft. is recommended for waste water cleanup (8 to 10 minutes contact time).
- 1.5 to 2 gpm/cu.ft. = Superior filtration and minor VOC levels with less than 2 psi pressure drop
- 3.5 to 5 gpm/cu.ft. = Commercial/residential de-chlorination, taste & odor control with less than 5 psi pressure drop
- 5 to 10 gpm/cu.ft. = Sporadic peak flow rates for non-critical light commercial and residential clean water de-chlorination, taste & odor control. Peak flow rates are more a function of the valving/bed psi loss and not a recommendation of the carbon's ability to perform at these rates.

System Flow Rates as listed are based on pressure drop curves of less than 2 psi drop through the service valves.

Backwash Rates for proper bed cleaning are best achieved at 14 gpm/sq.ft. However, water temperature variation may require backwash rate adjustment. Also allow service flow and backwash variations for valve sizes, pipe sizes, pump sizes, water availability, and unique applications.

Backwash Rates allow 40% bed expansion at 60°F.

Backwash Flow Restrictors are included and can be provided to accommodate any desired backwash flow rates.

Valve Sizes and Tank Size Pairings for special flow rates and backwash rates may be substituted at customer request or are application dependent. SWT GAC carbon filters use 8 x 30 mesh bituminous coal based granular activated carbon. Acid washed carbons and coconut shell carbons are available on request. 12 x 40 or 20 x 50 mesh carbons also available.

Operating Pressure: 150 psi (10 bar)

Maximum Temperature: 140°F (60°C)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1274
EFFECTIVE
MARCH 2004

Section 6

Components - Residential, Commercial, & Industrial

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

TANK HEADS & MANIFOLDS

CUSTOM MACHINED PLASTIC TANK HEADS
(MOST COMMON CONFIGURATIONS)

SWT's custom tank heads and manifolds are machined from solid PVC bar stock for maximum reliability in the field. These are ideal for common applications such as: deionization (DI) systems, carbon filters, sediment filters, neutralizers, and portable water softeners. They can also be machined from CPVC, polypropylene, teflon, or PVDF to meet your application's required specification.


SM-T481S7


SM-T481S75FPIS


SM-T2581S11


SM-T481S6

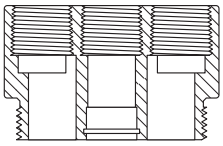

SM-T481S75FPIS

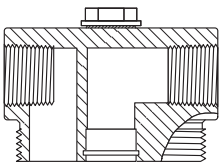
Technical Specifications

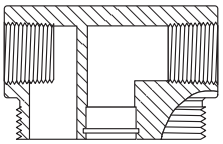
Maximum recommended operating temperature .....140°F (60°C)
Maximum recommended operating pressure .....150 PSI (10 Bar)
Standad material of construction .....PVC & EPDM


Chamfer O-ring Seal


Face O-ring Seal


IN OUT FILL


IN OUT


IN OUT



Part Number	Tank Thread	Inlet / Outlet FNPT	Center Riser Port	Inlet Screen Part No.
In, Out, and Rinse / Fill...Out the Top (Riser Port is Off Center)				
SM-T258375TA1P	2-1/2" #8 NPSM	3/4"	3/4" FNPT	SM-L87504510
SM-T4531T7	4-1/2" Buttress	1"	1"	SM-ST10610
In and Out the Top				
SM-T258375S175FP*	2-1/2" #8 NPSM	3/8"	13/16"	SM-MPU14
SM-T2585S175FP*	2-1/2" #8 NPSM	1/2"	13/16"	SM-MPU14
SM-T25875S75FP*	2-1/2" #8 NPSM	3/4"	13/16"	SM-MPU14
In and Out...Opposite Sides				
SM-T258375S1**	2-1/2" #8 NPSM	3/8"	13/16"	SM-MPU14
SM-T2585S1**	2-1/2" #8 NPSM	1/2"	13/16"	SM-MPU14
SM-T25875S75F1**	2-1/2" #8 NPSM	3/4"	13/16"	SM-MPU14
SM-T2581S11**	2-1/2" #8 NPSM	1"	3/4"	SM-US105
SM-T2581S7	2-1/2" #8 NPSM	1"	1"	SM-T2581S7-UDI.315
SM-T4875S1**	4" #8 UN	3/4"	13/16"	SM-MPU14
SM-T481S6**	4" #8 UN	1"	3/4"	SM-ST750610
SM-T4815S15R**†	4" #8 UN	1.5"	1.5"	SM-US3381015 ‡ SM-US3691510 §
SM-T4575S1**	4-1/2" Buttress	3/4"	13/16"	SM-MPU14
SM-T451S6**	4-1/2" Buttress	1"	3/4"	SM-ST750610
In the Side... Out the Other with Upper Screen/ Diffuser Solvent Welded				
SM-T258375TA1P	2-1/2" #8 NPSM	3/4"	3/4" FNPT	SM-L87504510

* Includes 3/4 inch fill port and ABS fill plug with EPDM o-ring.

** Chamfer O-ring Seal standard. Face O-ring Seal available (add "P" to end of Part Number).
† O-ring Kit (P/N SM-T4815S15R-ORINGS) available. Includes EPDM Tank Neck and Riser Port O-rings.
‡ SM-US3381015 has 1.6 square inches of slot area & 3-3/8" OAL - made-to-order with minimum quantity requirements
§ SM-US3691510 has 4.2 square inches of slot area & 6-3/4" OAL - stock product

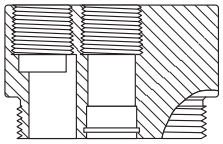
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1295
EFFECTIVE
JULY 2025

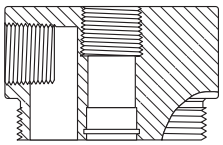
TANK HEADS & MANIFOLDS

CUSTOM MACHINED PLASTIC TANK HEADS
(MOST COMMON CONFIGURATIONS)



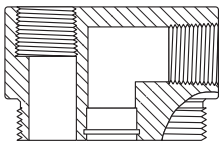
In and Out the Top

Part Number	Tank Thread	Inlet / Outlet FNPT	Center Riser Port	Inlet Screen Part No.
SM-T258375T1	2-1/2" #8 NPSM	3/8"	13/16"	SM-MPU14
SM-2585T1	2-1/2" #8 NPSM	1/2"	13/16"	SM-MPU14
SM-T25875T1	2-1/2" #8 NPSM	3/4"	13/16"	SM-MPU14
SM-T4875T1	4" #8 UN	3/4"	13/16"	SM-MPU14
SM-T481T6	4" #8 UN	1"	3/4"	SM-ST750610
SM-T4575T1	4-1/2" Buttress	3/4"	13/16"	SM-MPU14
SM-T451T6	4-1/2" Buttress	1"	3/4"	SM-ST750610



In the Side...Out the Top

SM-T258375ST1	2-1/2" #8 NPSM	3/8"	13/16"	SM-MPU14
SM-T2585ST1	2-1/2" #8 NPSM	1/2"	13/16"	SM-MPU14
SM-T25875ST1	2-1/2" #8 NPSM	3/4"	13/16"	SM-MPU14
SM-T4875ST1	4" #8 UN	3/4"	13/16"	SM-MPU14
SM-T481ST6	4" #8 UN	1"	3/4"	SM-ST750610
SM-4575ST1	4-1/2" Buttress	3/4"	13/16"	SM-MPU14
SM-T451ST6	4-1/2" Buttress	1"	3/4"	SM-ST750610



In the Top...Out the Side

SM-T258375TS1	2-1/2" #8 NPSM	3/8"	13/16"	SM-MPU14
SM-T2585TS1	2-1/2" #8 NPSM	1/2"	13/16"	SM-MPU14
SM-T25875TS1	2-1/2" #8 NPSM	3/4"	13/16"	SM-MPU14
SM-T4875TS1	4" #8 UN	3/4"	13/16"	SM-MPU14
SM-T481TS6	4" #8 UN	1"	3/4"	SM-ST750610
SM-4575TS1	4-1/2" Buttress	3/4"	13/16"	SM-MPU14
SM-T451TS6	4-1/2" Buttress	1"	3/4"	SM-ST750610

ALSO AVAILABLE
An additional 1/2 inch or 3/4 inch fill hole with plug seal is available. Call for pricing.
An additional 1/2 inch or 3/4 inch DI light hole is available. Call for pricing.
3/4 inch Plug, molded ABS with EPDM O-ring (P/N SM-PLG75-ABS)

SCREENS, BASKETS, & STRAINERS
Inlet Screen, 2-step socket for 0.375 and 0.540 inch O.D. rigid tubing, 0.014 inch screen size (approx. 45 mesh) (P/N SM-MPU14)
Upper Basket, molded ABS, for 3/4 inch pipe riser port (1.050 inch O.D.), attaches with two screws (sold separately) (P/N SM-US105)
Strainer, machined PVC, 3/4 inch slip connection, 6 inch length, 0.010 slot size (P/N SM-ST750610)
Strainer, machined PVC, 1 inch slip connection, 6 inch length, 0.010 slot size (P/N SM-ST106010)

REDUCING COUPLINGS — PVC
13/16 inch socket x 3/4 inch socket with 6 inch length of 13/16 inch PVC rigid tubing (P/N SM-CP812S75S)
13/16 inch socket x 13/16 inch socket —OR— 3/4 inch spigot x 13/16 inch socket (P/N SM-CP8128812SS)

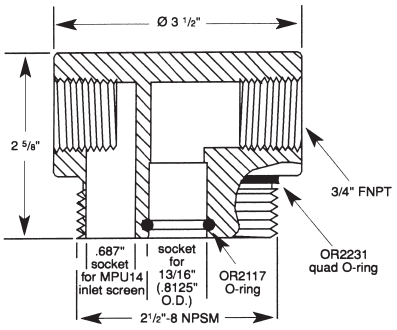
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

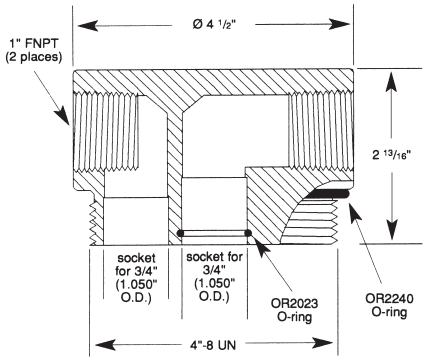
FORM 1295
EFFECTIVE
JULY 2025

TANK HEADS & MANIFOLDS

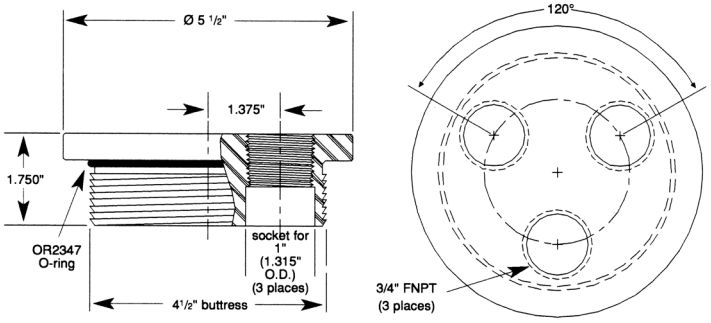
CUSTOM MACHINED PLASTIC TANK HEADS
(MOST COMMON CONFIGURATIONS)



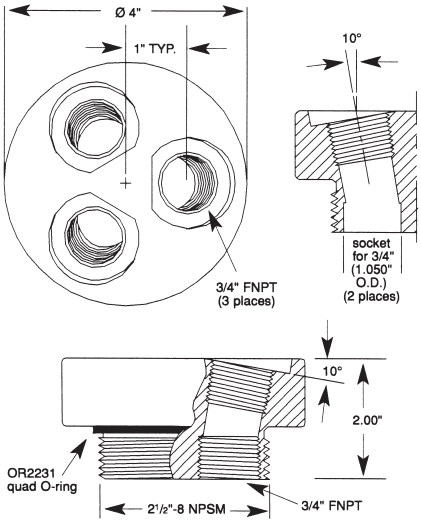
SM-T25875S1



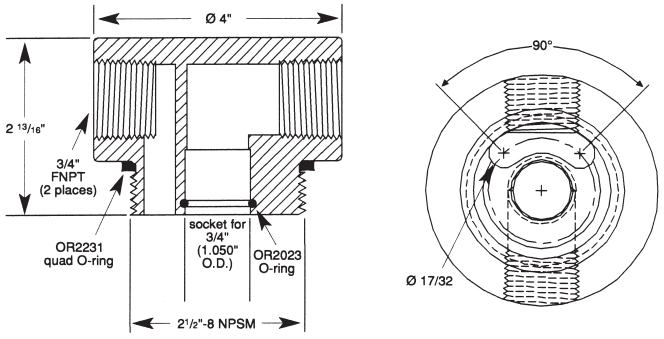
SM-T481S6



SM-T4531T7



SM-T258375TA10



SM-T2581S11

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1295
EFFECTIVE
JULY 2025

TANK HEADS

IN-OUT TANK HEADS



In-Out Tank Head (P/N LC-D1400)



In-Out Tank Head with Fill Port (P/N LC-D1220-01)

SPECIFICATIONS

Operating Pressure: ..... 20 to 125 psi
138 to 862 kPa

Temperature: ..... 40 to 110°F
4 to 43°C

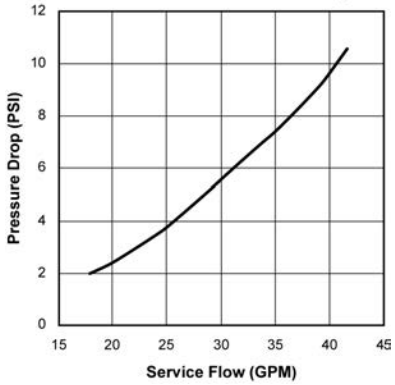
NOTES

Install only on cold water supplies.

Recommend flow rate 4 to 8.5 gpm based on 3 to 6 fps velocity for a 3/4 inch riser/distribution bottom system.

Flow rate may be increased to 15 gpm if riser/distribution bottom system is upgraded to 1 inch capability.

Service Flow Pressure Drop



In-Out Tank Heads *are designed for downflow filter applications or upflow pH neutralization.*

The In-Out Tank Head (P/N LC-D1400) is molded out of a rugged thermoplastic resin and features a 1/4 inch FPT air vent port which can be drilled out to accept an air relief valve. The 1 inch In-Out Tank Head is fully ported to provide maximum flow rates.* It incorporates a standard 2-1/2 inch tank connection and features parallel inlet and outlet ports to easily adapt to standard plumbing connections or SWT's Inline Bypass Valve Assembly. A full line of fitting plumbing connection kits are available (see below).

The In-Out Tank Head with Fill Port (P/N LC-D1220-01) has a removable fill port cap to allow easy access to the media bed. It includes a removable upper distributor basket providing access to the top of the riser pipe, allowing water to be drained from the tank when replacing media. The In-Out Tank Head with Fill Port also includes a utility wrench for use with the removable cap. A full line of top and bottom distributors are available.

* NOTE: Riser pipe port is sized for a 3/4 inch (1.050 inch O.D.) pipe.





Typical Applications

FITTINGS KITS (REQUIRED—SOLD SEPARATELY)

LC-V3007	1" PVC male NPT elbow
LC-V3007-01	3/4" x 1" PVC solvent elbow
LC-V3007-02LF	1" lead free brass sweat
LC-V3007-03LF	3/4" lead free brass sweat
LC-V3007-04	1" plastic male NPT
LC-V3007-05	1.25" plastic male NPT
LC-V3007-06	1" plastic male BSPT
LC-V3007-07	1.25" & 1.5" PVC solvent
LC-V3007-08	1.25" plastic male BSPT
LC-V3007-09LF	1.25" & 1.5" lead free brass sweat
LC-V3007-12LF	3/4" lead free brass SharkBite®
LC-V3007-13LF	1" lead free brass SharkBite®
LC-V3007-14	3/4" plastic male BSPT
LC-V3007-15	3/4" John Guest® QC elbow

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1446
EFFECTIVE
FEBRUARY 2021

TANK HEADS

MOLDED PLASTIC TANK HEADS

SWT's Molded Tank Heads *are designed to be the sturdiest molded tank heads on the market. Solid, tough, glass-filled polypropylene or ABS copolymer provides years of reliable service. Perfect for carbon, DI, and other filter tank applications.*

These tank heads feature 3/4 inch or 1 inch FPT pipe connections. Optional 1/2 inch or 3/4 inch side hole (for use as DI light monitor port or sampling port) is available on 3/4 inch heads only. Inlet screens are also available.



SM-MH25834S



LC-MH25875S



LC-MH2581S



LC-MH25875S-75 WITH DI LIGHT *



TANK HEAD WITH UPPER SCREEN

See next page for DI light options and upper screens.

Part Number	Description	Tank Opening Size	In/Out Ports Size	Center Riser Port Size	Side Port Size *
SM-MH25834S	Tank Head, Glass-filled PP, Blue	2.5"-8 NPSM	3/4" FPT	13/16"	N/A
LC-MH25875S	Tank Head, ABS Copolymer, Black	2.5"-8 NPSM	3/4" FPT	13/16"	N/A
LC-MH25875S-05	Tank Head, ABS Copolymer, Black	2.5"-8 NPSM	3/4" FPT	13/16"	1/2" FPT *
LC-MH25875S-75	Tank Head, ABS Copolymer, Black	2.5"-8 NPSM	3/4" FPT	13/16"	3/4" FPT *
LC-MH2581S	Tank Head, ABS Copolymer, Black	2.5"-8 NPSM	1" FPT	3/4"	N/A

* The side port is commonly used as a DI light port or as a sampling port.

MANUAL BACKWASHING TANK HEAD



SWT's Manual Backwashing Tank Head *features an effective design which allows three or four different service positions (bypass, shut-off, in service, backwash) by simple turning of the tank head handle. The head is manually operated, requiring no electricity. This head replaces complex plumbing systems requiring the need for separate bypass valves and shutoffs. The water treatment professional will save time and money by requiring fewer parts and less installation time. Stock sizes fit most common mineral tanks with a 2.5 inch #8 tank opening.*

Manufactured from 30% glass-filled polypropylene.
External flow controls not included.

See next page for replacement O-ring kit.

Part Number	Description	Tank Opening Size	In/Out Ports Size	Center Riser Port Size	Backwash Port Size *
OS2534 *	Manual Tank Head, Black	2.5"-8 NPSM	3/4" FPT	13/16"	1/2" FPT

* Available with upper screen (P/N OS2534-US-ROR).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1208
EFFECTIVE
MARCH 2018

TANK HEADS

MOLDED TANK HEAD ACCESSORIES

ALSO AVAILABLE:

UPPER SCREEN / DIFFUSER
ATTACHES WITH SCREW
FOR SM-MH25834S
(SCREW SOLD SEPARATELY)

For 13/16 Inch Riser . . . . . P/N SM-US813
Attachment Screw . . . . . P/N SCW-S458-PPSS

UPPER SCREEN / DIFFUSER
TWIST AND LOCK
FOR LC-MH25875S, LC-MH25875S-05,
LC-MH25875S-75, LC-MH2581S

For 3/4 Inch Riser . . . . . P/N LC-D1203
For 13/16 Inch Riser . . . . . P/N LC-D1203-01

DI LIGHTS

120 V, 10K Ohm, 1/2" MPT . . . . . P/N LC-R7031-10K
120 V, 20K Ohm, 1/2" MPT . . . . . P/N LC-R7031-20K
120 V, 50K Ohm, 1/2" MPT . . . . . P/N LC-R7031-50K
120 V, 200K Ohm, 1/2" MPT . . . . . P/N LC-R7031-200K
120 V, 500K Ohm, 1/2" MPT . . . . . P/N LC-R7031-500K
120 V, 1000K Ohm, 1/2" MPT . . . . P/N LC-R7031-1MEG

120 V, 10K Ohm, 3/4" MPT . . . . . P/N LC-R7046-10K
120 V, 20K Ohm, 3/4" MPT . . . . . P/N LC-R7046-20K
120 V, 50K Ohm, 3/4" MPT . . . . . P/N LC-R7046-50K
120 V, 200K Ohm, 3/4" MPT . . . . . P/N LC-R7046-200K
120 V, 500K Ohm, 3/4" MPT . . . . . P/N LC-R7046-500K
120 V, 1000K Ohm, 3/4" MPT . . . . P/N LC-R7046-1MEG

O-RING KIT — BUNA
FOR OS2534 Manual Backwashing Tank Head

Quad-ring for tank neck . . . . . P/N OS2534-ORINGS
and O-ring for riser port

DI LIGHT MOUNTS

Inline, 1/2" DI Light Port . . . . . P/N LC-R7011
Tank Head, 1/2" DI Light Port . . . P/N LC-MH25875S-05
Tank Head, 3/4" DI Light Port . . . P/N LC-MH25875S-75



LC-R7011 is designed for inline installation of a 1/2" DI Light. The threaded center opening places the monitor electrodes into the water flow for greatest accuracy. The inlet and outlet ports are 3/4" socket joints (solvent weld).



LC-MH25875S-05 and **LC-MH25875S-75** are designed for installation of a DI Light (1/2" and 3/4" respectively) in single in-out applications on deionizers. The threaded opening on the side places the monitor electrodes into the water flow for greatest accuracy. This economical head is molded of rugged plastic, fits a standard 2.5"- 8 tank opening, adapts to a 13/16" riser, and has 3/4" FNPT inlet and outlet for straight line installation.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1208
EFFECTIVE
MARCH 2018

DI Lights

RESISTIVITY WATER QUALITY INDICATOR LIGHTS AND MOUNTING OPTIONS



DI Light



PVC Inline Body with DI Light



Molded Tank Head with DI Light

SWT's DI Lights *are an economical method of monitoring water quality via resistivity/conductivity/TDS. The bright red or green visual output is easy to read. The monitoring is simple: the green light indicates the water resistivity is above the threshold value; the red light indicates that it is below. The LED output and solid state circuitry will outlast conventional neon lamps.*

NOTE: The DI Light monitor requires the water to be flowing in order to operate correctly.

The DI Light should not be used as the primary indicator for critical or medical applications.

Specifications

Available Thresholds: ..... 10K to 1 megohm-cm
Accuracy: ..... ± 15%
Thread: ..... 1/2" MNPT with o-ring or 3/4" MNPT with o-ring
Weight: ..... 200 g (7.05 oz)
Housing Material: ..... ABS Black
Electrode Material: ..... Monel
Sampling Frequency: ..... 150 Hz
Sampling Voltage: ..... 2.2 V peak at threshold
Supply Voltage: ..... 120 VAC
Supply Frequency: ..... 60 Hz
Output Voltage: ..... 9 VDC
Output Current: ..... 200 mA
Cord Length: ..... 9 feet
Working PSI: ..... 125 psi
Maximum Temperature: ..... 100°F
Max. Power Requirement: ..... < 5 watts
Typical DC Current: ..... 35 mA
Typical Lumen Output: ..... Green 80 mcd
Red 200 mcd

Resistivity (ohm-cm)	Conductivity (µS/cm)	~ TDS ± 15% (ppm)
1 MEG	1	0.5
500K	2	1.0
200K	5	2.5
50K	20	10
20K	50	25
10K	100	50

DI Lights

Part Number	Description	Connection Size
LC-R7031-10K	10K ohm-cm, 120V	1/2" MNPT
LC-R7031-20K	20K ohm-cm, 120V	1/2" MNPT
LC-R7031-50K	50K ohm-cm, 120V	1/2" MNPT
LC-R7031-200K	200K ohm-cm, 120V	1/2" MNPT
LC-R7031-500K	500K ohm-cm, 120V	1/2" MNPT
LC-R7031-1MEG	1 megohm-cm, 120V	1/2" MNPT
LC-R7046-10K	10K ohm-cm, 120V	3/4" MNPT
LC-R7046-20K	20K ohm-cm, 120V	3/4" MNPT
LC-R7046-50K	50K ohm-cm, 120V	3/4" MNPT
LC-R7046-200K	200K ohm-cm, 120V	3/4" MNPT
LC-R7046-500K	500K ohm-cm, 120V	3/4" MNPT
LC-R7046-1MEG	1 megohm-cm, 120V	3/4" MNPT

DI Light Mounts

Part Number	Description	Inlet/Outlet Port Size	DI Light Port Size
LC-MH25875S-75	Molded Tank Head	3/4" FNPT	3/4" FNPT
LC-MH25875S-05	Molded Tank Head	3/4" FNPT	1/2" FNPT
SM-R6000 *	PVC Inline Body *	3/8" FNPT	1/2" FNPT
SM-R6001 *	PVC Inline Body *	1/2" FNPT	1/2" FNPT
SM-R6002 *	PVC Inline Body *	3/4" FNPT	1/2" FNPT
SM-R6003 *	PVC Inline Body *	1" FNPT	1/2" FNPT
SM-R6004 *	PVC Inline Body *	1-1/2" FNPT	1/2" FNPT
LC-R7011	Modified Plastic Tee	3/4" Socket	1/2" FNPT

* Also available in polypropylene (add "-PP" to end of part number) and HDPE (add "-HDPE" to end of part number) and configurations for HY-Lite Resistivity Indicators (call for details).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1420
EFFECTIVE
FEBRUARY 2017

DI Lights

HY-LITE WATER QUALITY INDICATOR SYSTEMS



Hy-Lite Water Quality Indicator



Remote Alarm Module



Relay Module

Hy-Lite Water Quality/Resistivity Indicator Systems incorporate exclusive Auto Temperature Compensation (ATC) and Surface Mount Technology (SMT) circuitry for unequaled accuracy. Proper TC design is especially important in high purity applications because the effect of temperature on resistivity/conductivity values varies significantly with purity level. For increased accuracy, the Hy-Lite ATC has been range-tuned to the appropriate TC factor for the particular setpoint resistivity.

A flashing red LED and integral audible alarm (non-alarm optional) insures fast response to changing water quality.

Hy-Lites can perform as a controller or remote indicator by connecting Relay and Remote Alarm Modules to the output port.

An insertion style resistivity cell with stainless steel electrodes allows for easy installation and rotational positioning in standard 1/2 or 3/4 inch threaded tees.

Hy-Lite Water Quality Indicator Lights

Setpoint	Hy-Lite with Alarm	Hy-Lite without Alarm
25 kilohm-cm	CH-HLA-025K	CH-HLS-025K
50 kilohm-cm	CH-HLA-050K	CH-HLS-050K
100 kilohm-cm	CH-HLA-100K	CH-HLS-100K
200 kilohm-cm	CH-HLA-200K	CH-HLS-200K
500 kilohm-cm	CH-HLA-500K	CH-HLS-500K
1 megohm-cm	CH-HLA-001M	CH-HLS-001M
2 megohm-cm	CH-HLA-002M	CH-HLS-002M
3 megohm-cm	CH-HLA-003M	CH-HLS-003M
5 megohm-cm	CH-HLA-005M	CH-HLS-005M

Additional Equipment & Accessories

CH-RMA	Remote Alarm Module
CH-RMR	Relay Module
CH-RMAR	Remote Alarm Module with Re-Alarm
CH-HLTR-A	Transformer, US, 110 AC/12VDC, 8 ft
CH-HLTR-B	Transformer, Euro, 230VAC/50Hz/12VDC
CH-HLPC-8	Hy-Lite to Hy-Lite Patchcord, 8 ft
CH-RPC-010	Hy-Lite to Remote Module Cable, 10 ft
CH-RPC-050	Hy-Lite to Remote Module Cable, 50 ft
CH-RPC-100	Hy-Lite to Remote Module Cable, 100 ft
CH-RPC-200	Hy-Lite to Remote Module Cable, 200 ft

Specifications

Accuracy	± 3% @ 5 to 45°C (41 to 113°F)
Repeatability	± 1%
Temperature Compensation	Automatic to 25°C (77°F) from 5 to 45°C
Setpoints (single fixed)	25, 50, 100, 200, 500 kilohm-cm @ 25°C 1, 2, 3, 5 megohm-cm @ 25°C
Visual Display	Steady green and flashing red LEDs
Audible Alarm	Peizo-electric with membrane reset switch; > 70 dB @ 3 feet, 4 kHz ± 10%
Circuitry	Surface Mount Technology (SMT)
Input Power	12 VDC (isolated) ; 30 mA
Transformer	Plug-in, class 2, UL & CSA approved, Input 110 VAC, 50-60 Hz / Output 12 VDC @ 200 mA, integral 6 ft cable (alternate transformers available)
Hy-Lite to Hy-Lite Patchcord	8 ft with male termination
Module Interconnection	4 wire, 26 gauge, UL4110 telephone cable with FCC 68 modular handset connectors
Materials of Construction	Wetted: 303 SS, ABS, polypropylene, Viton Non-Wetted: ABS enclosure, polyester labels
Operating Pressure	0 to 150 psi
Fittings	1/2 or 3/4 inch MNPT provided
Dimensions	6 inch length, 2 inch width, 2 inch height

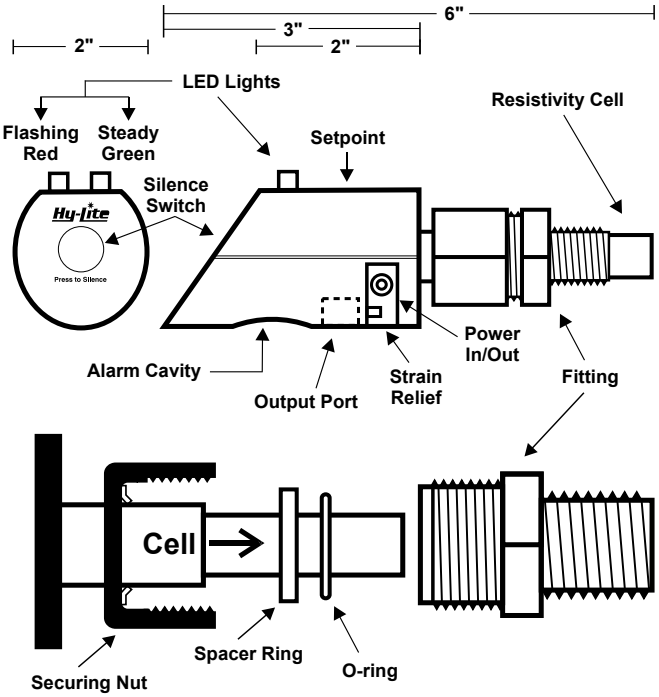
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1465
EFFECTIVE
FEBRUARY 2018

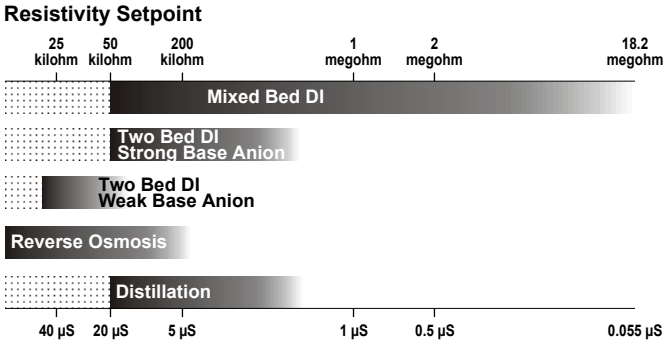
DI LIGHTS

HY-LITE WATER QUALITY INDICATOR SYSTEMS

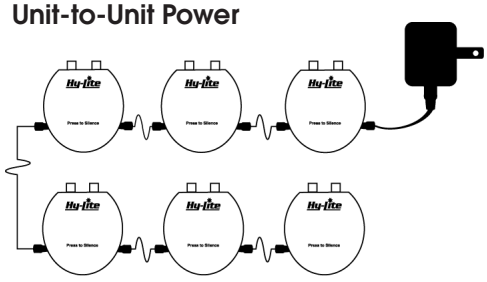
Identification Drawing



Application



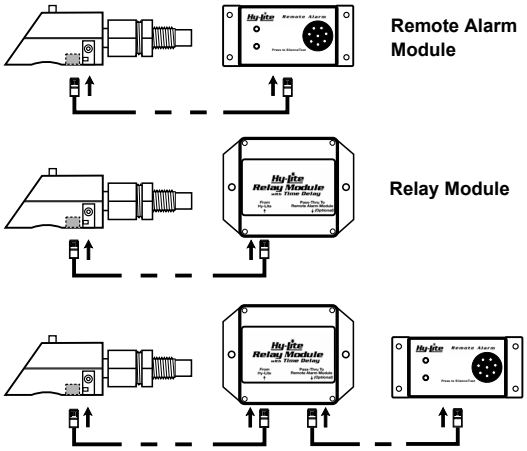
Unit-to-Unit Power



Up to six (6) Hy-Lites can be powered with a single power supply by connecting the Hy-Lites to each other using patchcord CH-HLPC-8 (sold separately).

Control and Remote Alarm Capability

Hy-Lites have an output port for connection to Relay and/or Remote Alarm Modules at distances up to 700 feet! Telephone type cable/connectors result in fast and easy installation.



The Remote Alarm Module has a peizo alarm, green and red LEDs, and silence switch to duplicate the operational status of the connected Hy-Lite. Both units act as a system—silencing the alarm at either location will silence both alarms. The alarm module is housed in a wall mountable enclosure and can be ordered with an optional auto re-alarm feature.

The Relay Module allows the Hy-Lite to perform as a controller of valves, custom alarm systems, etc. A 1 amp SPDT undedicated relay features an adjustable time delay to compensate for expected equipment rinse-up times. There is also a signal pass-thru feature permitting the relay module to be used with the remote alarm module.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

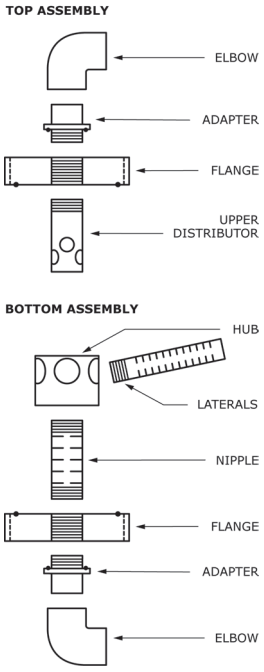
FORM 1465
EFFECTIVE
FEBRUARY 2018

UNDERDRAIN ASSEMBLIES

WATER'S EDGE™

DISTRIBUTION SYSTEM KITS FOR FLANGED TANKS

WATER'S EDGE DISTRIBUTOR SYSTEM KIT FOR FLANGED TANKS (TYPICAL)



SWT's Water's Edge Distributor System Kits for Flanged Tanks are fabricated from non-corrosive FDA and NSF approved materials for use in softeners, dealkalizers, carbon filters, sediment filters, iron filters, and multimedia filters. They are recommended for use with Aquamatic-style valve nests and side-mounted valves or simple flow-through filtration.

Water's Edge Distributor Systems are extra strong and durable for use with heavy filtration medias (gravel, sand, garnet) and can be used with a variety of regenerants including salt, caustics, acids, chlorine, etc. The collection screens (laterals) have 0.010 standard slotting for use with 50 mesh filter media or larger. They are designed to spread flow evenly across the filter bed to eliminate dead zones and to provide proper and even lift and separation during backwash.

Technical Specifications:

Maximum Recommended Operating Temperature 140ºF (60ºC)

Maximum Recommended Operating Pressure . . . . . 150 psi

ΔP @ 5 ft/sec Velocity . . . . . ≤ 3 psi

Materials of Construction (Standard) . . . . . PVC, EPDM

Materials of Construction (Available) . . . . . CPVC, Polypropylene, PVDF, HDPE, etc.

Slot Width (Standard) . . . . . 0.010 inch (0.254 mm)

Slot Width (Available) . . . . . 0.008, 0.012, 0.016, 0.020, 0.032, 0.125 inch

Model Number	Tank Size Inches	Pipe Size Inches	Laterals Number (Size)
SM-DSF1815	18 x 65	1.5	6 (3/4 inch)
SM-DSF2115	21 x 62	1.5	8 (3/4 inch)
SM-DSF2415	24 x 65	1.5	8 (3/4 inch)
SM-DSF242	24 x 72	2	8 (3/4 inch)
SM-DSF302	30 x 72	2	12 (3/4 inch)
SM-DSF3025	30 x 72	2.5	12 (3/4 inch)
SM-DSF362	36 x 72	2	12 (3/4 inch)
SM-DSF3625	36 x 72	2.5	12 (3/4 inch)
SM-DSF422	42 x 72	2	16 (1 inch)
SM-DSF4225	42 x 72	2.5	16 (1 inch)
SM-DSF423	42 x 72	3	16 (1 inch)
SM-DSF482	48 x 72	2	16 (1 inch)
SM-DSF4825	48 x 72	2.5	16 (1 inch)
SM-DSF483	48 x 72	3	16 (1 inch)
SM-DSF484	48 x 72	4	16 (1 inch)
SM-DSF633	63 x 86	3	20 (1 to 1.25 inch)
SM-DSF634	63 x 86	4	20 (1 to 1.25 inch)

Custom sizes, configurations, and materials are our specialty. Contact SWT with your requirements.

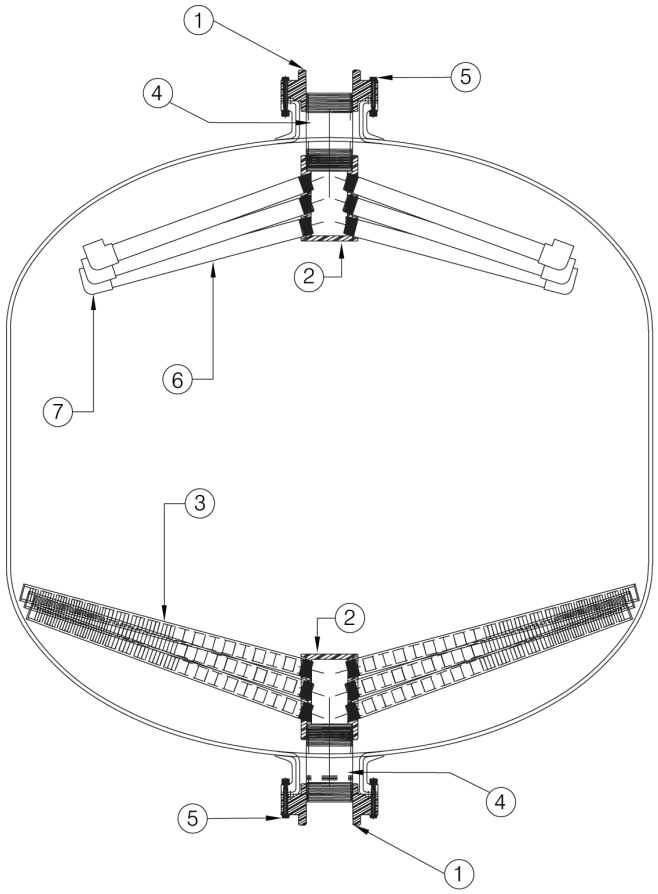
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

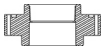
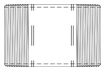
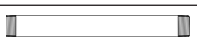
MEMBER Water Quality ASSOCIATION

FORM 1209
EFFECTIVE
MARCH 2011

UNDERDRAIN ASSEMBLIES

WATER'S EDGE™ DISTRIBUTION SYSTEM KIT FOR 63 INCH COMPOSITE TANKS



Pt	Part List	Qty	Description
1		2	Flange Adapter 6" SNA x 4" Socket PVC with EPDM Gasket 4" FNPT Inside Tank, 4" Socket Outside Tank with 12 Bolt Holes, 9-3/8" OD x 4" Height
2		2	Hub 4" FNPT, 21 each: 1" FNPT Type A Lateral Ports 3 Rows of 7 Lateral Ports at 15°, 18°, and 20° (Faced) 5-1/2" OD x 7-1/4" Height
3		21	Lateral S80 1" MPT x 28" OAL 0.010 Slot CUSTOM 1.315" OD x 28" OAL
4		2	Nipple 4" MPT x 7", 0.010" Slots 5 Rows x 2 Slots on Each End 4-1/2" x 7" OAL
5		1	Hardware Kit SS304 for 6" SNA Flange Adapter 24 each: Washers; 12 each: Lock Washers; 12 each: Nuts; 12 each: Bolts
6		21	Nipple 1" NPT x 12" Machine Threaded Both Ends (TBE)
7		21	Elbow 90° 1" FNPT x Socket 2.4" Length x 2.25" Width x 1.625" OD

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

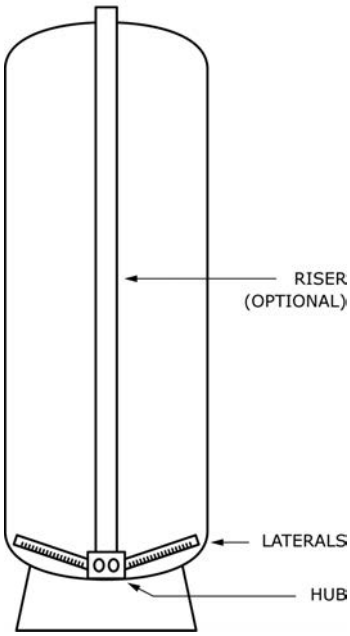
FORM 1207
EFFECTIVE
DECEMBER 2024

UNDERDRAIN ASSEMBLIES

WATER'S EDGE™

DISTRIBUTION SYSTEM KITS FOR TOP MOUNT CONTROL VALVES

WATER'S EDGE DISTRIBUTOR SYSTEM KIT FOR TOP MOUNT TANKS (TYPICAL)



SWT's Water's Edge Distributor System Kits for Top Mount Tanks *are fabricated from non-corrosive FDA and NSF approved materials for use in softeners, deionizers, carbon filters, sediment filters, iron filters, and multimedia filters. They are designed for all top mount control valves with a 1-1/2 inch center riser port.*

Water's Edge Distributor Systems are extra strong and durable for use with heavy filtration medias (gravel, sand, garnet) and can be used with a variety of regenerants including salt, caustics, acids, chlorine, etc. The collection screens (laterals) have 0.010 standard slotting for use with 50 mesh filter media or larger. They are designed to spread flow evenly across the filter bed to eliminate dead zones and to provide proper and even lift and separation during backwash.

Technical Specifications:

Max. Recommended Operating Temperature . . . 140ºF (60ºC)

Max. Recommended Operating Pressure . . . . . 150 psi

ΔP @ 5 ft/sec Velocity . . . . . ≤ 3 psi

Materials of Construction (Standard) . . . . . PVC, EPDM

Materials of Construction (Available) . . . . . CPVC, Polypropylene, PVDF, HDPE, etc.

Slot Width (Standard) . . . . . 0.010 inch (0.254 mm)

Slot Width (Available) . . . . . 0.008, 0.012, 0.016, 0.020, 0.032, 0.125 inch

Model Number	Tank Diameter Inches	Center Pipe Size Inches	Laterals Number (Size)
SM-H141572-LR	14	1-1/2 x 72	8 (3/4 inch)
SM-H161572-LR	16	1-1/2 x 72	8 (3/4 inch)
SM-H181572-LR	18	1-1/2 x 72	8 (3/4 inch)
SM-H211572-LR	21	1-1/2 x 72	8 (3/4 inch)
SM-H241572-LR	24	1-1/2 x 72	8 (3/4 inch)
SM-H301572-LR	30	1-1/2 x 72	8 (3/4 inch)
SM-H361572-LR	36	1-1/2 x 72	8 (3/4 inch)

Custom sizes, configurations, and materials are our specialty. Contact SWT with your requirements.

Available with riser upon request.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

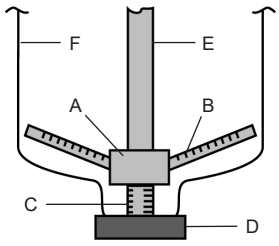
FORM 1226
EFFECTIVE
JULY 2021

UNDERDRAIN ASSEMBLIES

WATER'S EDGE™
Z-STYLE TOP MOUNT DISTRIBUTORS



Z-style distributor shown mounted on blind flange.



Z-style distributor includes:
A. Hub
B. Laterals
C. Strainer

Additional:
D. Blind flange
E. Riser tube
F. Fibergalss tank

SWT's Water's Edge Z-style Top Mount Distributors are manufactured of solid PVC bar stock and Schedule 80 PVC pipe. They are available with a 1.5-inch, 2-inch, or 3-inch socket riser tube port (riser tube available separately). All Z-style systems are intended for use in tanks with a blind bottom flange (bottom flange available separately). A slotted strainer is affixed to the bottom of the hub to eliminate dead zones between the closure and the hub.

Water's Edge Distributor Systems are extra strong and durable for use with heavy filtration medias (gravel, sand, garnet) and can be used with a variety of regenerants including salt, caustics, acids, chlorine, etc. The collection screens (laterals) have 0.010 standard slotting for use with 50 mesh filter media or larger. They are designed to spread flow evenly across the filter bed to eliminate dead zones and to provide proper and even lift and separation during backwash. **Made in USA.**

Technical Specifications:

Maximum Recommended Operating Temperature	140°F (60°C)
Maximum Recommended Operating Pressure	150 psi
ΔP @ 5 ft/sec Velocity	≤ 2 psi
Materials of Construction (Standard)	PVC
Materials of Construction (Available)	CPVC, Polypropylene, PVDF, HDPE, etc.
Slot Width (Standard)	0.010 inch (0.254 mm)
Slot Width (Available)	0.008, 0.012, 0.016, 0.020, 0.032, 0.125 inch

Part Number	Tank Diameter	Riser Tube Port
SM-H1815Z-LR	18 inch	1.5 inch Socket
SM-H2115Z-LR	21 inch	1.5 inch Socket
SM-H2415Z-LR	24 inch	1.5 inch Socket
SM-H242Z-LR	24 inch	2 inch Socket
SM-H243Z-LR	24 inch	3 inch Socket
SM-H302Z-LR	30 inch	2 inch Socket
SM-H303Z-LR	30 inch	3 inch Socket
SM-H362Z-LR	36 inch	2 inch Socket
SM-H363Z-LR	36 inch	3 inch Socket
SM-H422Z-LR	42 inch	2 inch Socket
SM-H423Z-LR	42 inch	3 inch Socket
SM-H482Z-LR	48 inch	2 inch Socket
SM-H483Z-LR	48 inch	3 inch Socket

Custom sizes, configurations, and materials are our specialty. Contact SWT with your requirements.

Also available: Machined blind flange closure for tanks with 6-inch bottom flange connection, includes hardware and gasket (P/N SM-DSF6BLIND).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

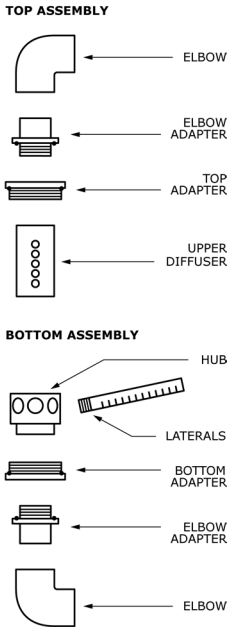
MEMBER Water Quality ASSOCIATION
FORM 1402
EFFECTIVE
SEPTEMBER 2025

UNDERDRAIN ASSEMBLIES

WATER'S EDGE™

DISTRIBUTION SYSTEM KITS FOR TOP & BOTTOM THREADED TANKS

WATER'S EDGE DISTRIBUTOR SYSTEM KIT FOR TOP & BOTTOM HOLE TANKS (TYPICAL)



SWT's Water's Edge Distributor System Kits for Top and Bottom Threaded Tanks *are fabricated from non-corrosive FDA and NSF approved materials for use in softeners, deionizers, carbon filters, sediment filters, iron filters, and multimedia filters. They are designed for FRP molded tanks with a 4"#8 UN threaded top opening, and a 6"#8 UN (standard) or 4"#8 UN threaded bottom opening. They can also be modified to fit tanks of other manufacture.*

Water's Edge Distributor Systems are extra strong and durable for use with heavy filtration medias (gravel, sand, garnet) and can be used with a variety of regenerants including salt, caustics, acids, chlorine, etc. The collection screens (laterals) have 0.010 standard slotting for use with 50 mesh filter media or larger. They are designed to spread flow evenly across the filter bed to eliminate dead zones and to provide even lift and separation during backwash.

Technical Specifications:

Maximum Recommended Operating Temperature	140°F (60°C)
Maximum Recommended Operating Pressure	150 psi
ΔP @ 5 ft/sec Velocity	≤ 3 psi
Materials of Construction (Standard)	PVC, ABS, Buna-N
Slot Width (Standard)	0.010 inch (0.254 mm)
Slot Area	2.5 x Pipe Area

Model Number [1]	Tank Size Inches	Connection Size Inches	Laterals Number (Size)
SM-DS162	16 x 65	2 inch Socket	6 (3/4 inch)
SM-DS212	21 x 62	2 inch Socket	8 (3/4 inch)
SM-DS242	24 x 62	2 inch Socket	8 (3/4 inch)
SM-DS302	30 x 72	2 inch Socket	12 (3/4 inch)
SM-DS3025	30 x 72	2.5 inch Socket	12 (3/4 inch)
SM-DS303	30 x 72	3 inch Socket	12 (3/4 inch)
SM-DS362	36 x 72	2 inch Socket	12 (3/4 inch)
SM-DS3625	36 x 72	2.5 inch Socket	12 (3/4 inch)
SM-DS363	36 x 72	3 inch Socket	12 (3/4 inch)

[1] 4"#8 UN Top with 6"#8 UN Bottom is standard configuration. For 4"#8 UN Top with 4"#8 UN Bottom, add "4TB" to end of part number.

AVAILABLE OPTIONS:

4 inch Side Mount Valve Adapter (P/N UA-1040920) with 4"#8 UN valve base, 1.5 inch riser size, 2 inch FPT inlet/outlet available.

4 inch Side Mount Valve Adapter (P/N UA-1040921) with 4"#8 UN valve base, 1.5 inch riser size, 2 inch BSP inlet/outlet available.

Upper Diffuser can be slotted instead of drilled at additional cost. Add "-S" to end of part number.

Slot Widths including 0.008, 0.010 (Standard), 0.012, 0.016, 0.020, 0.032, 0.125 inch and larger are available.

Custom sizes, configurations, and materials are our specialty. Contact SWT with your requirements.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

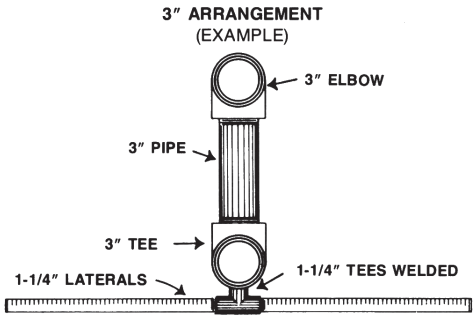
FORM 1252
EFFECTIVE
JUNE 2023

UNDERDRAIN ASSEMBLIES

WATER'S EDGE™

CUSTOM FABRICATED HEADERS FOR STEEL TANKS





SWT's Water's Edge Header Systems are custom fabricated from non-corrosive FDA and NSF approved materials. For use in softeners, carbon filters, multimedia filters, and waste water applications, they are available for tanks from 48 to 120 inches in diameter and are optimized for your application—whether you need 3.5 or 20 gpm/sq.ft.

Water's Edge Header Systems are available in a variety of materials and are resistant to brine, acids, caustics, oxidizing agents, and chlorine. They are designed to spread flow evenly across the filter bed to eliminate dead zones and to provide proper and even lift and separation during backwash.

Technical Specifications:

Max. Recommended Operating Temperature	140°F (60°C)
Max. Recommended Operating Pressure	150 psi
ΔP @ 5 ft/sec Velocity	≤ 3 psi
Materials of Construction (Standard)	PVC, Buna-N
Materials of Construction (Available)	CPVC, PP, PVDF, HDPE, etc.
Slot Width (Standard)	0.010 inch (0.254 mm)
Slot Width (Available)	0.008, 0.012, 0.016, 0.020, 0.032, 0.125 inch, and larger

Model Number	Tank Diameter	Pipe Size
SM-HS483	48 inch	3 inch
SM-HS543	54 inch	3 inch
SM-HS544	54 inch	4 inch
SM-HS603	60 inch	3 inch
SM-HS604	60 inch	4 inch
SM-HS663	66 inch	3 inch
SM-HS664	66 inch	4 inch
SM-HS724	72 inch	4 inch
SM-HS726	72 inch	6 inch
SM-HS844	84 inch	4 inch
SM-HS846	84 inch	6 inch
SM-HS964	96 inch	4 inch
SM-HS966	96 inch	6 inch
SM-HS1084	108 inch	4 inch
SM-HS1086	108 inch	6 inch
SM-HS1204	120 inch	4 inch
SM-HS1206	120 inch	6 inch

Custom sizes, configurations, and materials are our specialty. Contact SWT with your requirements.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1210
EFFECTIVE
MARCH 2011

UNDERDRAIN COMPONENTS

HUBS FOR STEEL AND COMPOSITE TANKS

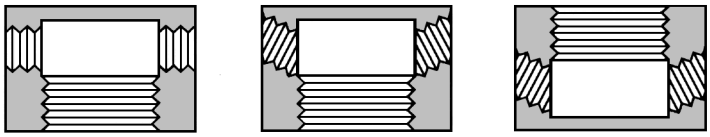


Technical Specifications:

Maximum recommended operating temperature . . . . 140°F (60°C)
Maximum recommended operating pressure . . . . . 150 PSI
Material. . . . . PVC (Standard) *

* Other materials available include CPVC, PP, PVDF, Kynar, PTFE, Teflon

Made in USA



STANDARD **TYPE A** **TYPE B**

Single Row Hubs

Part Number	Style	Piping Size FNPT	Number of Inlets FNPT	Overall Height Inches	Outside Diameter Inches	Side Wall Minimum Inches	Top Wall Minimum Inches
SM-C034024	Standard	3/4 inch	(4) 0.25 inch	1.75	1.875	0.50	0.25
SM-034024A	Type A	3/4 inch	(4) 0.25 inch	1.75	1.875	0.50	0.25
SM-C034024B	Type B	3/4 inch	(4) 0.25 inch	1.75	1.875	0.50	0.25
SM-C1124	Standard	1 inch	(4) 0.50 inch	2.00	1.875	0.375	0.25
SM-C1124A	Type A	1 inch	(4) 0.50 inch	2.00	1.875	0.375	0.25
SM-C1124B	Type B	1 inch	(4) 0.50 inch	2.00	1.875	0.375	0.25
SM-C1344	Standard	1 inch	(4) 0.75 inch	2.125	2.375	0.375	0.25
SM-C1344A	Type A	1 inch	(4) 0.75 inch	2.125	2.375	0.375	0.25
SM-C1344B	Type B	1 inch	(4) 0.75 inch	2.125	2.375	0.375	0.25
SM-C14126	Standard	1.25 inch	(6) 0.50 inch	2.25	3.00	0.50	0.375
SM-C14126A	Type A	1.25 inch	(6) 0.50 inch	2.25	3.00	0.50	0.375
SM-C14126B	Type B	1.25 inch	(6) 0.50 inch	2.25	3.00	0.50	0.375
SM-C14344	Standard	1.25 inch	(4) 0.75 inch	2.25	3.00	0.50	0.375
SM-C14344A	Type A	1.25 inch	(4) 0.75 inch	2.25	3.00	0.50	0.375
SM-C14344B	Type B	1.25 inch	(4) 0.75 inch	2.25	3.00	0.50	0.375
SM-C15128	Standard	1.5 inch	(8) 0.50 inch	2.25	3.00	0.50	0.375
SM-C15128A	Type A	1.5 inch	(8) 0.50 inch	2.25	3.00	0.50	0.375
SM-C15128B	Type B	1.5 inch	(8) 0.50 inch	2.25	3.00	0.50	0.375
SM-C15346	Standard	1.5 inch	(6) 0.75 inch	2.25	3.00	0.50	0.375
SM-C15346A	Type A	1.5 inch	(6) 0.75 inch	2.25	3.00	0.50	0.375
SM-C15346B	Type B	1.5 inch	(6) 0.75 inch	2.25	3.00	0.50	0.375
SM-C2348	Standard	2 inch	(8) 0.75 inch	2.50	4.00	0.50	0.437
SM-C2348A	Type A	2 inch	(8) 0.75 inch	2.50	4.00	0.50	0.437
SM-C2348B	Type B	2 inch	(8) 0.75 inch	2.50	4.00	0.50	0.437

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1227
EFFECTIVE
SEPTEMBER 2025

HUBS FOR STEEL AND COMPOSITE TANKS

Double Row Hubs

Part Number	Style	Piping Size FNPT	Number of Inlets FNPT	Overall Height Inches	Outside Diameter Inches	Side Wall Minimum Inches	Top Wall Minimum Inches
SM-C23416B	Type B	2 inch	(16) 0.75 inch (2 rows 8)	3.75	4.00	0.750	0.50
SM-C2116A	Type A	2 inch	(16) 1 inch (2 Rows 8)	5.00	5.50	1.25	0.50
SM-C253412	Standard	2.5 inch	(12) 0.75 inch (2 Rows 6)	3.625	4.00	0.50	0.437
SM-C253412A	Type A	2.5 inch	(12) 0.75 inch (2 Rows 6)	3.625	4.00	0.50	0.437
SM-C253412B	Type B	2.5 inch	(12) 0.75 inch (2 Rows 6)	3.625	4.00	0.50	0.437
SM-C33416	Standard	3 inch	(16) 0.75 inch (2 Rows 8)	4.00	4.50	0.50	0.437
SM-C33416A	Type A	3 inch	(16) 0.75 inch (2 Rows 8)	4.00	4.50	0.50	0.437
SM-C33416B	Type B	3 inch	(16) 0.75 inch (2 Rows 8)	4.00	4.50	0.50	0.437
SM-C33424B	Type B	3 inch	(24) 0.75 inch (3 Rows 8)	5.75	4.50	1.25	0.437
SM-C3120A	Type A	3 inch	(20) 1 inch (2 Rows 10)	4.50	6.00	0.875	0.50
SM-C4116	Standard	4 inch	(16) 1 inch (2 Rows 8)	4.625	5.50	0.50	0.437
SM-C4116A	Type A	4 inch	(16) 1 inch (2 Rows 8)	4.625	5.50	0.50	0.437
SM-C4116B	Type B	4 inch	(16) 1 inch (2 Rows 8)	4.625	5.50	0.50	0.437
SM-C4120A	Type A	4 inch	(20) 1 inch (2 Rows 10)	5.75	7.00	1.375	0.50
SM-C4120B	Type B	4 inch	(20) 1 inch (2 Rows 10)	5.75	7.00	1.375	0.50
SM-C41436A	Type A	4 inch	(36) 1.25 inch (3 Rows 12)	9.375	13.00	N/A	1.25
SM-C61424A	Type A	6 inch	(24) 1.25 inch (2 Rows 12)	7.50	13.00	N/A	1.25
SM-C61436A	Type A	6 inch	(36) 1.25 inch (3 Rows 12)	10.50	13.00	N/A	1.25
SM-C61516	Standard	6 inch	(16) 1.5 inch (2 Rows 8)	6.375	8.625	0.562	1.00
SM-C61516A	Type A	6 inch	(16) 1.5 inch (2 Rows 8)	6.375	8.625	0.562	1.00
SM-C61516B	Type B	6 inch	(16) 1.5 inch (2 Rows 8)	6.375	8.625	0.562	1.00
SM-C81436A	Type A	8 inch	(36) 1.25 inch (3 Rows 12)	9.375	13.00	N/A	1.25
SM-C8220	Standard	8 inch	(20) 2 inch (2 Rows 10)	8.75	9.75	0.365	1.50

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

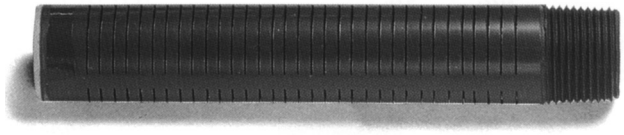
MEMBER Water Quality ASSOCIATION

FORM 1227
EFFECTIVE
SEPTEMBER 2025

PVC Slotted Laterals

MACHINED LATERALS

All SWT laterals are cut-to-length and NPT threaded to match standard PVC or stainless steel hubs. One end is threaded MNPT, the other end is closed with a flat end-plug. SCH. 80 PVC pipe with 0.010 slots are standard. Other materials and slot sizes are available including: SCH. 40, SDR, CPVC, PolyPro, PVDF with 0.012 or 0.020 slots. Always use a proper underbedding. **Made in USA.**



Lateral Sizing Formula:
To accurately determine the length of a lateral, you must know the tank inner diameter and the hub outer diameter. The formula is as follows:

$$\left(\frac{\text{tank diameter} - \text{hub diameter}}{2}\right) - 1 = \text{lateral length}$$

Standard Machined Lateral Sizes

Part Number	Length Inches	Pipe Diameter	Material	Slot Size Inches	Slot Rows
SM-L80504510	4.5	1/2" (0.840 OD x 0.528 ID)	SCH. 80	0.010	3
SM-L87504510	4.5	3/4" (1.050 OD x 0.724 ID)	SCH. 80	0.010	3
SM-L8750610	6	3/4" (1.050 OD x 0.724 ID)	SCH. 80	0.010	3
SM-L87506510	6.5	3/4" (1.050 OD x 0.724 ID)	SCH. 80	0.010	3
SM-L8750710	7	3/4" (1.050 OD x 0.724 ID)	SCH. 80	0.010	3
SM-L8750810	8	3/4" (1.050 OD x 0.724 ID)	SCH. 80	0.010	3
SM-L8750910	9	3/4" (1.050 OD x 0.724 ID)	SCH. 80	0.010	3
SM-L8751010	10	3/4" (1.050 OD x 0.724 ID)	SCH. 80	0.010	3
SM-L8751210	12	3/4" (1.050 OD x 0.724 ID)	SCH. 80	0.010	3
SM-L8751310	13	3/4" (1.050 OD x 0.724 ID)	SCH. 80	0.010	3
SM-L8751510	15	3/4" (1.050 OD x 0.724 ID)	SCH. 80	0.010	3
SM-L8751710	17	3/4" (1.050 OD x 0.724 ID)	SCH. 80	0.010	3
SM-L8751810	18	3/4" (1.050 OD x 0.724 ID)	SCH. 80	0.010	3
SM-L8752010	20	3/4" (1.050 OD x 0.724 ID)	SCH. 80	0.010	3
SM-L8752110	21	3/4" (1.050 OD x 0.724 ID)	SCH. 80	0.010	3
SM-L811510**	15	1" (1.315 OD x 0.935 ID)	SCH. 80	0.010	3
SM-L811810**	18	1" (1.315 OD x 0.935 ID)	SCH. 80	0.010	3
SM-L812010**	20	1" (1.315 OD x 0.935 ID)	SCH. 80	0.010	3
SM-L812310**	23	1" (1.315 OD x 0.935 ID)	SCH. 80	0.010	3
SM-L812610**	26	1" (1.315 OD x 0.935 ID)	SCH. 80	0.010	3
SM-L8125121065	12	1.25" (1.660 OD x 1.256 ID)	SCH. 80	0.010	3
SM-L8125151068*	15	1.25" (1.660 OD x 1.256 ID)	SCH. 80	0.010	3
SM-L8125151096	15	1.25" (1.660 OD x 1.256 ID)	SCH. 80	0.010	3
SM-L81251810102	18	1.25" (1.660 OD x 1.256 ID)	SCH. 80	0.010	3
SM-L81252010136	20	1.25" (1.660 OD x 1.256 ID)	SCH. 80	0.010	3

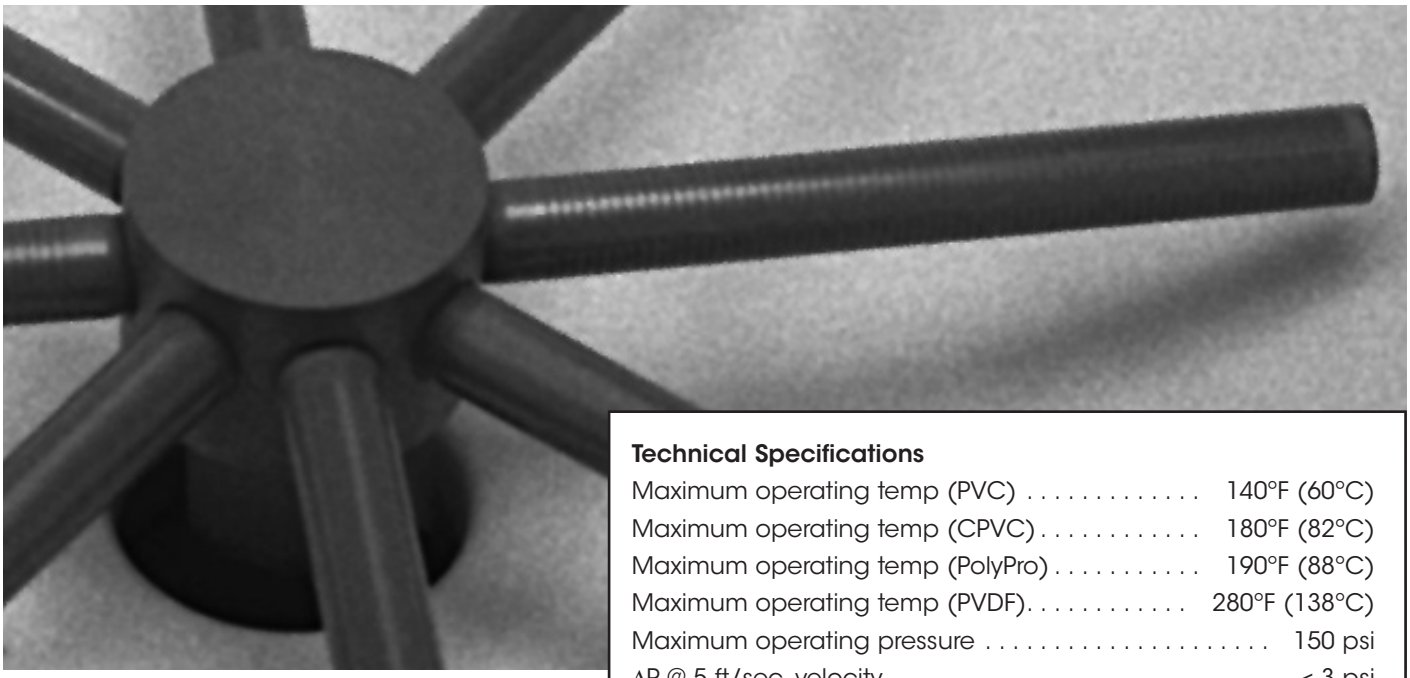
* Non-standard 3/16 inch spacing between slots.
** Non-stock items – made to order.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1228
EFFECTIVE
SEPTEMBER 2025

PVC Slotted Laterals

MACHINED LATERALS



Technical Specifications

Maximum operating temp (PVC)	140°F (60°C)
Maximum operating temp (CPVC)	180°F (82°C)
Maximum operating temp (PolyPro)	190°F (88°C)
Maximum operating temp (PVDF)	280°F (138°C)
Maximum operating pressure	150 psi
ΔP @ 5 ft/sec. velocity	≤ 3 psi
Slot width (standard)	0.010" (0.254 mm)
Available slot widths	0.006, 0.012, 0.020, 0.032, 0.125

Safe Water Technologies standard PVC laterals are fabricated from Schedule 80 PVC pipe. Stocked diameters include 1/2", 3/4", and 1-1/4". Also available are pipe diameters of 1", 1-1/2", and 2". One end is threaded MNPT. The other end is closed with a flat end plug.

Generally, 3/4" diameter laterals up to 5" long receive 1/16" spacing between slots; from 5" to 8" long receive 1/8" spacing; and over 8" long receive 3/16" spacing. Laterals with 1-1/4" diameter typically receive 1/8" spacing between slots. Laterals 1-1/2" in diameter and smaller are slotted in three rows. Laterals 2" in diameter and larger have four rows of slots. To minimize pressure loss when in service, the open area of slots is engineered to be equal to or greater than 1-1/2 times the cross sectional open area of the pipe.

Standard slot widths are 0.010", 0.012", and 0.020. Other slot widths, including 0.006", 0.008", 0.016", 0.032", and 0.125", are available for a nominal extra fee. Laterals are available in plastics other than Schedule 80 PVC, including Schedule 40 PVC, SDR, CPVC, polypropylene, teflon, and PVDF. Contact your SWT sales representative to discuss custom sizes, configurations, materials, and lead times.

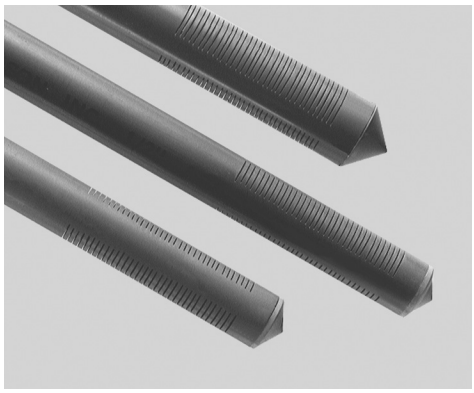
Lateral Sizing Formula:
To accurately determine the length of a lateral, you must know the tank inner diameter and the hub outer diameter. The formula is as follows:

$$\left(\frac{\text{tank diameter} - \text{hub diameter}}{2}\right) - 1 = \text{lateral length}$$

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association
FORM 1228
EFFECTIVE
SEPTEMBER 2025

MACHINED & MOLDED RISERS



All materials are NSF-61 Certified.

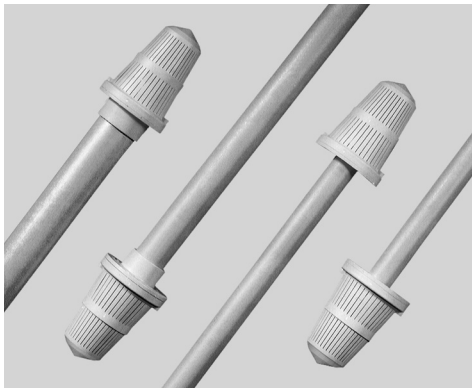
SWT Slotted Riser Tubes are machined from high quality PVC pipe, slotted, and plugged at one end. The other end is available with either a chamfered slip connection or MNPT adapter. The open area of slots in the riser tube is engineered to be equal to or greater than 1.5 times the cross-sectional open area of the pipe. This insures minimal pressure drop when in service.

Technical Specifications

Maximum recommended operating temperature	140°F (60°C)
Maximum recommended operating pressure	150 psi
ΔP @ 5ft/sec. velocity	≤ 2 psi
Materials of construction	PVC pipe & PVC plug
Slot width	0.010 inch (0.254 mm)

Slotted Riser Tubes — Part Numbers

Connection Size	Riser Length					
	14 inch	18 inch	24 inch	36 inch	48 inch	60 inch
13/16 inch Slip (0.812 inch O.D.)	R131410	R131810	R132410	R133610	R134810	R136010
3/4 inch Slip (1.050 inch O.D.)	R341410	R341810	R342410	R343610	R344810	R346010



All materials are NSF-61 Certified.

SWT Molded Basket Riser Tubes are fabricated from high quality PVC pipe and sturdy ABS molded baskets. They are an economical alternative to SWT Slotted Riser Tubes. The riser tube and basket are shipped assembled with the slip end of the riser tube chamfered for easy insertion into the o-ring seal of a valve or tank head.

Technical Specifications

Maximum recommended operating temperature	140°F (60°C)
Maximum recommended operating pressure	150 psi
ΔP @ 5ft/sec. velocity	≤ 1 psi
Materials of construction	PVC pipe & ABS basket
Slot width	0.013 inch (0.330 mm)

Molded Basket Riser Tubes — Part Numbers

Connection Size	Riser Length					
	14 inch	18 inch	24 inch	36 inch	48 inch	60 inch
13/16 inch Slip (0.812 inch O.D.)	SMMB1314	SMMB1318	SMMB1324	SMMB1336	SMMB1348	SMMB1360
3/4 inch Slip (1.050 inch O.D.)	SMMB3414	SMMB3418	SMMB3424	SMMB3436	SMMB3448	SMMB3460

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1232
EFFECTIVE
JULY 2025

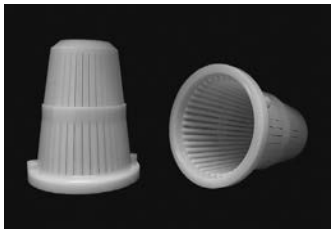
BASKET DISTRIBUTORS

UPPER SCREENS, LOWER SCREENS & BAFFLE PLATE STRAINERS

SWT's Basket Distributors *are molded of sturdy ABS material and are useful as upper screens or inlet screens, as lower screens or distributors, or as baffle plate strainers. The slotting is configured to allow greater flow with minimal pressure loss.*

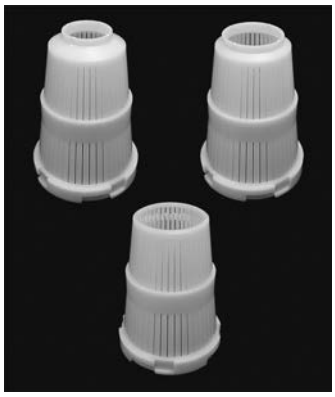
Technical Specifications

Maximum recommended operating temperature ..... 120°F (48°C)
Maximum recommended operating pressure ..... 150 psi
Materials of construction. ..... ABS



SWT's Upper Screen/Diffusers *can be cemented to a valve or tank head, or fixtured with two 3/32 inch self-tapping screws. Total open area of slots: 1.070 sq.in.*

Part Number	Description	Riser Port Size	Slot Size
SM-US813	Upper Screen/Diffuser	13/16 inch (0.813 inch O.D.)	0.010 to 0.013 inch (0.25 to 0.33 mm)
SM-US105	Upper Screen/Diffuser	3/4 inch (1.050 inch O.D.)	0.010 to 0.013 inch (0.25 to 0.33 mm)



SWT's Upper Screen/Diffusers *twist-n-lock onto a valve or tank head.*

Part Number	Description	Riser Port Size	Slot Size
LC-D1203-01	Upper Screen/Diffuser	13/16 inch (0.813 inch O.D.)	0.010 to 0.013 inch (0.25 to 0.33 mm)
LC-D1203	Upper Screen/Diffuser	3/4 inch (1.050 inch O.D.)	0.010 to 0.013 inch (0.25 to 0.33 mm)
LC-D1203-02	Upper Screen/Diffuser	1 inch (1.320 inch O.D.)	0.010 to 0.013 inch (0.25 to 0.33 mm)



SWT's Stacked Upper Screen/Diffusers *twist-n-lock onto a valve or tank head. Constructed of individual ABS segments fastened with stainless steel screws, they have the ability to open up when backwashed, removing any possible fines that might accumulate.*

Part Number	Description	Riser Port Size	Slot Size
LC-D1225-03	Upper Screen/Diffuser, 11-Stack	3/4 inch (1.050 inch O.D.)	0.007 to 0.010 inch (0.17 to 0.25 mm)
LC-D1225-05	Upper Screen/Diffuser, 11-Stack	3/4 inch (1.050 inch O.D.)	0.010 to 0.013 inch (0.25 to 0.33 mm)
LC-D1225-06	Upper Screen/Diffuser, 11-Stack	1 inch (1.320 inch O.D.)	0.007 to 0.010 inch (0.17 to 0.25 mm)
LC-D1225-08	Upper Screen/Diffuser, 14-Stack	1 inch (1.320 inch O.D.)	0.010 to 0.013 inch (0.25 to 0.33 mm)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1335
EFFECTIVE
FEBRUARY 2021

BASKET DISTRIBUTORS

UPPER SCREENS, LOWER SCREENS & BAFFLE PLATE STRAINERS





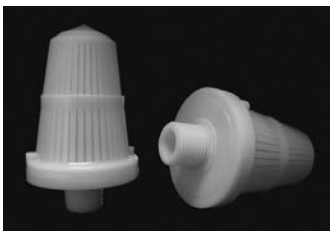
SWT's Lower Screen/Distributors *are an economical alternative to slotted risers. The pointed end of the cone-shaped basket allows easy insertion into a resin or media bed. Total open area of slots: 1.070 sq.in.*

Part Number	Description	Riser Port Size	Slot Size
SM-MB3	Lower Screen/Distributor with 3-Step Collar	13/16 inch (0.813 inch O.D.) 1/2 inch (0.840 inch O.D.) 3/4 inch (1.050 inch O.D.)	0.010 to 0.013 inch (0.25 to 0.33 mm)
SM-MB105	Lower Screen/Distributor	3/4 inch (1.050 inch O.D.)	0.010 to 0.013 inch (0.25 to 0.33 mm)



SWT's Stacked Lower Screen/Distributors *consists of individual ABS segments fastened with stainless steel screws. They have the ability to open up when backwashed, removing any possible fines that might accumulate on the distributor.*

Part Number	Description	Riser Port Size	Slot Size
LC-D1210-13	Lower Screen/Distributor, 3-Stack	13/16 inch (0.813 inch O.D.)	0.007 to 0.010 inch (0.17 to 0.25 mm)
LC-D1210-01	Lower Screen/Distributor, 6-Stack	13/16 inch (0.813 inch O.D.)	0.007 to 0.010 inch (0.17 to 0.25 mm)
LC-D1212-06	Lower Screen/Distributor, 11-Stack	3/4 inch (1.050 inch O.D.)	0.007 to 0.010 inch (0.17 to 0.25 mm)
LC-D1212-04	Lower Screen/Distributor, 11-Stack	3/4 inch (1.050 inch O.D.)	0.010 to 0.013 inch (0.25 to 0.33 mm)
LC-D1212-21	Lower Screen/Distributor, 15-Stack	1 inch (1.320 inch O.D.)	0.010 to 0.013 inch (0.25 to 0.33 mm)



SWT's Baffle Plate Strainers *are a convenient and reliable choice when servicing a tank containing a baffle plate. A variety of standard connections is available. Total open area of slots: 1.070 sq.in.*

Part Number	Description	Riser Port Size	Slot Size
SM-MBP500M	Baffle Plate Strainer	1/2 inch MNPT	0.010 to 0.013 inch (0.25 to 0.33 mm)
SM-MBP750M	Baffle Plate Strainer	3/4 inch MNPT	0.010 to 0.013 inch (0.25 to 0.33 mm)
SM-MBP100M	Baffle Plate Strainer	1 inch MNPT	0.010 to 0.013 inch (0.25 to 0.33 mm)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

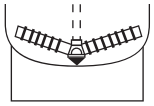
FORM 1335
EFFECTIVE
FEBRUARY 2021

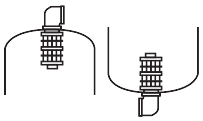
DISTRIBUTION SYSTEMS

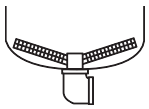
MOLDED BAJONET™ DISTRIBUTION SYSTEMS

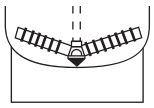


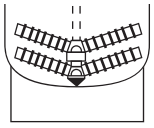
These ***Molded Polypropylene Distribution Systems*** *for composite tanks feature chemical and impact resistance for a variety of applications. Unique 1/4-turn, cam-lock hubs and laterals make assembly and installation easy and secure. With proper underbedding, the unique slot design assures a uniform, vertical distribution of flow and less than 5 psi pressure drop at designated flow rates. These distribution systems will operate at temperatures up to 120°F.*











Part Number	Description	Flow Rate GPM	Tank Diameter Inches	System Connection
Distribution System for Composite Tanks with 4 inch Threaded Top Opening				
TS-5665	Hub & 6 Laterals *	29	13 to 16	1.5 inch Socket
TS-5666	Hub & 6 Laterals *	29	18	1.5 inch Socket
TS-5667	Hub & 6 Laterals *	29	21	1.5 inch Socket
TS-10848	Hub & 6 Laterals *	29	24	1.5 inch Socket
TS-10849	Hub & 6 Laterals *	48	30	1.5 inch Socket
Top/Bottom Diffuser for Composite Tanks with 4 inch Threaded Top/Bottom Opening				
TS-5671	Top or Bottom Stack Diffuser	88	12 to 36	2 inch Socket
Bottom Hub & Laterals for Composite Tanks with 4 inch Threaded Bottom Opening				
TS-5669	Bottom Mount Hub & Laterals	100	18 to 21	2 inch Socket
TS-5670	Bottom Mount Hub & Laterals	100	24	2 inch Socket
TS-11039	Bottom Mount Hub & Laterals	100	30	2 inch Socket
TS-11040	Bottom Mount Hub & Laterals	100	36	2 inch Socket
Distribution System for Composite Tanks with 6 inch Flanged Top Opening				
TS-12201	Hub & 8 Laterals *	104	24	3 inch Socket
TS-5672	Hub & 8 Laterals *	104	30	3 inch Socket
TS-5673	Hub & 8 Laterals *	104	36	3 inch Socket
TS-5674	Hub & 8 Laterals *	104	42	3 inch Socket
TS-5675	Hub & 8 Laterals *	104	48	3 inch Socket
TS-13492	Hub & 8 Laterals *	104	63	3 inch Socket
High Flow Distribution System for Composite Tanks with 6 inch Flanged Top Opening				
TS-5676	Hub & 16 Laterals *	173	42	3 inch Socket
TS-5677	Hub & 16 Laterals *	173	48	3 inch Socket
TS-13569	Hub & 16 Laterals *	174	63	3 inch Socket

* Riser Tube is **not** included.
Note: Flow rates are calculated with a 5 psi pressure drop.

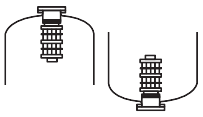
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1184
EFFECTIVE
JUNE 2018

DISTRIBUTION SYSTEMS

MOLDED BAJONET™ DISTRIBUTION SYSTEMS



Part Number	Description	Flow Rate GPM	Tank Diameter Inches	System Connection
Top/Bottom Diffuser for Composite Tanks with 6 inch Flanged Top/Bottom Opening				
TS-5679	Top or Bottom Diffuser	88	18 to 48	3 inch FNPT



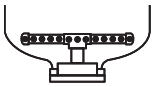
High Flow Top Diffuser for Composite Tanks with 6 inch Flanged Top Opening				
TS-5680-1	High Flow Top Diffuser	200	21 to 24	3 inch FNPT
TS-5680-2	High Flow Top Diffuser	200	30 to 63	3 inch FNPT



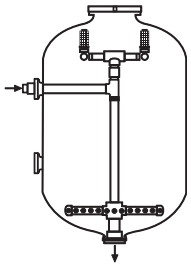
Bottom Hub & Laterals for Composite Tanks with 6 inch Flanged Bottom Opening				
TS-11790	Bottom Mount Hub, Laterals, & Flange	122	18	3 inch FNPT
TS-5678	Bottom Mount Hub, Laterals, & Flange	90	21 to 24	3 inch FNPT
TS-5683	Bottom Mount Hub, Laterals, & Flange	122	30	3 inch FNPT
TS-5684	Bottom Mount Hub, Laterals, & Flange	122	36	3 inch FNPT
TS-5686	Bottom Mount Hub, Laterals, & Flange	122	42 to 48	3 inch FNPT



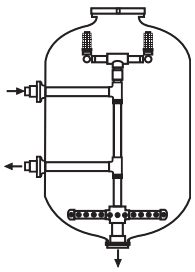
High Flow Hub & Laterals for Composite Tanks with 6 inch Flanged Bottom Opening				
TS-11892	Bottom Mount Hub, Laterals, & Flange	167	36	3 inch FNPT
TS-11663	Bottom Mount Hub, Laterals, & Flange	167	42	3 inch FNPT
TS-11665	Bottom Mount Hub, Laterals, & Flange	167	48	3 inch FNPT
TS-14248	Bottom Mount Hub, Laterals, & Flange	175	63	3 inch FNPT



Bottom Header for 63 inch Composite Tanks with 6 inch Flanged Bottom Opening				
TS-5687	Bottom Header, Laterals, & Flange	170	63	3 inch FNPT



Distribution System for 63 inch Composite Tanks with 4 inch Flanged Side Opening, 6 inch Flanged Bottom Opening, and 16 inch Top Manway				
TS-11190	Inlet: 4 inch Flanged Upper Side Outlet: 6 inch Flanged Bottom	130 †	63 x 86	3" MNPT (Side) 3" FNPT (Bottom)
TS-11192	Inlet: 4 inch Flanged Upper Side Outlet: 6 inch Flanged Bottom	130 †	63 x 116	3" MNPT (Side) 3" FNPT (Bottom)
TS-11194	Inlet: 4 inch Flanged Upper Side Outlet: 6 inch Flanged Bottom	130 †	63 x 144	3" MNPT (Side) 3" FNPT (Bottom)



Distribution System for 63 inch Composite Tanks with (2) 4 inch Flanged Side Openings, 6 inch Flanged Bottom Opening, and 16 inch Top Manway				
TS-11191	Inlet: 4 inch Flanged Upper Side Outlet: 4 inch Flanged Lower Side	130 †	63 x 86	3" MNPT (Side) 3" FNPT (Bottom)
TS-11193	Inlet: 4 inch Flanged Upper Side Outlet: 4 inch Flanged Lower Side	130 †	63 x 116	3" MNPT (Side) 3" FNPT (Bottom)
TS-11195	Inlet: 4 inch Flanged Upper Side Outlet: 4 inch Flanged Lower Side	130 †	63 x 144	3" MNPT (Side) 3" FNPT (Bottom)

† Upper Flow Rate: 130 gpm. Lower Flow Rate: 170 gpm.
Note: Flow rates are calculated with a 5 psi pressure drop.

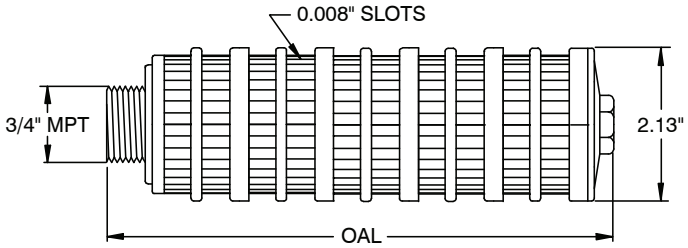
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

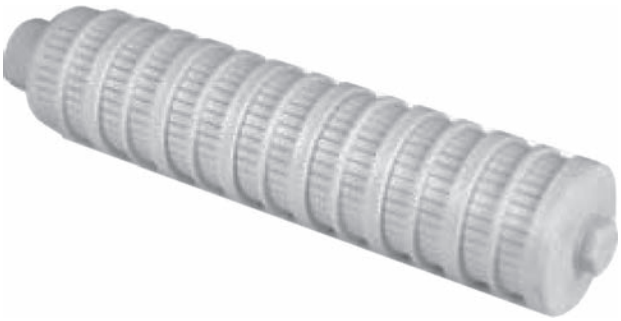
MEMBER Water Quality ASSOCIATION

FORM 1184
EFFECTIVE
JUNE 2018

MOLDED POLYPROPYLENE LATERALS

Molded Polypropylene Laterals *feature a modular design which allows them to be quickly disassembled and reassembled for easy cleaning. Made in USA.*





Part Number	Overall Length (OAL)		Slot Size		Outside Diameter (OD)		Connection Size
	inch	mm	inch	mm	inch	mm	
LP-L75042008-PP	4.2	107	0.008	0.2	2.13	54	3/4" MNPT
LP-L75054008-PP	5.4	138	0.008	0.2	2.13	54	3/4" MNPT
LP-L75066008-PP	6.6	168	0.008	0.2	2.13	54	3/4" MNPT
LP-L75078008-PP	7.8	199	0.008	0.2	2.13	54	3/4" MNPT
LP-L75090008-PP	9.0	229	0.008	0.2	2.13	54	3/4" MNPT
LP-L75103008-PP	10.3	262	0.008	0.2	2.13	54	3/4" MNPT
LP-L75115008-PP	11.5	293	0.008	0.2	2.13	54	3/4" MNPT
LP-L75127008-PP	12.7	323	0.008	0.2	2.13	54	3/4" MNPT
LP-L75139008-PP	13.9	354	0.008	0.2	2.13	54	3/4" MNPT
LP-L75151008-PP	15.1	384	0.008	0.2	2.13	54	3/4" MNPT
LP-L75164008-PP	16.4	417	0.008	0.2	2.13	54	3/4" MNPT
LP-L75176008-PP	17.6	448	0.008	0.2	2.13	54	3/4" MNPT
LP-L75188008-PP	18.8	478	0.008	0.2	2.13	54	3/4" MNPT
LP-L75200008-PP	20.0	508	0.008	0.2	2.13	54	3/4" MNPT
LP-L75212008-PP	21.2	539	0.008	0.2	2.13	54	3/4" MNPT
LP-L75225008-PP	22.5	572	0.008	0.2	2.13	54	3/4" MNPT
LP-L75237008-PP	23.7	602	0.008	0.2	2.13	54	3/4" MNPT
LP-L75249008-PP	24.9	633	0.008	0.2	2.13	54	3/4" MNPT
LP-L75261008-PP	26.1	663	0.008	0.2	2.13	54	3/4" MNPT
LP-L75273008-PP	27.3	694	0.008	0.2	2.13	54	3/4" MNPT

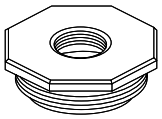
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1445
EFFECTIVE
AUGUST 2018

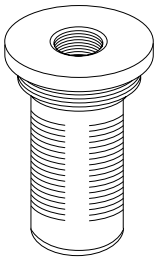
TANK FITTINGS & ACCESSORIES

ADAPTERS, CLOSURES, CONNECTORS, VACUUM BREAKERS, AND WRENCHES



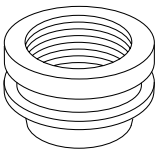
Threaded Adapters (2.5"–8 NPSM)

Part Number	Adapt to . . .	Material	Max. Temp.	Max. Pressure
TS-2751-3	3/4" NPT	PVC	120°F	150 PSI
SM-TR75258-G-FS	3/4" NPT	PVC	120°F	150 PSI
TS-2751-5	1" NPT	PVC	120°F	150 PSI
TS-2751-8	1-1/4" NPT	PVC	120°F	150 PSI
TS-2751-4	1-1/2" NPT	PVC	120°F	150 PSI
TS-2751-6	2-1/4"–16 UN	PVC	120°F	150 PSI
LC-D1170	2-1/4"–16	CELCON	—	—



Threaded Adapters (2.5"–8 NPSM) with Slotted Screen (0.010" Slots)

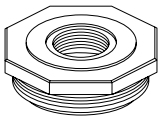
Part Number	Adapt to . . .	Material	Max. Temp.	Max. Pressure
SM-BA75258	3/4" NPT	PVC	120°F	150 PSI
SM-BA1258	1" NPT	PVC	120°F	150 PSI



Threaded Adapters (2.5"–8 NPSM) for ECO-type Non-threaded Tank Openings

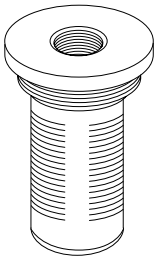
Part Number	Adapt to . . .	Material	Max. Temp.	Max. Pressure
PA-TR258ECO	2-1/2"–8 NPSM	PVC	120°F	150 PSI

NOTE: Requires clamp (sold separately) to install.



Threaded Adapters (4"–8 UN)

Part Number	Adapt to . . .	Material	Max. Temp.	Max. Pressure
SM-TR148	1" NPT	PVC	120°F	150 PSI
SM-TR12548	1-1/4" NPT	PVC	120°F	150 PSI
SM-TR1548	1-1/2" NPT	PVC	120°F	150 PSI
SM-TR248	2" NPT	PVC	120°F	150 PSI
SM-TR2548	2-1/2" NPT	PVC	120°F	150 PSI
TS-4821-6	1" NPT	CPVC	150°F	150 PSI
TS-4821-12	1-1/4" NPT	CPVC	150°F	150 PSI
TS-4821-7	1-1/2" NPT	CPVC	150°F	150 PSI
TS-4821-8	2" NPT	CPVC	150°F	150 PSI
TS-4821-17	2"–11.5 NPSM	CPVC	150°F	150 PSI
SM-TR25848 (with Chamfer Seal)	2-1/2"–8 UN	PVC	120°F	150 PSI
SM-TR25848-EG (with Face Seal)	2-1/2"–8 UN	PVC	120°F	150 PSI
TS-4821-2	2-1/2"–8 UN	CPVC	150°F	150 PSI
SM-TR25848PP	2-1/2"–8 UN	PP	150°F	150 PSI
LC-C610227	2-1/2"–8 UN	NORYL	150°F	150 PSI
TS-4821-4	3"–8 UN	CPVC	150°F	150 PSI



Threaded Adapters (4"–8 UN) with Slotted Screen (0.010" Slots)

Part Number	Adapt to . . .	Material	Max. Temp.	Max. Pressure
SM-BA148	1" NPT	PVC	120°F	150 PSI

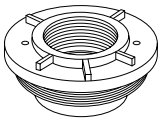
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1257
EFFECTIVE
JUNE 2023

Tank Fittings & Accessories

ADAPTERS, CLOSURES, CONNECTORS, VACUUM BREAKERS, AND WRENCHES



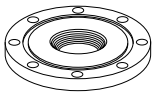
Threaded Adapters (6"–8 UN)

Part Number	Adapt to . . .	Material	Max. Temp.	Max. Pressure
TS-4125-003	3" FNPT	NORYL	150°F	150 PSI
SM-TR468	4" FNPT	PVC	120°F	150 PSI
SM-TR4868	4"–8 UN	PVC	120°F	150 PSI



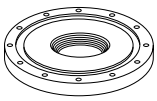
Threaded Couplers (2.5"–8 NPSM)

Part Number	Adapt to . . .	Material	Max. Temp.	Max. Pressure
LC-Q1021	2.5"–8 x 2.5"–8	PVC	120°F	150 PSI
SM-TCM2582AS10 (with ABS Baskets)	2.5"–8 x 2.5"–8	High Impact Type-2 PVC	120°F	150 PSI
SM-TCM2582AS13 (with ABS Baskets)	2.5"–8 x 2.5"–8	High Impact Type-2 PVC	120°F	150 PSI



ANSI Flanged Adapters (4" ANSI)

Part Number	Adapt to . . .	Material	Max. Temp.	Max. Pressure
TS-10673	2" NPT	CPVC	150°F	150 PSI
TS-10674	3" NPT	CPVC	150°F	150 PSI
TS-5276	3" NPSM	CPVC	150°F	150 PSI



SNA Flanged Adapters (6" SNA) — Machined

Part Number	Adapt to . . .	Material	Max. Temp.	Max. Pressure
SM-FLGRD61	1" NPT	PVC	120°F	150 PSI
SM-FLGRD615	1-1/2" NPT	PVC	120°F	150 PSI
SM-FLGRD62	2" NPT	PVC	120°F	150 PSI
SM-FLGRD63	3" NPT	PVC	120°F	150 PSI
SM-FLGRD64N	4" NPT	PVC	120°F	150 PSI
TS-10659	1" NPT	CPVC	150°F	150 PSI
TS-10660	1-1/2" NPT	CPVC	150°F	150 PSI
TS-10661	2" NPT	CPVC	150°F	150 PSI
TS-10662	3" NPT	CPVC	150°F	150 PSI
TS-10663	4" NPT	CPVC	150°F	150 PSI
SM-FLGRD64N-C	4" NPT	CPVC	150°F	150 PSI
SM-FLGRD63S	3" Socket	PVC	120°F	150 PSI
SM-FLGRD64S	4" Socket	PVC	120°F	150 PSI
SM-FLGRD63S-C	3" Socket	CPVC	150°F	150 PSI
SM-FLGRD64S-C	4" Socket	CPVC	150°F	150 PSI
SM-FLGRD64	4"–8 UN	PVC	120°F	150 PSI
SM-FLGRD64-A (without SS Hardware)	4"–8 UN	PVC	120°F	150 PSI
SM-FLGRD64-C	4"–8 UN	CPVC	150°F	150 PSI

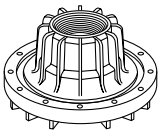
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1257
EFFECTIVE
JUNE 2023

TANK FITTINGS & ACCESSORIES

ADAPTERS, CLOSURES, CONNECTORS, VACUUM BREAKERS, AND WRENCHES

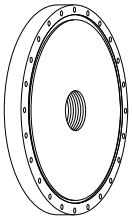


SNA Flanged Adapters (6" SNA) — Molded

Part Number	Adapt to . . .	Material	Max. Temp.	Max. Pressure
TS-5292 *	3" NPT x 3" NPT	NORYL	150°F	150 PSI
TS-5267	3" NPT x 3" NPT	NORYL	150°F	150 PSI
LC-C610222	3" NPT x 3" NPT	NORYL	150°F	150 PSI
TS-5295	3" NPT x 4"–8 UN	NORYL	150°F	150 PSI
LC-C610223	3" NPT x 4"–8 UN	NORYL	150°F	150 PSI
TS-10566 * *	4"–8 UN	NORYL	150°F	150 PSI
LC-C610225	4"–8 UN	NORYL	150°F	150 PSI

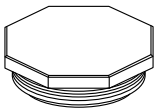
* Bottom adapter with brine drain ports.

* * Without internal 3 inch NPT section.



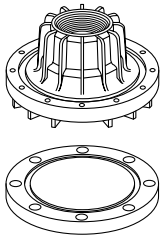
Manway Adapters (16" Manway)

Part Number	Adapt to . . .	Material	Max. Temp.	Max. Pressure
TS-10108	2" NPT	Vinylester	150°F	150 PSI
TS-10582	2" NPT	CPVC	150°F	100 PSI
TS-11294	3" NPT x 3" NPT	CPVC	150°F	100 PSI
TS-10584	4" NPT	CPVC	150°F	100 PSI



Threaded Closures

Part Number	Opening	Material	Max. Temp.	Max. Pressure
LC-Q7006	1-1/4" NPSM	Polyglass	120°F	150 PSI
TS-2751-1	2-1/2"–8 NPSM	PVC	120°F	150 PSI
SM-CL258	2-1/2"–8 NPSM	PVC	120°F	150 PSI
LC-Q7004	2-1/2"–8 NPSM	ABS	120°F	120 PSI
SM-CL48	4"–8 UN	PVC	120°F	150 PSI
TS-4821-1	4"–8 UN	CPVC	150°F	150 PSI
LC-C610226	4"–8 UN	NORYL	150°F	150 PSI
SM-CL6	6"–8 UN	PVC	120°F	150 PSI
TS-2695-1	6"–8 UN	CPVC	150°F	150 PSI



Flanged Closures

Part Number	Opening	Material	Max. Temp.	Max. Pressure
TS-5259	4" ANSI	CPVC	150°F	150 PSI
TS-10472	4" ANSI	ACRYLIC	—	—
TS-10658	6" SNA	CPVC	150°F	120 PSI
TS-5296	6" SNA	NORYL	150°F	150 PSI
LC-C610224	6" SNA	NORYL	150°F	150 PSI

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

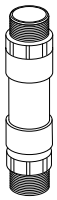
MEMBER Water Quality ASSOCIATION

FORM 1257
EFFECTIVE
JUNE 2023

TANK FITTINGS & ACCESSORIES

ADAPTERS, CLOSURES, CONNECTORS, VACUUM BREAKERS, AND WRENCHES

Flex Connector Assembly (NPT x NPT)



Part Number	Description	Max. Temperature	Max. Pressure
NI-5285	2" MNPT x 2" MNPT, 14" Overall Length	180°F	150 PSI
NI-5286	3" MNPT x 3" MNPT, 14" Overall Length	180°F	150 PSI
TS-5285	2" MNPT x 2" MNPT, 12" Overall Length	180°F	150 PSI
TS-5286	3" MNPT x 3" MNPT, 13" Overall Length	180°F	150 PSI

Straight Connector



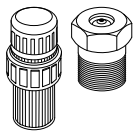
Part No.	Description
TS-5045	3" NPSM x 3" NPT (CPVC) 150 PSI / 150°F

Elbow Connector



Part No.	Description
TS-5201	2" NPSM x 2" Slip (CPVC) 150 PSI / 150°F

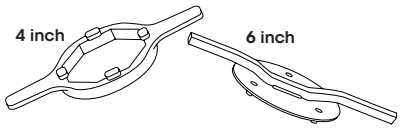
Vacuum Breakers



Part Number	Description	Max. Temperature	Max. Pressure
SM-VB-34SP-CPVC	3/4" Spigot, machined CPVC body	160°F	150 PSI
TS-10725	1" FNPT, molded glass-filled PP body	180°F	100 PSI
TS-10724	1-1/2" MNPT, machined PVC body	120°F	125 PSI
SM-VB4P	1-1/2" MNPT, machined PVC body	120°F	125 PSI
SM-VB4P-CPVC	1-1/2" MNPT, machined CPVC body	160°F	150 PSI
SM-VB4P-SPIG	1-1/2" Spigot, machined PVC body	120°F	125 PSI
SM-VB4P-CPVC-SPIG	1-1/2" Spigot, machined CPVC body	160°F	150 PSI

Wrenches

Part No.	Description
TS-6568-2	4" Closure (4825-1)
TS-7729	6" Closure (2695-1)



Brass Side Adapter



Part Number	Description	Max. Temperature	Max. Pressure
TS-1661	3/4" MNPT x 3/4" FNPT	150°F	150 PSI

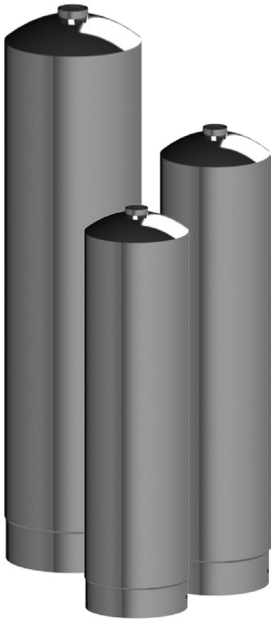
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1257
EFFECTIVE
JUNE 2023

Steel Tanks

STAINLESS STEEL TANKS



Stainless Steel Tanks *are produced to meet industry standards and can be used for filters, softeners, and deionization systems.*

Features

- Resistant to ultraviolet rays
- More durable than fiberglass, ABS, or poly tanks
- Adds no taste or odor to the water
- Clean, attractive look
- Ideal for hot water applications
- Long life (will not rust)
- Tank liner available
- 304 stainless steel construction (316 SS available)
- 100 psi maximum operating pressure
- Made in USA

Temperature Ratings

- Non-lined tanks are rated for below boiling point of water (varies based on elevation)
- Polymer alloy lined tanks are rated to 150°F (65.6°C)

Note: temperature rating of an assembly with SS tank may be limited by the mating parts

Part Number	Tank Size Inches	Top Opening	Capacity Cubic Feet 50% FB	Height Inches		Gauge		Weight Lbs.
				Overall	Shell	Head	Shell	
TA0815S20N	8 x 15	2.5"-8 NPSM	0.50	18	15.75	14	14	15
TA0836S20N	8 x 36	2.5"-8 NPSM	0.52	40	36	14	14	24
TA0848S20N	8 x 48	2.5"-8 NPSM	0.85	52	48	14	14	30
TA1015S20N	10 x 15	2.5"-8 NPSM	0.50	18	15.75	14	14	19
TA1036S20N	10 x 36	2.5"-8 NPSM	0.90	40	36	14	14	30
TA1040S20N	10 x 40	2.5"-8 NPSM	1.00	44	40	14	14	33
TA1048S20N	10 x 48	2.5"-8 NPSM	1.50	52	48	14	14	37
TA1048S20N125D*	10 x 48	2.5"-8 NPSM	1.50	52	48	14	14	37
TA1060S20N	10 x 60	2.5"-8 NPSM	2.00	65	60	14	14	45
TA1215S20N	12 x 15	2.5"-8 NPSM	0.50	18	15.75	14	14	19
TA1236S20N	12 x 36	2.5"-8 NPSM	1.50	40	36	14	14	43
TA1248S20N	12 x 48	2.5"-8 NPSM	1.70	52	48	14	14	53
TA1248S20N125D*	12 x 48	2.5"-8 NPSM	1.70	52	48	14	14	53
TA1440S20N	14 x 40	2.5"-8 NPSM	2.00	44	40	14	14	55
TA1448S20N	14 x 48	2.5"-8 NPSM	2.25	52	48	14	14	63
TA1460S20N	14 x 60	2.5"-8 NPSM	3.00	65	60	14	14	75
TA1460S20N125D*	14 x 60	2.5"-8 NPSM	3.00	65	60	14	14	75
TA1848S40N	18 x 48	4"-8 UN	4.00	52	48	12	12	117
TA1860S40N	18 x 60	4"-8 UN	5.00	65	60	12	12	138
TA2448S40N	24 x 48	4"-8 UN	6.00	52	48	12	12	198
TA2460S40N	24 x 60	4"-8 UN	8.00	65	60	12	12	198

* Includes dome hole port with plug.

Options: Polymer alloy liner for abrasive media backwashing (change N in part number to L — example: TA2460S40L).
316 stainless steel construction (add -316 to end of part number — example: TA2460S40N-316).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1544
EFFECTIVE
AUGUST 2025

COMPOSITE PRESSURE TANKS

FIBERGLASS WRAPPED & PP LINER



These are the first tanks on the market to feature a 100% polypropylene (PP) copolymer inner lining for all wetted materials. This makes it the perfect tank for drinking water applications, DI exchange, laboratory, and applications where chemical resistance is required. Call to ask about optional dome holes, bottom holes, custom lengths, and Cyclonic Distributor System™ availability.

FEATURES

- Inner shell is blow molded from engineering grade plastic (PP)
- Wound with continuous fiberglass to provide superior strength under pressure
- 150 psi maximum operating pressure
- 120°F maximum operating temperature
- Corrosion-free, made in the USA
- Certified to NSF/ANSI Standard 44
- 7 to 16 inch diameter tanks available with Cyclonic Distributor System™ (See Form 1319)
- 10 year warranty for tanks up to 13 inch in diameter, 5 year warranty for larger tanks

Part Number	Tank Size Inches	Top Opening	Base Style	Capacity		Height with Base Inch (mm)	Tank Net Wt. Lb (kg)	Carton Qty.
				Cu. Ft.	Gallon (Liter)			
NE0714C20*	7 x 14	2.5"-8 NPSM	Standard	0.24	1.8 (6.8)	14.6 (371)	4 (1.8)	50
NE0724C20*	7 x 24	2.5"-8 NPSM	Standard	0.45	3.4 (12.9)	23.6 (599)	5 (2.3)	24
NE0730C20*	7 x 30	2.5"-8 NPSM	Standard	0.59	4.4 (16.7)	30.4 (772)	5 (2.3)	24
NE0735C20*	7 x 35	2.5"-8 NPSM	Standard	0.67	5.0 (18.9)	34.9 (886)	6 (2.7)	24
NE0744C20*	7 x 44	2.5"-8 NPSM	Standard	0.87	6.5 (24.6)	44.2 (1123)	7 (3.2)	24
NE0818C20*	8 x 18	2.5"-8 NPSM	Standard	0.43	3.2 (12.1)	18.4 (467)	5 (2.3)	28
NE0824C20*	8 x 24	2.5"-8 NPSM	Standard	0.57	4.3 (16.3)	23.5 (597)	5 (2.3)	32
NE0830C20*	8 x 30	2.5"-8 NPSM	Standard	0.76	5.7 (21.6)	29.9 (759)	6 (2.7)	18
NE0835C20*	8 x 35	2.5"-8 NPSM	Standard	0.88	6.6 (25.0)	34.9 (886)	7 (3.2)	18
NE0840C20*	8 x 40	2.5"-8 NPSM	Standard	1.02	7.6 (28.8)	39.8 (1011)	8 (3.6)	18
NE0844C20*	8 x 44	2.5"-8 NPSM	Standard	1.14	8.5 (32.2)	44.2 (1123)	8 (3.6)	18
NE0918C20*	9 x 18	2.5"-8 NPSM	Standard	0.53	4.0 (15.1)	18.4 (470)	5 (2.3)	28
NE0935C20*	9 x 35	2.5"-8 NPSM	Standard	1.11	8.3 (31.4)	34.8 (884)	9 (4.1)	18
NE0940C20*	9 x 40	2.5"-8 NPSM	Standard	1.31	9.8 (37.1)	40.3 (1024)	9 (4.1)	14
NE0942C20*	9 x 42	2.5"-8 NPSM	Standard	1.38	10.3 (39.0)	42.3 (1074)	10 (4.5)	16
NE0948C20*	9 x 48	2.5"-8 NPSM	Standard	1.59	11.9 (45.0)	48.3 (1227)	11 (5.0)	16
NE1018C20*	10 x 18	2.5"-8 NPSM	Standard	0.64	4.8 (18.2)	18.5 (470)	6 (2.7)	24
NE1022C20*	10 x 22	2.5"-8 NPSM	Standard	0.79	5.9 (22.3)	22.0 (559)	7 (3.2)	16
NE1024C20*	10 x 24	2.5"-8 NPSM	Standard	0.88	6.6 (25.0)	23.7 (602)	7 (3.2)	16
NE1030C20*	10 x 30	2.5"-8 NPSM	Standard	1.15	8.6 (32.6)	30.0 (762)	9 (4.1)	12
NE1035C20*	10 x 35	2.5"-8 NPSM	Standard	1.38	10.3 (39.0)	35.0 (889)	10 (4.5)	12
NE1040C20*	10 x 40	2.5"-8 NPSM	Standard	1.62	12.1 (45.8)	40.6 (1031)	11 (5.0)	12
NE1044C20*	10 x 44	2.5"-8 NPSM	Standard	1.78	13.3 (50.3)	44.3 (1125)	12 (5.4)	12
NE1047C20*	10 x 47	2.5"-8 NPSM	Standard	1.90	14.2 (53.8)	47.2 (1199)	12 (5.4)	14
NE1054C20*	10 x 54	2.5"-8 NPSM	Standard	2.21	16.5 (62.5)	54.4 (1382)	14 (6.4)	16**
NE1060C20*	10 x 60	2.5"-8 NPSM	Standard	2.50	18.7 (70.8)	60.6 (1539)	15 (6.8)	1
NE1065C20*	10 x 65	2.5"-8 NPSM	Standard	2.69	20.1 (76.1)	65.1 (1654)	16 (7.3)	1
NE1229C20*	12 x 29	2.5"-8 NPSM	Standard	1.62	12.1 (45.8)	29.5 (749)	11 (5.0)	9
NE1229C40*	12 x 29	4"-8 UN [1]	Standard	1.62	12.1 (45.8)	29.5 (749)	11 (5.0)	9
NE1236C20*	12 x 36	2.5"-8 NPSM	Standard	2.02	15.1 (57.2)	36.3 (922)	13 (5.9)	9
NE1236C40*	12 x 36	4"-8 UN [1]	Standard	2.02	15.1 (57.2)	36.3 (922)	13 (5.9)	9
NE1236C50*-RB	12 x 36	4.5"-8 Buttress [1,2]	Standard	2.02	15.1 (57.2)	36.3 (922)	13 (5.9)	9

* Specify color: 'A'=Almond; 'B'=Blue; 'G'=Gray; 'K'=Black; 'N'=Natural. If not specified, SWT will supply Black or Natural.

** Tanks 50" or taller with extended base require single carton for shipment. 1. Top opening with machined threads. 2. Buttress with rubber bumper.

NOTE: Tanks purchased at less than carton quantity are subject to additional per tank charge. Contact SWT for details.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1300
EFFECTIVE
MAY 2025

COMPOSITE PRESSURE TANKS

FIBERGLASS WRAPPED & PP LINER

Part Number	Tank Size Inches	Top Opening	Base Style	Capacity		Height with Base Inch (mm)	Tank Net Wt. Lb (kg)	Carton Qty.
				Cu. Ft.	Gallon (Liter)			
NE1242C20*	12 x 42	2.5"-8 NPSM	Standard	2.41	18.0 (68.1)	42.4 (1077)	15 (6.8)	9
NE1242C40*	12 x 42	4"-8 UN [1]	Standard	2.41	18.0 (68.1)	42.4 (1077)	15 (6.8)	9
NE1242C50*-RB	12 x 42	4.5"-8 Buttress [1,2]	Standard	2.41	18.0 (68.1)	42.4 (1077)	15 (6.8)	9
NE1244C20*	12 x 44	2.5"-8 NPSM	Standard	2.53	18.9 (71.6)	44.5 (1130)	15 (6.8)	9
NE1244C40*	12 x 44	4"-8 UN [1]	Standard	2.53	18.9 (71.6)	44.5 (1130)	15 (6.8)	9
NE1248C20*	12 x 48	2.5"-8 NPSM	Standard	2.78	20.8 (78.7)	48.5 (1232)	16 (7.3)	9
NE1248C40*	12 x 48	4"-8 UN [1]	Standard	2.78	20.8 (78.7)	48.5 (1232)	16 (7.3)	9
NE1252C20*	12 x 52	2.5"-8 NPSM	Standard	3.06	22.9 (86.6)	52.8 (1341)	17 (7.7)	9**
NE1252C40*	12 x 52	4"-8 UN [1]	Standard	3.06	22.9 (86.6)	52.8 (1341)	17 (7.7)	9**
NE1252C50*-RB	12 x 52	4.5"-8 Buttress [1,2]	Standard	3.06	22.9 (86.6)	52.8 (1341)	17 (7.7)	9**
NE1330C20*	13 x 30	2.5"-8 NPSM	Standard	1.95	14.6 (55.3)	30.0 (762)	12 (5.4)	12
NE1335C20*	13 x 35	2.5"-8 NPSM	Standard	2.34	17.5 (66.2)	35.1 (892)	14 (6.4)	12
NE1344C20*	13 x 44	2.5"-8 NPSM	Standard	3.03	22.7 (85.9)	44.4 (1128)	18 (8.2)	9
NE1348C20*	13 x 48	2.5"-8 NPSM	Standard	3.33	24.9 (94.3)	48.3 (1227)	20 (9.1)	9
NE1354C20*	13 x 54	2.5"-8 NPSM	Standard	3.74	28.0 (106.0)	54.3 (1379)	22 (10.0)	9**
NE1360C20*	13 x 60	2.5"-8 NPSM	Standard	4.24	31.7 (120.0)	60.6 (1539)	25 (11.4)	1
NE1365C20*	13 x 65	2.5"-8 NPSM	Standard	4.59	34.3 (129.8)	65.1 (1654)	26 (11.8)	1
NE1430C20*	14 x 30	2.5"-8 NPSM	Standard	2.15	16.1 (60.8)	30.1 (765)	15 (6.8)	10
NE1430C40*	14 x 30	4"-8 UN [1]	Standard	2.15	16.1 (60.8)	30.1 (765)	15 (6.8)	10
NE1447C50*-RB	14 x 47	4.5"-8 Buttress [1,2]	Standard	3.65	27.3 (103.5)	47.9 (1216)	23 (10.5)	8
NE1454C20*	14 x 54	2.5"-8 NPSM	Standard	4.17	31.2 (118.1)	54.1 (1375)	25 (11.4)	8**
NE1454C40*	14 x 54	4"-8 UN [1]	Standard	4.17	31.2 (118.1)	54.1 (1375)	25 (11.4)	8**
NE1465C20*	14 x 65	2.5"-8 NPSM	Standard	5.10	38.1 (144.3)	65.1 (1654)	29 (13.2)	1
NE1465C40*	14 x 65	4"-8 UN [1]	Standard	5.10	38.1 (144.3)	65.1 (1654)	29 (13.2)	1
NE1465C50*-RB	14 x 65	4.5"-8 Buttress [1,2]	Standard	5.10	38.1 (144.3)	65.1 (1654)	29 (13.2)	1
NE1472C20*	14 x 72	2.5"-8 NPSM	Standard	5.69	42.6 (161.3)	72.1 (1832)	32 (14.5)	1
NE1472C40*	14 x 72	4"-8 UN [1]	Standard	5.69	42.6 (161.3)	72.1 (1832)	32 (14.5)	1
NE1623C20*	16 x 23	2.5"-8 NPSM	Standard	2.06	15.4 (58.3)	23.1 (587)	17 (7.7)	1
NE1628C20*	16 x 28	2.5"-8 NPSM	Standard	2.61	19.5 (73.8)	28.0 (711)	19 (8.6)	1
NE1636C20*	16 x 36	2.5"-8 NPSM	Standard	3.62	27.1 (102.6)	36.5 (927)	21 (9.5)	1
NE1636C40*	16 x 36	4"-8 UN [1]	Standard	3.62	27.1 (102.6)	36.5 (927)	21 (9.5)	1
NE1644C20*	16 x 44	2.5"-8 NPSM	Standard	4.53	33.9 (128.3)	44.2 (1124)	25 (11.4)	1
NE1644C40*	16 x 44	4"-8 UN [1]	Standard	4.53	33.9 (128.3)	44.2 (1124)	25 (11.4)	1
NE1653C20*	16 x 53	2.5"-8 NPSM	Standard	5.57	41.7 (157.9)	53.3 (1353)	30 (13.6)	1
NE1653C40*	16 x 53	4"-8 UN [1]	Standard	5.57	41.7 (157.9)	53.3 (1353)	30 (13.6)	1
NE1665C20*	16 x 65	2.5"-8 NPSM	Standard	6.91	51.7 (195.7)	64.7 (1643)	33 (15.0)	1
NE1665C40*	16 x 65	4"-8 UN [1]	Standard	6.91	51.7 (195.7)	64.7 (1643)	33 (15.0)	1
NE2162C40*	21 x 62	4"-8 UN SS	Standard	11.23	84.0 (318.0)	67.0 (1702)	101 (45.8)	1
NE2472C40*	24 x 72	4"-8 UN SS	Standard	15.37	115.0 (435.3)	73.1 (1857)	125 (56.7)	1

* Specify color: 'A'=Almond; 'B'=Blue; 'G'=Gray; 'K'=Black; 'N'=Natural. If not specified, SWT will supply Black or Natural.

** Tanks 50 inches or taller with extended base require single carton for shipment.

1. Top opening with machined threads.
2. Buttress with rubber bumper.

NOTE: Tanks purchased at less than carton quantity are subject to additional per tank charge. Contact SWT for details.

Extended Base: Available for 7 to 16 inch diameter tanks. **Super-Extended Base:** Available for 14 and 16 inch diameter tanks.
Base for DI Exchange Tanks: Poly-base available for 8, 9, and 10 inch diameter tanks; Rubber-like base available for 12 and 14 inch diameter tanks.
Bottom Opening: 2.5 inch NPSM available for 7 to 16 inch diameter tanks; 4 inch UN available for 12, 14, and 16 inch diameter tanks.
1.25 inch Dome Hole with Closure: Available for 10, 12, and 13 inch diameter tanks. **Bumper Band:** Available for 7 to 14 inch diameter tanks.

Dome hole option not available for 12 inch diameter tanks with 4 inch inlet.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

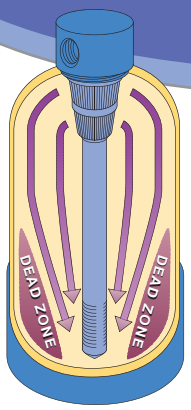
MEMBER Water Quality ASSOCIATION

FORM 1300
EFFECTIVE
MAY 2025

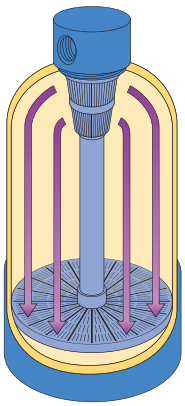
Give it a whirl!



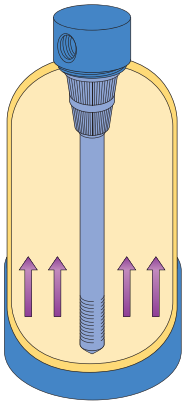
Introducing the REVOLUTIONARY New CYCLONIC DISTRIBUTOR SYSTEM™



Standard Service
leaves 'dead zones' of unused media in the bed and promotes channeling.

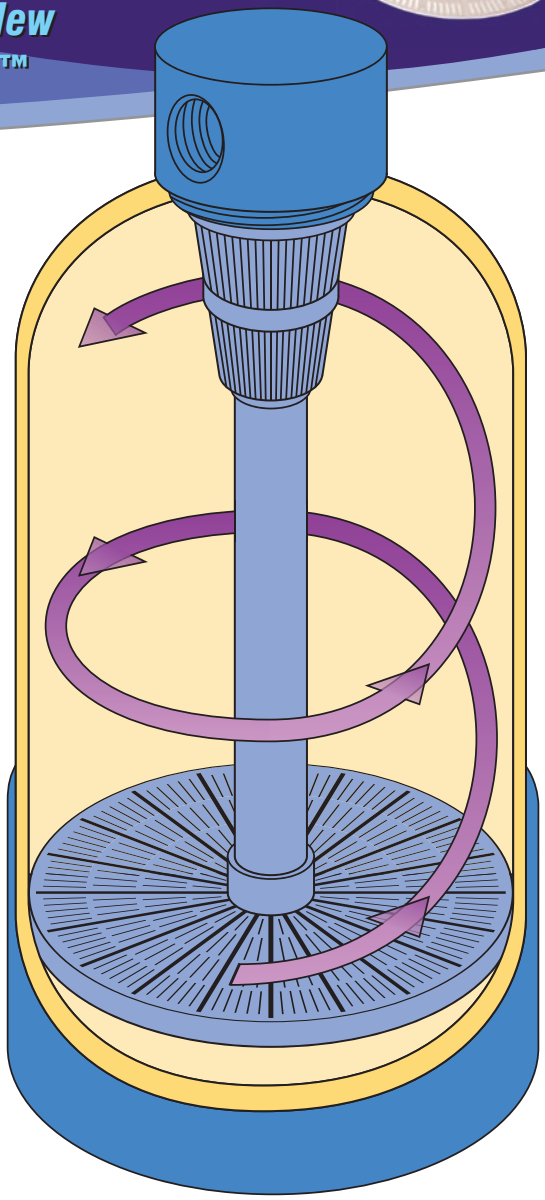


Cyclonic Service
utilizes the entire media bed.



Standard Backwash
lifts the bed.

Cyclonic Backwash
utilizes angled plate slots to expand the full bed and swirl the media; resulting in a more vigorous and effective cleaning of the entire media bed.





Available for 7 – 16 inch diameter tanks; Adapters for 1, 1.25, and 2 inch valves.



Now used in SWT MetalEase, FilterEase, Tannin, & Chloramine filtration systems.

- Up to 30% less backwash flow rate is required...conserving water for the customer
- Distributor plate is designed for more than 6,500 lbs load capacity
- Reduces system pressure loss while increasing flow and efficiency through the bed

SAFE WATER TECHNOLOGIES
996 Bluff City Blvd.
Elgin, IL 60120 USA
847-888-6900
info@swtwater.com
www.swtwater.com

Residential composite vessels containing SWT's Cyclonic Distributor System™ (CDS), an innovative internal bottom plate distribution system, provide significant advantages over standard tanks — from the elimination of gravel underbedding (reducing overall cost and shipping weight) to the permanent attachment of the riser tube and distribution plate (eliminating re-bedding when servicing the valve). This environmentally friendly design offers the most efficient service and backwashing characteristics available — reducing the amount of water to drain in backwash, while increasing the overall filtration capacity of a system.

DISTRIBUTION SYSTEMS

CYCLONIC DISTRIBUTOR SYSTEMS™



*The **Cyclonic Distributor System** (CDS) is an innovative vessel technology providing higher flow rates, less pressure loss, improved treatment capacity, product flexibility, and water conservation. Simply put—smart technology. The CDS creates uniform water distribution in both service and regeneration flow paths to better utilize media surface area and depth, which extends the contaminant removal capacity of the media and subsequently requires less regeneration. Mid plates are also available to compartmentalize several different media in a single vessel—eliminating the need for multiple tank systems, reducing system costs, and providing easier installations and servicability.*

Benefits

- Conserves water
- Softeners require less salt
- 30% less backwashing
- Increased resin capacity of 10 to 15% compared to standard basket distribution systems
- Eliminates rebedding when servicing the valve
- 100% corrosion free
- Reduces environmental impact
- Creates cleaner, more efficient water treatment systems

Cyclonic Distributor System Bottom Plates
Bottom Plate for 7 to 8 inch Diameter Tanks
Bottom Plate for 9 to 13 inch Diameter Tanks
Bottom Plate for 14 inch Diameter Tanks
Bottom Plate for 16 inch Diameter Tanks

Cyclonic Distributor System Bottom Plate Riser Tube Adapters *
1.050 Adapter for 1 inch Valves
1.050 Adapter for 1 inch Valves (for Bottom Opening Stacked Tank Systems)
32mm Adapter for 32mm Valves
1.315 Adapter for 1.25 inch Valves
2.375 Adapter for 2 inch Valves and 16 inch CDS

Cyclonic Distributor System Mid Plates **
One (1) Mid Plate for 10 & 13 inch Diameter Tanks
Two (2) Mid Plates for 10 & 13 inch Diameter Tanks
Three (3) Mid Plates for 10 & 13 inch Diameter Tanks (No Bottom Plate, only available with Dual Inlet Bottom Opening Vessels)
Four (4) Mid Plates for 10 & 13 inch Diameter Tanks (No Bottom Plate, only available with Dual Inlet Bottom Opening Vessels)

Cyclonic Distributor System Mid Plate Riser Tube Adapters *
1.050 Adapter for 1 inch Valves (for upper plate location of One Mid Plate Systems)
1.315 Adapter for 1.25 inch Valves (for upper plate location of One Mid Plate Systems)
1.050 Adapter for 1 inch Valves (for lower plate location of Two Mid Plate Systems)
1.315 Adapter for 1.25 inch Valves (for lower plate location of Two Mid Plate Systems)

Cyclonic Distributor System Mid Plate Accessories
Mid Plate Fill Tube Assembly
Mid Plate Center Adapter Installation and Removal Tool
Mid Plate Media Removal Tool

* Quantities of 100 per box.

** Only available on 10 & 13 inch diameter tanks. Bottom Plate required except for Dual Inlet Vessels.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1319
EFFECTIVE
APRIL 2011

COMPOSITE PRESSURE TANKS

FIBERGLASS WRAPPED & PE LINER



Features:

- Inner shell constructed of high molecular weight polyethylene
- Wound with continuous fiberglass to provide superior strength under pressure
- 100% corrosion-free
- Made in the USA
- Temperature/Pressure Rating:
  — Threaded tanks 120°F @ 150 psi
  — Flanged tanks 150°F @ 150 psi
- NSF Certified: Std 44 (6 -16"); Std 61 (18 - 63")
- Available in almond, black, gray, natural (blue is discontinued)
- Private labeling available

Warranty:

Polyglass™ pressure vessels are warranted to be free of manufacturing and material defects for a period of 10 years if operated within specifications in residential (up to 13 inch diameter) water treatment applications. Commercial and industrial sizes (above 13 inch diameters) are warranted for a period of 5 years. Warranty coverage excludes freezing, vacuum, corrosive materials exposure.

Part Number	Tank Size Inches	Top Opening	Dome Hole	Base Style	Volume		Height w/ Base Inch (mm)	Case Qty / Multi Qty **
					Cu.Ft.	Gallon (Liter)		
TS0613C20*	6 x 13	2.5"-8 NPSM	—	Standard	0.15	1.1 (4.2)	13.4 (340)	99 / 9
TS0618C20*	6 x 18	2.5"-8 NPSM	—	Standard	0.24	1.8 (6.8)	18.8 (479)	66 / 9
TS0635C20*	6 x 35	2.5"-8 NPSM	—	Standard	0.51	3.8 (14.4)	35.7 (906)	33 / 9
TS0735C20*	7 x 35	2.5"-8 NPSM	—	Standard	0.70	5.2 (19.7)	35.4 (898)	24 / 9
TS0744C20*	7 x 44	2.5"-8 NPSM	—	Standard	0.90	6.7 (25.4)	44.0 (1120)	24 / 9
TS0818C20*	8 x 18	2.5"-8 NPSM	—	Standard	0.44	3.3 (12.5)	18.7 (475)	36 / 4
TS0824C20*	8 x 24	2.5"-8 NPSM	—	Standard	0.60	4.5 (17.0)	24.4 (620)	18 / 4
TS0830C20*	8 x 30	2.5"-8 NPSM	—	Standard	0.79	5.9 (22.3)	30.3 (770)	18 / 4
TS0835C20*	8 x 35	2.5"-8 NPSM	—	Standard	0.88	6.6 (25.0)	35.4 (899)	18 / 4
TS0840C20*	8 x 40	2.5"-8 NPSM	—	Standard	1.04	7.8 (29.5)	40.1 (1018)	18 / 4
TS0844C20*	8 x 44	2.5"-8 NPSM	—	Standard	1.16	8.7 (32.9)	44.5 (1130)	18 / 4
TS0918C20*	9 x 18	2.5"-8 NPSM	—	Standard	0.52	3.9 (14.8)	18.4 (467)	28 / 4
TS0935C20*	9 x 35	2.5"-8 NPSM	—	Standard	1.11	8.3 (31.4)	35.3 (896)	14 / 4
TS0940C20*	9 x 40	2.5"-8 NPSM	—	Standard	1.27	9.5 (36.0)	39.8 (1010)	14 / 4
TS0942C20*	9 x 42	2.5"-8 NPSM	—	Standard	1.46	10.1 (38.2)	41.9 (1063)	14 / 9
TS0948C20*	9 x 48	2.5"-8 NPSM	—	Standard	1.58	11.8 (44.7)	48.7 (1237)	16 / 4
TS1018C20*	10 x 18	2.5"-8 NPSM	—	Standard	0.65	4.9 (18.5)	18.9 (480)	24 / 4
TS1035C20*	10 x 35	2.5"-8 NPSM	—	Standard	1.36	10.2 (38.6)	35.5 (902)	12 / 4
TS1040C20*	10 x 40	2.5"-8 NPSM	—	Standard	1.54	11.5 (43.5)	40.3 (1024)	12 / 4
TS1044C20*	10 x 44	2.5"-8 NPSM	—	Standard	1.75	13.1 (49.6)	44.6 (1134)	12 / 4
TS1044C2013D*	10 x 44	2.5"-8 NPSM	1.25" NPSM	Standard	1.75	13.1 (49.6)	44.9 (1142)	12 / 4
TS1047C20*	10 x 47	2.5"-8 NPSM	—	Standard	2.02	15.1 (57.2)	47.7 (1211)	14 / 4
TS1054C20*	10 x 54	2.5"-8 NPSM	—	Standard	2.19	16.4 (62.1)	54.4 (1383)	16 / 4
TS1054C2013D*	10 x 54	2.5"-8 NPSM	1.25" NPSM	Standard	2.19	16.4 (62.1)	54.4 (1383)	16 / 4
TS1060C20*	10 x 60	2.5"-8 NPSM	—	Standard	2.45	18.3 (69.3)	61.3 (1558)	20 / 4
TS1242C20*	12 x 42	2.5"-8 NPSM	—	Standard	2.60	19.1 (72.3)	43.0 (1093)	NA / NA
TS1242C50*	12 x 42	4.5"-8 Buttress	—	Standard	2.60	19.1 (72.3)	43.0 (1093)	NA / NA
TS1248C20*	12 x 48	2.5"-8 NPSM	—	Standard	2.75	20.6 (78.0)	49.0 (1245)	9 / NA
TS1248C2013D*	12 x 48	2.5"-8 NPSM	1.25" NPSM	Standard	2.75	20.6 (78.0)	49.0 (1245)	9 / NA
TS1248C40*	12 x 48	4"-8 UN	—	Standard	2.75	20.6 (78.0)	49.9 (1245)	9 / NA
TS1252C20*	12 x 52	2.5"-8 NPSM	—	Standard	2.97	22.2 (84.0)	53.0 (1346)	9 / NA
TS1252C2013D*	12 x 52	2.5"-8 NPSM	1.25" NPSM	Standard	2.97	22.2 (84.0)	53.0 (1346)	9 / NA
TS1252C40*	12 x 52	4"-8 UN	—	Standard	2.97	22.2 (84.0)	53.4 (1356)	9 / NA
TS1252C50*	12 x 52	4.5"-8 Buttress	—	Standard	2.97	22.2 (84.0)	53.1 (1350)	9 / NA
TS1354C20*	13 x 54	2.5"-8 NPSM	—	Standard	3.68	27.5 (104.0)	54.3 (1380)	9 / NA
TS1354C2013D*	13 x 54	2.5"-8 NPSM	1.25" NPSM	Standard	3.68	27.5 (104.0)	54.3 (1380)	9 / NA
TS1354C40*	13 x 54	4"-8 UN	—	Standard	3.68	27.5 (104.0)	54.9 (1394)	9 / NA
TS1447C20*	14 x 47	2.5"-8 NPSM	—	Standard	3.68	27.5 (104.0)	46.5 (1181)	6 / NA
TS1447C40*	14 x 47	4"-8 UN	—	Standard	3.68	27.5 (104.0)	47.0 (1195)	6 / NA
TS1447C50*	14 x 47	4.5"-8 Buttress	—	Standard	3.68	27.5 (104.0)	47.3 (1200)	6 / NA
TS1454C20*	14 x 54	2.5"-8 NPSM	—	Standard	4.40	32.8 (124.2)	54.7 (1388)	6 / NA
TS1465C20*	14 x 65	2.5"-8 NPSM	—	Standard	5.10	38.2 (144.4)	66.1 (1679)	9 / NA
TS1465C40*	14 x 65	4"-8 UN	—	Standard	5.10	38.2 (144.4)	66.1 (1679)	9 / NA
TS1633C40*	16 x 33	4"-8 UN	—	Standard	3.00	22.4 (85.0)	34.8 (885)	NA / NA
TS1653C40*	16 x 53	4"-8 UN	—	Standard	5.30	39.6 (150.0)	55.0 (1397)	NA / NA
TS1665C20*	16 x 65	2.5"-8 NPSM	—	Standard	6.55	49.0 (185.5)	64.6 (1641)	9 / NA
TS1665C40*	16 x 65	4"-8 UN	—	Standard	6.55	49.0 (185.5)	66.2 (1682)	9 / NA

* Specify color: 'A'=Almond; 'G'=Gray; 'K'=Black; 'N'=Natural. If not specified, SWT will supply Black or Natural.

** Multi-pack and single-pack available at additional cost.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1290
EFFECTIVE
OCTOBER 2024

COMPOSITE PRESSURE TANKS

FIBERGLASS WRAPPED & PE LINER

Part Number	Tank Size Inches	Top Opening	Bottom Opening	Top & Bottom Side Openings	Base Style	Volume		Heoght w/ Base Inch (mm)	Weight Lb
						Cu.Ft.	Gallon (Liter)		
TS1665C44*T	16 x 65	4"-8 UN	4"-8 UN	—	Tripod	6.6	49 (185)	78.8 (2002)	—
TS1865C40*	18 x 65	4"-8 UN	—	—	Skirt	8.6	64 (242)	66.3 (1683)	67
TS1865C44*T	18 x 65	4"-8 UN	4"-8 UN	—	Tripod	8.6	64 (242)	73.1 (1858)	67
TS1865C60*	18 x 65	6" SNA Flange	—	—	Skirt	8.3	62 (235)	84.1 (2137)	92
TS1865C66*T	18 x 65	6" SNA Flange	6" SNA Flange	—	Tripod	8.3	62 (235)	84.1 (2137)	92
TS2136C40*	21 x 36	4"-8 UN	—	—	Skirt or Ext	6.1	46 (173)	41.7 (1059)	46
TS2136C44*T	21 x 36	4"-8 UN	4"-8 UN	—	Tripod	6.1	46 (173)	47.5 (1205)	53
TS2162C40*	21 x 62	4"-8 UN	—	—	Skirt	11.2	84 (318)	67.0 (1702)	95
TS2162C44*	21 x 62	4"-8 UN	4"-8 UN	—	Skirt, Ext, or Tri	11.2	84 (318)	72.8 (1848)	95
TS2162C60*	21 x 62	6" SNA Flange	—	—	Skirt	11.2	84 (318)	67.0 (1702)	95
TS2162C66*T	21 x 62	6" SNA Flange	6" SNA Flange	—	Tripod	11.2	84 (318)	72.8 (1848)	95
TS2438C40*	24 x 38	4"-8 UN	—	—	Skirt	8.2	61 (231)	42.6 (1081)	65
TS2438C44*	24 x 38	4"-8 UN	4"-8 UN	—	Ext or Tripod	8.2	61 (231)	42.6 (1081)	65
TS2438C66*T	24 x 38	6" SNA Flange	6" SNA Flange	—	Tripod	8.2	61 (231)	42.6 (1081)	65
TS2450C40*	24 x 50	4"-8 UN	—	—	Skirt	11.2	84 (317)	55.6 (1412)	90
TS2450C44*T	24 x 50	4"-8 UN	4"-8 UN	—	Tripod	11.2	84 (317)	63.0 (1601)	90
TS2465C40*	24 x 65	4"-8 UN	—	—	Skirt	13.4	100 (379)	65.2 (1655)	109
TS2465C44*	24 x 65	4"-8 UN	4"-8 UN	—	Ext or Tripod	13.4	100 (379)	70.1 (1781)	115
TS2465C60*	24 x 65	6" SNA Flange	—	—	Skirt	13.4	100 (379)	65.0 (1651)	114
TS2465C66*T	24 x 65	6" SNA Flange	6" SNA Flange	—	Tripod	13.4	100 (379)	79.0 (2007)	114
TS2472C40*	24 x 72	4"-8 UN	—	—	Skirt, Ext, or Tri	15.8	118 (447)	74.7 (1897)	109
TS2472C44*	24 x 72	4"-8 UN	4"-8 UN	—	Skirt, Ext, or Tri	15.8	118 (447)	80.4 (2043)	124
TS2472C77*E	24 x 72	6"-8 UN	6"-8 UN	—	Extended	15.8	118 (447)	80.4 (2043)	124
TS2472C60*	24 x 72	6" SNA Flange	—	—	Skirt or Ext	15.8	118 (447)	77.0 (1956)	137
TS2472C66*	24 x 72	6" SNA Flange	6" SNA Flange	—	Ext or Tripod	15.8	118 (447)	88.5 (2248)	137
TS3060C60*E	30 x 60	6" SNA Flange	—	—	Extended	20.2	151 (572)	71.6 (1819)	195
TS3060C66*T	30 x 60	6" SNA Flange	6" SNA Flange	—	Tripod	20.2	151 (572)	82.5 (2096)	211
TS3072C40*E	30 x 72	4"-8 UN	—	—	Extended	25.0	187 (708)	78.9 (2004)	198
TS3072C44*	30 x 72	4"-8 UN	4"-8 UN	—	Ext or Tripod	25.0	187 (708)	77.2 (1961)	198
TS3072C70*E	30 x 72	6"-8 UN	—	—	Extended	25.0	187 (708)	78.9 (2004)	198
TS3072C77*E	30 x 72	6"-8 UN	6"-8 UN	—	Extended	25.0	187 (708)	78.9 (2004)	198
TS3072C60*E	30 x 72	6" SNA Flange	—	—	Extended	25.0	187 (708)	83.7 (2126)	195
TS3072C66*T	30 x 72	6" SNA Flange	6" SNA Flange	—	Tripod	25.0	187 (708)	88.9 (2258)	211
TS3636C66*T	36 x 36	6" SNA Flange	6" SNA Flange	—	Tripod	15.8	118 (447)	55.3 (1403)	148
TS3657C60*E	36 x 57	6" SNA Flange	—	—	Extended	27.4	205 (776)	68.0 (1727)	225
TS3657C66*T	36 x 57	6" SNA Flange	6" SNA Flange	—	Tripod	27.4	205 (776)	77.3 (1962)	225
TS3672C40*E	36 x 72	4"-8 UN	—	—	Extended	35.2	264 (999)	80.5 (2045)	264
TS3672C44*	36 x 72	4"-8 UN	4"-8 UN	—	Ext or Tripod	35.2	264 (999)	80.5 (2045)	285
TS3672C70*E	36 x 72	4"-8 UN	—	—	Extended	35.2	264 (999)	80.5 (2045)	285
TS3672C60*	36 x 72	6" SNA Flange	—	—	Ext or Tripod	35.2	264 (999)	83.0 (2108)	285
TS3672C66*T	36 x 72	6" SNA Flange	6" SNA Flange	—	Tripod	35.2	264 (999)	90.4 (2296)	285
TS3672C6644*T	36 x 72	6" SNA Flange	6" SNA Flange	4" ANSI Flange	Tripod	35.2	264 (999)	89.6 (2275)	292
TS4272C60*	42 x 72	6" SNA Flange	—	—	Skirt or Tripod	46.1	345 (1306)	72.5 (1842)	370
TS4272C66*T	42 x 72	6" SNA Flange	6" SNA Flange	—	Tripod	46.1	345 (1306)	90.1 (2289)	400
TS4272C6644*T	42 x 72	6" SNA Flange	6" SNA Flange	4" ANSI Flange	Tripod	46.1	345 (1306)	94.6 (2403)	415
TS4872C60*	48 x 72	6" SNA Flange	—	—	Skirt or Tripod	61.9	463 (1753)	81.5 (2071)	494
TS4872C66*T	48 x 72	6" SNA Flange	6" SNA Flange	—	Tripod	61.9	463 (1753)	92.9 (2360)	494
TS4872C6644*T	48 x 72	6" SNA Flange	6" SNA Flange	4" ANSI Flange	Tripod	61.9	463 (1753)	96.8 (2458)	504
TS6367C66*T	63 x 67	6" SNA Flange	6" SNA Flange	—	Tripod	80.2	600 (2271)	81.4 (2068)	680
TS6367CM6*T	63 x 67	16" SNA Manway	6" SNA Flange	—	Tripod	80.2	600 (2271)	81.4 (2068)	680
TS6386C66*T	63 x 86	6" SNA Flange	6" SNA Flange	—	Tripod	120.3	900 (3407)	98.5 (2503)	950
TS6386C6644*T	63 x 86	16" SNA Manway	6" SNA Flange	—	Tripod	120.3	900 (3407)	99.0 (2515)	950
TS6386CM6*T	63 x 86	16" SNA Manway	6" SNA Flange	4" ANSI Flange	Tripod	120.3	900 (3407)	99.0 (2515)	950
TS63116CM6*T	63 x 116	16" SNA Manway	6" SNA Flange	—	Tripod	167.0	1250 (4732)	130.0 (3302)	1190
TS63116CM644*T	63 x 116	16" SNA Manway	6" SNA Flange	4" ANSI Flange	Tripod	167.0	1250 (4732)	130.0 (3302)	1190
TS63144CM6*T	63 x 144	16" SNA Manway	6" SNA Flange	—	Tripod	214.0	1600 (6057)	157.9 (4012)	1398
TS63144CM644*T	63 x 144	16" SNA Manway	6" SNA Flange	4" ANSI Flange	Tripod	214.0	1600 (6057)	157.9 (4012)	1398

* Specify color: 'A'=Almond; 'G'=Gray; 'K'=Black; 'N'=Natural. If not specified, SWT will supply Black or Natural.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1290
EFFECTIVE
OCTOBER 2024

Composite Pressure Tanks

ASME CODED FIBERGLASS WRAPPED & PE LINER



Features:

- Inner shell constructed of high molecular weight polyethylene
- Wound with continuous fiberglass to provide superior strength under pressure
- 100% corrosion-free
- Made in the USA
- Temperature/Pressure Rating: Flanged tanks 150°F @ 150 psi
- Certified to NSF/ANSI Standard 61 for material and structural integrity requirements.
- Available in almond, blue, black, gray, natural
- Private labeling available

Warranty:

Warranted to be free of manufacturing and material defects for a period of 5 years. Warranty coverage excludes freezing, vacuum, corrosive materials exposure.

Part Number	Tank Size Inches	Top Opening	Bottom Opening	Top & Bottom Side Openings	Base Style	Capacity Gallons (Liters)	Volume Cu.Ft.	Weight Lb
TS1865C60*-ASME	18 x 65	6" SNA Flange	—	—	Skirt	62 (234)	8.3	92
TS1865C66*T-ASME	18 x 65	6" SNA Flange	6" SNA Flange	—	Tripod	62 (234)	8.3	92
TS2162C60*-ASME	21 x 62	6" SNA Flange	—	—	Skirt	84 (318)	11.0	95
TS2162C66*T-ASME	21 x 62	6" SNA Flange	6" SNA Flange	—	Tripod	84 (318)	11.0	95
TS2438C66*T-ASME	24 x 38	6" SNA Flange	6" SNA Flange	—	Tripod	61 (231)	8.2	65
TS2465C60*-ASME	24 x 65	6" SNA Flange	—	—	Skirt	100 (378)	13.4	114
TS2465C66*T-ASME	24 x 65	6" SNA Flange	6" SNA Flange	—	Tripod	100 (378)	13.4	114
TS2472C60*-ASME	24 x 72	6" SNA Flange	—	—	Skirt	118 (451)	15.8	137
TS2472C66*T-ASME	24 x 72	6" SNA Flange	6" SNA Flange	—	Tripod	118 (451)	15.8	137
TS3072C60*E-ASME	30 x 72	6" SNA Flange	—	—	Extended	187 (708)	25.0	195
TS3072C66*T-ASME	30 x 72	6" SNA Flange	6" SNA Flange	—	Tripod	187 (708)	25.0	211
TS3657C60*E-ASME	36 x 57	6" SNA Flange	—	—	Extended	205 (776)	27.4	225
TS3657C66*T-ASME	36 x 57	6" SNA Flange	6" SNA Flange	—	Tripod	205 (776)	27.4	225
TS3672C60*E-ASME	36 x 72	6" SNA Flange	—	—	Extended	264 (999)	35.2	285
TS3672C66*T-ASME	36 x 72	6" SNA Flange	6" SNA Flange	—	Tripod	264 (999)	35.2	285
TS3672C6644*T-ASME	36 x 72	6" SNA Flange	6" SNA Flange	4" ANSI Flange	Tripod	264 (999)	35.2	292
TS4272C60*-ASME	42 x 72	6" SNA Flange	—	—	Skirt	345 (1306)	46.1	370
TS4272C66*T-ASME	42 x 72	6" SNA Flange	6" SNA Flange	—	Tripod	345 (1306)	46.1	400
TS4872C60*-ASME	48 x 72	6" SNA Flange	—	—	Skirt	463 (1753)	61.9	494
TS4872C66*T-ASME	48 x 72	6" SNA Flange	6" SNA Flange	—	Tripod	463 (1753)	61.9	494
TS4872C6644*T-ASME	48 x 72	6" SNA Flange	6" SNA Flange	4" ANSI Flange	Tripod	463 (1753)	61.9	504
TS6367C66*T-ASME	63 x 67	6" SNA Flange	6" SNA Flange	—	Tripod	600 (2271)	80.2	494
TS6367CM6*T-ASME	63 x 67	16" SNA Manway	6" SNA Flange	—	Tripod	600 (2271)	80.2	494
TS6386C66*T-ASME	63 x 86	6" SNA Flange	6" SNA Flange	—	Tripod	900 (3407)	120.3	950
TS6386C6644*T-ASME	63 x 86	6" SNA Flange	6" SNA Flange	4" ANSI Flange	Tripod	900 (3407)	120.3	950
TS6386CM6*T-ASME	63 x 86	16" SNA Manway	6" SNA Flange	—	Tripod	900 (3407)	120.3	950
TS63116CM6*T-ASME	63 x 116	16" SNA Manway	6" SNA Flange	—	Tripod	1250 (4732)	167.0	1190
TS63116CM644*T-ASME	63 x 116	16" SNA Manway	6" SNA Flange	4" ANSI Flange	Tripod	1250 (4732)	167.0	1190
TS63144CM6*T-ASME	63 x 144	16" SNA Manway	6" SNA Flange	—	Tripod	1600 (6057)	214.0	1398
TS63144CM644*T-ASME	63 x 144	16" SNA Manway	6" SNA Flange	4" ANSI Flange	Tripod	1600 (6057)	214.0	1398

* Specify color: 'A'=Almond; 'B'=Blue; 'G'=Gray; 'K'=Black; 'N'=Natural. If not specified, SWT will supply Black or Natural.

Tank Design Parameters:

Safety factor: 4:1
Minimum burst at 600 psi
Tested to 250,000 cycles without leakage

NSF Design Parameters:

Safety factor: 4:1
Minimum burst at 600 psi
Tested to 100,000 cycles without leakage

ASME Design Parameters:

Top/Bottom Flange
Safety factor: 5:1
Minimum burst at 750 psi
Tested to 33,000 cycles without leakage

Side Flange
Safety factor: 6:1
Minimum burst at 900 psi
Tested to 100,000 cycles without leakage

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1400
EFFECTIVE
OCTOBER 2024

Composite Pressure Tanks

LOW PROFILE FIBERGLASS WRAPPED & PE LINER



Low Profile Composite Pressure Tanks are the smart choice when space is a challenge and performance is a priority. These tanks feature a lower profile tank design with a 2 inch reduction to the top and bottom flanges, allowing the tanks to fit in tighter spaces without compromising media capacity. Their lightweight, fiberglass construction provides durability in harsh chemical environments.

Made in the USA.

Operating Parameters

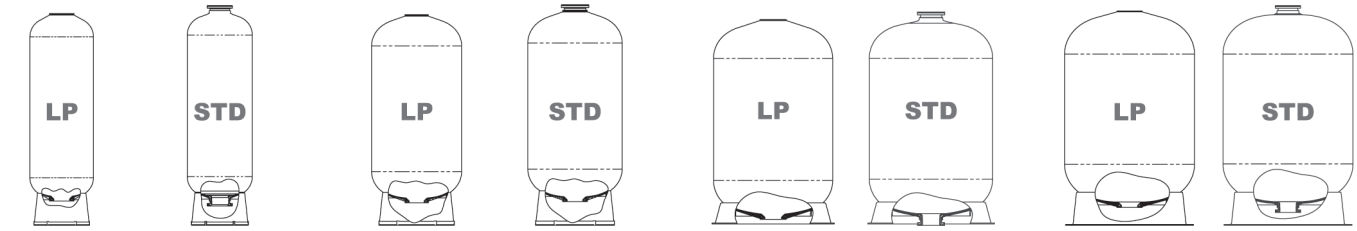
- 150 psi maximum operating pressure
- 150ºF maximum operating temperature

Certified to NSF Std. 61 for Material Safety Section 8 and NSF Std. 372 for Low Lead Compliance.

Features

- Reduced tank height and improved flange-to-floor clearance makes pipe connections easier to reach
- No-thread seal design simplifies installation, provides better sealing surface and reduces risk of leaking
- Pad flange with 6 inch SNA bolt pattern (non-ANSI bolt pattern)
- Quick access to internals through large, 6 inch flange opening
- Inner shell constructed of high molecular weight polyethylene
- Wound with continuous fiberglass to provide superior strength under pressure
- 100% corrosion-free
- Five year warranty

Tank Height and Flange Clearance Comparison — Low Profile (LP) vs Standard (STD) Flange



Part Number	Tank Size Inches	Base Style	System Connections		Height		Capacity		
			Top	Bottom	Inches	Millimeters	Gallons	Liters	Cu.Ft.
TS2472C66N-LP	24 x 72	Ext	6" Flange	6" Flange	79.6	2,021.8	118	447	15.8
TS2472C66NT-LP	24 x 72	Tripod	6" Flange	6" Flange	86.4	2,194.5	118	447	15.8
TS3672C66N-LP	36 x 72	Ext	6" Flange	6" Flange	80.1	2,034.5	264	999	35.2
TS3672C66NT-LP	36 x 72	Tripod	6" Flange	6" Flange	87.5	2,222.5	264	999	35.2
TS4272C66N-LP	42 x 72	Ext	6" Flange	6" Flange	70.5	1,790.7	345	1,306	46.1
TS4872C66N-LP	48 x 72	Ext	6" Flange	6" Flange	78.6	1,996.4	463	1,753	61.9
TS4872C66NT-LP	48 x 72	Tripod	6" Flange	6" Flange	89.9	2,283.4	463	1,753	61.9

NOTE: Only available in Natural color.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1401
EFFECTIVE
FEBRUARY 2020

COMPOSITE PRESSURE TANKS

FIBERGLASS WRAPPED & HDPE LINER



Features:

- Continuous, seamless, inner liner constructed of high density polyethylene (HDPE)
- Wound with continuous fiberglass to provide superior strength under pressure
- Threaded inlet constructed of glass filled polypropylene for higher strength and pressure capabilities
- Tested and Certified by NSF International against NSF/ANSI 44 for material and structural integrity requirements and NSF/ANSI/CAN Standard 61 for material requirements. Certified to NSF/ANSI 372.
- 150 psi maximum operating pressure
- 120°F (50°F) maximum operating temperature
- 10 year warranty for tanks up to 13 inch in diameter; 5 year warranty for larger tanks
- 4:1 Safety Factor (600 psi minimum burst). Tested to 100,000 cycles / 0-150 psi
- Made in USA

Part Number	Tank Size Inches	Top Opening	Base Style	Volume		Height with Base Inch (mm)	Tank Net Weight Lb (Kg)	Case Qty.
				Cu.Ft.	Gallon (Liter)			
LC0835C20*	8 x 35	2.5"-8 NPSM	Standard	0.90	6.7 (25.5)	34.9 (886)	8.1 (3.7)	18
LC0835C20*-NB	8 x 35	2.5"-8 NPSM	None	0.90	6.7 (25.5)	—	—	18
LC0844C20*	8 x 44	2.5"-8 NPSM	Standard	1.15	8.6 (32.5)	44.2 (1123)	9.8 (4.4)	18
LC0918C20*	9 x 18	2.5"-8 NPSM	Standard	0.52	3.9 (14.8)	18.4 (467)	5.1 (2.3)	9
LC0918C20*-NB	9 x 18	2.5"-8 NPSM	None	0.52	3.9 (14.8)	—	—	9
LC0935C20*	9 x 35	2.5"-8 NPSM	Standard	1.09	8.2 (31.0)	34.8 (884)	9.5 (4.3)	16
LC0935C20*-NB	9 x 35	2.5"-8 NPSM	None	1.09	8.2 (31.0)	—	—	16
LC0948C20*	9 x 48	2.5"-8 NPSM	Standard	1.54	11.5 (43.7)	48.3 (1227)	12.5 (5.7)	16
LC1018C20*	10 x 18	2.5"-8 NPSM	Standard	0.64	4.75 (18.0)	18.4 (468)	6.3 (2.9)	8
LC1018C20*-NB	10 x 18	2.5"-8 NPSM	None	0.64	4.75 (18.0)	—	—	8
LC1035C20*	10 x 35	2.5"-8 NPSM	Standard	1.37	10.2 (38.8)	35.0 (889)	10.4 (4.7)	16
LC1035C20*-NB	10 x 35	2.5"-8 NPSM	None	1.37	10.2 (38.8)	—	—	16
LC1040C20*	10 x 40	2.5"-8 NPSM	Standard	1.61	12.0 (45.5)	40.6 (1031)	11.7 (5.3)	16
LC1044C20*	10 x 44	2.5"-8 NPSM	Standard	1.77	13.2 (50.1)	44.3 (1125)	12.4 (5.6)	16
LC1047C20*	10 x 47	2.5"-8 NPSM	Standard	1.90	14.2 (53.8)	47.2 (1199)	13.1 (5.9)	16
LC1054C20*	10 x 54	2.5"-8 NPSM**	Standard	2.14	16.0 (60.6)	54.4 (1382)	15.0 (6.8)	16
LC1235C20*	12 x 35	2.5"-8 NPSM	Standard	1.95	14.6 (55.3)	35.4 (900)	15.4 (7.0)	9
LC1235C20*-NB	12 x 35	2.5"-8 NPSM	None	1.95	14.6 (55.3)	—	—	9
LC1252C20*	12 x 52	2.5"-8 NPSM**	Standard	3.10	23.0 (87.1)	52.8 (1341)	19.7 (8.9)	9
LC1354C20*	13 x 54	2.5"-8 NPSM**	Standard	3.70	28.0 (106.0)	55.0 (1397)	22.5 (10.2)	9
LC1465C20*	14 x 65	2.5"-8 NPSM	Standard	5.27	39.4 (149.2)	65.6 (1666)	37.5 (17.0)	1
LC1465C40*	14 x 65	4"-8 UN	Standard	5.27	39.4 (149.2)	65.6 (1666)	37.5 (17.0)	1
LC1653C20*	16 x 53	2.5"-8 NPSM	Standard	5.48	41.0 (155.2)	54.0 (1371)	41.0 (18.6)	1
LC1665C40*	16 x 65	4"-8 UN	Standard	6.85	51.2 (193.8)	65.6 (1666)	42.7 (19.4)	1
LC1865C40*	18 x 65	4"-8 UN	Standard	9.83	73.5 (278.1)	67.7 (1720)	52.5 (23.8)	1
LC2162C40*	21 x 62	4"-8 UN	Standard	11.98	89.6 (339.1)	67.8 (1722)	75.7 (34.4)	1
LC2472C40*	24 x 72	4"-8 UN	Standard	16.39	120.0 (454.2)	73.6 (1869)	98.2 (44.6)	1
LC3072C40*	30 x 72	4"-8 UN	Standard	25.28	189.1 (715.8)	72.2 (1834)	116.0 (52.6)	1
LC3072C60*	30 x 72	6" SNA Flange	Standard	25.28	189.1 (715.8)	76.0 (1930)	196.0 (88.9)	1

* Specify color: 'A'=Almond; 'B'=Blue; 'G'=Gray; 'K'=Black; 'N'=Natural. If not specified, SWT will supply Natural.

** Available with dome hole option. Also available with 60° and 120° shim o-rings. Contact SWT for details.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1399
EFFECTIVE
SEPTEMBER 2025

COMPOSITE PRESSURE TANKS

ECONOMY FIBERGLASS WRAPPED & PE LINER



Features:

- Inner shell constructed of high quality LLDPE or HDPE polyethylene
- Wound with continuous fiberglass to provide superior strength under pressure
- Resists corrosion and provides years of reliable service
- Lightweight tank design makes installation fast and easy
- 150 psi maximum operating pressure
- 120°F maximum operating temperature for threaded tanks
  150°F maximum operating temperature for flanged tanks
- NSF and PED (CE) certified
- Made in China

Part Number	Tank Size Inches	Top Opening	Bottom Opening	Base Style	Volume		Height with Base Inch (mm)	Tank Net Weight Lb (Kg)	Case Qty.
					Cu.Ft.	Gallon (Liter)			
LCW0618C20*	6 x 18	2.5"-8 NPSM	—	Standard	0.24	1.77 (6.7)	18.07 (459)	3.41 (1.55)	12
LCW0635C20*	6 x 35	2.5"-8 NPSM	—	Standard	0.48	3.62 (13.7)	35.08 (891)	6.05 (2.75)	20
LCW0713C20*	7 x 13	2.5"-8 NPSM	—	Standard	0.20	1.53 (5.8)	13.15 (334)	3.08 (1.40)	12
LCW0717C20*	7 x 17	2.5"-8 NPSM	—	Standard	0.29	2.19 (8.3)	16.93 (430)	4.30 (1.95)	8
LCW0724C20*	7 x 24	2.5"-8 NPSM	—	Standard	0.45	3.33 (12.6)	24.09 (612)	5.40 (2.45)	20
LCW0735C20*	7 x 35	2.5"-8 NPSM	—	Standard	0.67	5.05 (19.1)	35.35 (898)	7.49 (3.40)	20
LCW0735C20*-NB	7 x 35	2.5"-8 NPSM	—	None	0.67	5.05 (19.1)	35.08 (891)	7.04 (3.20)	20
LCW0740C20*	7 x 40	2.5"-8 NPSM	—	Standard	0.78	5.81 (22.0)	40.08 (1018)	8.37 (3.80)	20
LCW0744C20*	7 x 44	2.5"-8 NPSM	—	Standard	0.86	6.42 (24.3)	44.45 (1129)	8.92 (4.05)	20
LCW0818C20*	8 x 18	2.5"-8 NPSM	—	Standard	0.41	3.04 (11.5)	18.07 (459)	5.28 (2.40)	8
LCW0835C20*	8 x 35	2.5"-8 NPSM	—	Standard	0.88	6.55 (24.8)	35.35 (898)	9.15 (4.15)	18
LCW0835C20*-NB	8 x 35	2.5"-8 NPSM	—	None	0.88	6.55 (24.8)	35.08 (891)	8.58 (3.90)	18
LCW0840C20*	8 x 40	2.5"-8 NPSM	—	Standard	1.03	7.69 (29.1)	40.08 (1018)	9.98 (4.53)	18
LCW0844C20*	8 x 44	2.5"-8 NPSM	—	Standard	1.13	8.48 (32.1)	44.33 (1126)	10.58 (4.80)	18
LCW0918C20*	9 x 18	2.5"-8 NPSM	—	Standard	0.52	3.88 (14.7)	18.07 (459)	5.33 (2.42)	8
LCW0935C20*	9 x 35	2.5"-8 NPSM	—	Standard	1.12	8.35 (31.6)	35.28 (896)	9.25 (4.20)	16
LCW0935C20*-NB	9 x 35	2.5"-8 NPSM	—	None	1.12	8.35 (31.6)	35.08 (891)	8.25 (3.75)	16
LCW0940C20*	9 x 40	2.5"-8 NPSM	—	Standard	1.28	9.59 (36.3)	40.08 (1018)	10.66 (4.84)	16
LCW0948C20*	9 x 48	2.5"-8 NPSM	—	Standard	1.58	11.78 (44.6)	48.35 (1228)	13.33 (6.05)	16
LCW1022C20*	10 x 22	2.5"-8 NPSM	—	Standard	0.81	6.05 (22.9)	22.01 (559)	8.05 (3.66)	16
LCW1035C20*	10 x 35	2.5"-8 NPSM	—	Standard	1.36	10.15 (38.4)	35.31 (897)	11.23 (5.10)	16
LCW1035C20*-NB	10 x 35	2.5"-8 NPSM	—	None	1.36	10.15 (38.4)	35.08 (891)	10.13 (4.60)	16
LCW1040C20*	10 x 40	2.5"-8 NPSM	—	Standard	1.59	11.86 (44.9)	40.16 (1020)	12.91 (5.86)	16
LCW1044C20*	10 x 44	2.5"-8 NPSM	—	Standard	1.77	13.24 (50.1)	44.33 (1126)	14.43 (6.55)	16
LCW1047C20*	10 x 47	2.5"-8 NPSM	—	Standard	1.91	14.27 (54.0)	46.77 (1188)	15.31 (6.95)	16
LCW1054C20*	10 x 54	2.5"-8 NPSM	—	Standard	2.20	16.49 (62.4)	54.57 (1386)	17.38 (7.90)	16

* Specify color: 'A'=Almond; 'B'=Blue; 'G'=Gray; 'K'=Black; 'N'=Natural. If not specified, SWT will supply Natural.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1303
EFFECTIVE
OCTOBER 2024

COMPOSITE PRESSURE TANKS

ECONOMY FIBERGLASS WRAPPED & PE LINER

Part Number	Tank Size Inches	Top Opening	Bottom Opening	Base Style	Volume		Height with Base Inch (mm)	Tank Net Weight Lb (Kg)	Case Qty.
					Cu.Ft.	Gallon (Liter)			
LCW1236C20*	12 x 36	2.5"-8 NPSM	—	Standard	1.96	14.7 (56)	36.46 (926)	13.86 (6.30)	1
LCW1248C20*	12 x 48	2.5"-8 NPSM	—	Standard	2.81	21.0 (80)	48.50 (1232)	18.50 (8.40)	1
LCW1252C20*	12 x 52	2.5"-8 NPSM	—	Standard	3.08	23.1 (87)	52.68 (1338)	19.71 (8.95)	1
LCW1252C40*	12 x 52	4"-8 UN	—	Standard	3.08	23.1 (87)	52.48 (1333)	19.89 (9.04)	1
LCW1354C20*	13 x 54	2.5"-8 NPSM	—	Standard	3.73	27.9 (106)	55.04 (1398)	23.76 (10.80)	1
LCW1354C40*	13 x 54	4"-8 UN	—	Standard	3.73	27.9 (106)	54.84 (1393)	23.76 (10.80)	1
LCW1465C20*	14 x 65	2.5"-8 NPSM	—	Standard	5.23	39.1 (148)	65.91 (1674)	32.60 (14.80)	1
LCW1465C40*	14 x 65	4"-8 UN	—	Standard	5.23	39.1 (148)	65.91 (1674)	32.60 (14.80)	1
LCW1465C44*T	14 x 65	4"-8 UN	4"-8 UN	Tripod	5.23	39.1 (148)	73.15 (1858)	32.80 (14.91)	1
LCW1628C20*	16 x 28	2.5"-8 NPSM	—	Standard	2.69	20.1 (76)	28.94 (735)	23.02 (10.46)	1
LCW1628C40*	16 x 28	4"-8 UN	—	Standard	2.69	20.1 (76)	28.94 (735)	23.02 (10.46)	1
LCW1665C20*	16 x 65	2.5"-8 NPSM	—	Standard	6.86	51.3 (194)	65.79 (1671)	41.03 (18.65)	1
LCW1665C40*	16 x 65	4"-8 UN	—	Standard	6.86	51.3 (194)	65.79 (1671)	41.03 (18.65)	1
LCW1665C44*T	16 x 65	4"-8 UN	4"-8 UN	Tripod	6.86	51.3 (194)	73.27 (1861)	41.03 (18.65)	1
LCW1836C40*	18 x 36	4"-8 UN	—	Standard	4.88	36.4 (138)	39.37 (1000)	41.1 (18.7)	1
LCW1865C40*	18 x 65	4"-8 UN	—	Standard	9.51	71.1 (269)	67.80 (1722)	67.1 (30.5)	1
LCW2136C40*	21 x 36	4"-8 UN	—	Standard	5.80	43.3 (164)	39.45 (1002)	53.0 (24.1)	1
LCW2162C40*	21 x 62	4"-8 UN	—	Standard	12.16	90.9 (344)	67.76 (1721)	73.7 (33.5)	1
LCW2162C44*T	21 x 62	4"-8 UN	4"-8 UN	Tripod	11.66	87.2 (330)	81.25 (2064)	94.3 (42.9)	1
LCW2162C60*	21 x 62	6" SNA Flange	—	Standard	11.66	87.2 (330)	70.08 (1780)	108.1 (49.1)	1
LCW2162C66*T	21 x 62	6" SNA Flange	6" SNA Flange	Tripod	11.66	87.2 (330)	83.78 (2128)	122.3 (55.6)	1
LCW2465C40*	24 x 65	4"-8 UN	—	Standard	15.01	112.3 (4.25)	67.60 (1717)	110.2 (50.1)	1
LCW2472C40*	24 x 72	4"-8 UN	—	Standard	16.71	125.0 (473)	75.51 (1918)	119.2 (54.2)	1
LCW2472C44*T	24 x 72	4"-8 UN	4"-8 UN	Tripod	16.71	125.0 (473)	85.35 (2168)	121.1 (55.0)	1
LCW2472C60*	24 x 72	6" SNA Flange	—	Standard	17.35	129.7 (491)	77.68 (1973)	129.4 (58.8)	1
LCW2472C66*T	24 x 72	6" SNA Flange	6" SNA Flange	Tripod	17.35	129.7 (491)	87.48 (2222)	142.1 (64.6)	1
LCW3072C40*	30 x 72	4"-8 UN	—	Standard	25.02	187.1 (708)	72.28 (1836)	199.1 (90.5)	1
LCW3072C60*	30 x 72	6" SNA Flange	—	Standard	24.88	186.0 (704)	74.49 (1892)	207.7 (94.4)	1
LCW3072C66*T	30 x 72	6" SNA Flange	6" SNA Flange	Tripod	24.88	186.0 (704)	86.57 (2199)	220.5 (100.1)	1
LCW3657C60*	36 x 57	6" SNA Flange	—	Standard	28.76	215.1 (814)	63.70 (1618)	215.4 (97.9)	1
LCW3657C66*T	36 x 57	6" SNA Flange	6" SNA Flange	Tripod	27.42	205.0 (776)	75.31 (1913)	235.2 (106.9)	1
LCW3672C40*	36 x 72	4"-8 UN	—	Standard	34.77	260.0 (984)	73.07 (1856)	270.2 (122.8)	1
LCW3672C60*	36 x 72	6" SNA Flange	—	Standard	35.27	263.7 (998)	75.43 (1916)	273.7 (124.4)	1
LCW3672C66*T	36 x 72	6" SNA Flange	6" SNA Flange	Tripod	35.26	263.7 (998)	87.13 (2213)	291.7 (132.6)	1
LCW4272C66*T	42 x 72	6" SNA Flange	6" SNA Flange	Tripod	52.80	394.7 (1494)	94.33 (2396)	473 (215)	1
LCW4872C66*T	48 x 72	6" SNA Flange	6" SNA Flange	Tripod	66.96	500.6 (1895)	94.45 (2399)	543 (247)	1
LCW6367C66*T	63 x 67	6" SNA Flange	6" SNA Flange	Tripod	86.61	647.6 (2451)	80.47 (2044)	673 (306)	1
LCW6386C66*T	63 x 86	6" SNA Flange	6" SNA Flange	Tripod	116.82	873.5 (3306)	97.44 (2475)	792 (360)	1

* Specify color: 'A'=Almond; 'B'=Blue; 'G'=Gray; 'K'=Black; 'N'=Natural. If not specified, SWT will supply Natural.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

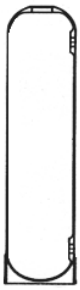
FORM 1303
EFFECTIVE
OCTOBER 2024

FRP Pressure Tanks

MOLDED POLYESTER OR VINYLESTER



Extended Base



Standard Base

Each individual FRP molded tank can be custom built per your special requirements. Special molded construction allows for a variety of hole sizes and locations — top, bottom, side walls, or dome curve. When your tanks need to be customized for speciality designed systems, FRP is the way to go. FRP molded tanks are available in two types of fiberglass:

- **Standard Polyester** for most filtration/softening applications
- **Special Vinylester** for increased chemical resistance

- Certified to NSF/ANSI Standard 61
- Maximum Operating Pressure: 150 psi
- Max. Temp: Polyester 120°F; Vinylester 150°F

- 10 year warranty for 6 to 13 inch vessels
  5 year warranty for 14 to 16 inch vessels
  Warranties are for water treatment applications only.

Part Number**	Tank Size Inches	Top Opening	Tank Volume			Weight, Lb		Case Qty.
			Cu. Ft.	Gallons	Liters	Unit	Case	
TS0618F2(?)*	6 x 18 †	2.5"-8 NPSM	0.31	2.3	8.7	—	—	66
TS0724F2(?)*	7 x 24 †	2.5"-8 NPSM	0.51	3.8	14.4	3.9	110	28
TS0744F2(?)*	7 x 44	2.5"-8 NPSM	0.97	7.3	27.6	7.2	173	24
TS0835F2(?)*	8 x 35 †	2.5"-8 NPSM	0.95	7.1	26.9	9.8	196	20
TS0840F2(?)*	8 x 40 †	2.5"-8 NPSM	1.09	8.2	31.0	9.5	190	20
TS0844F2(?)*	8 x 44	2.5"-8 NPSM	1.21	9.1	34.4	10.7	214	20
TS0935F2(?)*	9 x 35 †	2.5"-8 NPSM	1.18	8.8	33.3	11.3	159	14
TS0940F2(?)*	9 x 40	2.5"-8 NPSM	1.38	10.3	39.0	12.0	168	14
TS0948F2(?)*	9 x 48	2.5"-8 NPSM	1.67	12.5	47.3	12.8	205	16
TS1019F2(?)*	10 x 19	2.5"-8 NPSM	0.68	5.1	19.3	—	—	24
TS1030F2(?)*	10 x 30	2.5"-8 NPSM	1.14	8.5	32.2	12.0	192	16
TS1035F2(?)*	10 x 35	2.5"-8 NPSM	1.39	10.4	39.4	13.0	156	12
TS1040F2(?)*	10 x 40	2.5"-8 NPSM	1.62	12.1	45.8	13.5	162	12
TS1044F2(?)*	10 x 44	2.5"-8 NPSM	1.80	13.5	51.0	14.7	177	12
TS1047F2(?)*	10 x 47	2.5"-8 NPSM	1.94	14.5	55.0	15.4	216	14
TS1054F2(?)*	10 x 54	2.5"-8 NPSM	2.22	16.6	63.0	16.9	271	16
TS1229F2(?)*	12 x 29 †	2.5"-8 NPSM	1.90	14.2	53.7	17.0	187	11
TS1248F2(?)*	12 x 48	2.5"-8 NPSM	3.14	23.5	89.0	20.8	188	9
TS1248F4(?)*	12 x 48	4"-8 UN	3.14	23.5	89.0	20.8	188	9
TS1354F2(?)*	13 x 54	2.5"-8 NPSM	3.71	27.7	105.0	32.3	291	9
TS1354F4(?)*	13 x 54	4"-8 UN	3.71	27.7	105.0	32.3	291	9
TS1465F4(?)*	14 x 65	4"-8 UN	5.31	39.7	150.3	42.5	383	9
TS1623F4(?)*	16 x 23	4"-8 UN	1.94	14.5	55.0	23.0	—	—
TS1633F4(?)*	16 x 33 †	4"-8 UN	3.00	22.4	85.0	30.0	—	—
TS1653F4(?)*	16 x 53 †	4"-8 UN	4.90	36.7	138.8	34.0	—	—
TS1665F4(?)*	16 x 65	4"-8 UN	6.45	48.3	182.8	49.0	441	9

* Specify color: 'B'=Blue; 'K'=Black; 'N'=Natural

** For Vinylester, substitute the 'F' in the Part Number with 'V'.

† Tank size available ONLY with large purchase quantity and extended lead time.

(?) TANK OPTIONS (See next page for details.)
Bottom holes, dome holes, and **side holes** available.
Extended base available for 12, 13, 14, and 16 inch diameter tanks.

NOTES:
All tanks ordered with bottom opening should be ordered with extended base.

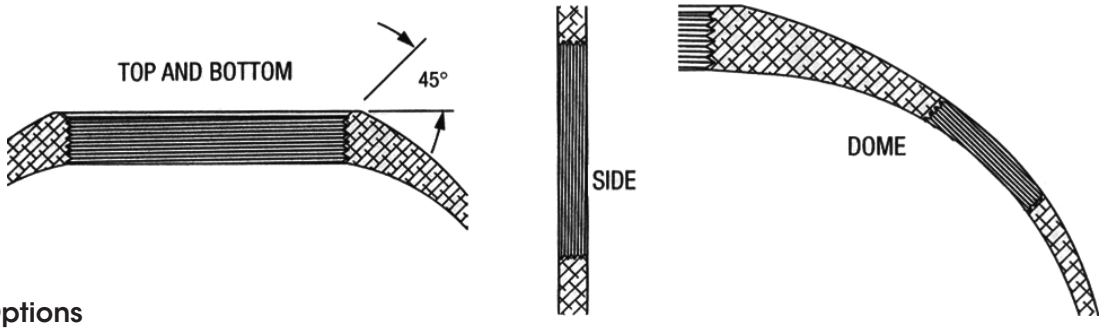
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1247
EFFECTIVE
OCTOBER 2024

FRP Pressure Tanks

MOLDED POLYESTER OR VINYLESTER



FRP Tank Options
(X = Available)

Material of Construction	6 inch	7 inch	8 inch	9 inch	10 inch	12 inch	13 inch	14 inch	16 inch
Polyester	X	X	X	X	X	X	X	X	X
Vinylester	X	X	X	X	X	X	X	X	X

Top Opening	6 inch	7 inch	8 inch	9 inch	10 inch	12 inch	13 inch	14 inch	16 inch
2.5" - 8 NPSM Thread	X	X	X	X	X	X	X		
4" - 8 UN Thread				X	X	X	X	X	X
6" - 8 UN Thread									X

Bottom Opening	6 inch	7 inch	8 inch	9 inch	10 inch	12 inch	13 inch	14 inch	16 inch
1" NPT Thread	X	X	X	X	X				
2.5" NPSM Thread	X	X	X	X	X	X	X		
4" - 8 UN Thread				X	X	X	X	X	X
6" - 8 UN Thread								X	X

Side Opening	6 inch	7 inch	8 inch	9 inch	10 inch	12 inch	13 inch	14 inch	16 inch
0.75" NPT Thread	X	X	X	X	X	X	X	X	
1" NPT Thread			X	X	X	X	X		
1.5" NPT Thread								X	X
1.5" NPSM Thread								X	X
2" NPSM Thread									X

Dome Opening	6 inch	7 inch	8 inch	9 inch	10 inch	12 inch	13 inch	14 inch	16 inch
0.75" NPT Thread	X	X	X						
1.25" NPSM Thread				X	X	X	X	X	X

Base	6 inch	7 inch	8 inch	9 inch	10 inch	12 inch	13 inch	14 inch	16 inch
Standard	X	X	X	X	X	X		X	X
Compression							X		
Extended						X	X	X	X

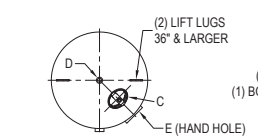
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

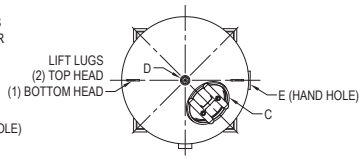
MEMBER Water Quality ASSOCIATION

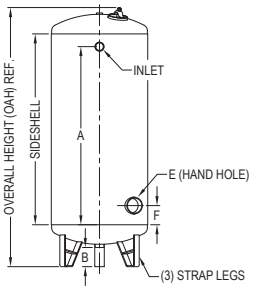
FORM 1247
EFFECTIVE
OCTOBER 2024

STEEL TANKS

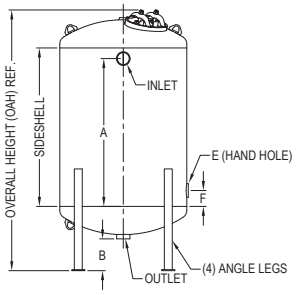
LINED AND PRIMED/COLORED STEEL TANKS
NON-CODE







20 TO 42 INCH DIAMETER TANKS



48 TO 72 INCH DIAMETER TANKS

SWT's Non-Code Steel Tanks *are UL classified for drinking water system components in accordance with Standard NSF/ANSI 61-(1992) 7N44. They come fully lined and primed/colored to meet NSF/ANSI-61 for coatings.*

These steel tanks have two large top and bottom access openings to simplify distributor system assembly; inlet and outlet openings located at the top-side wall and center-bottom of the tank; and a top-center spud to bleed air. All tanks larger than 36 inches in diameter come standard with lift lugs and a 12 x 16 inch covered manway. SWT's steel tanks are durable, rustproofed, and built to last. Made in USA.

- Meets all requirements for both FDA and US Dept. of Agriculture
- Flanged and Dished (F&D) domes standard on non-code tanks
- 100 psi max. operating pressure, 140°F max. operating temperature
- Standardized equipment means faster shipping
- Custom designs available (see Form 1194C – Steel Tank Config)

Part Number	Tank Size Inches	Overall Height Inches	Total Volume Cu.Ft.	Head* Volume Cu.Ft.	Inlet and Outlet	Dim A Inches	Dim B Inches	Dim C Inches	Dim D Inches	Dim E Inches	Dim F Inches	Approx. Weight Lbs.
UQ-2054(?)-2B	20 x 54	70	10	0.5	2" NPS	50	6	4 x 6	1" NPT	4 x 6	6	155
UQ-2060(?)-2B	20 x 60	76	11	0.5	2" NPS	55.75	6	4 x 6	1" NPT	4 x 6	6	170
UQ-2454(?)-2B	24 x 54	72	15	0.8	2" NPS	50	6	4 x 6	1" NPT	4 x 6	6	184
UQ-2460(?)-2B	24 x 60	78	17	0.8	2" NPS	55.75	6	4 x 6	1" NPT	4 x 6	6	197
UQ-3054(?)-2B	30 x 54	76	25	1.9	2" NPS	50	6	4 x 6	1" NPT	4 x 6	6	245
UQ-3060(?)-2B	30 x 60	82	27	1.9	2" NPS	55.75	6	4 x 6	1" NPT	4 x 6	6	255
UQ-3054(?)-3B	30 x 54	79	25	1.9	3" NPT	50	9	4 x 6	1" NPT	6 x 8	8	260
UQ-3060(?)-3B	30 x 60	85	27	1.9	3" NPT	55.75	9	4 x 6	1" NPT	6 x 8	8	275
UQ-3660(?)-3B	36 x 60	89	40	3.0	3" NPT	55.75	9	12 x 16	1" NPT	6 x 8	7	465
UQ-3672(?)-3B	36 x 72	101	47	3.0	3" NPT	67.75	9	12 x 16	1" NPT	6 x 8	7	575
UQ-4260(?)-3B	42 x 60	91	55	4.6	3" NPT	55.75	9	12 x 16	1" NPT	6 x 8	7	595
UQ-4272(?)-3B	42 x 72	103	65	4.6	3" NPT	67.75	9	12 x 16	1" NPT	6 x 8	7	695
UQ-4860(?)-4B	48 x 60	99	76	7.0	4" NPT	55.75	12	12 x 16	2" NPS	4 x 6	6	840
UQ-4872(?)-4B	48 x 72	111	88	7.0	4" NPT	67.75	12	12 x 16	2" NPS	4 x 6	6	1159
UQ-5460(?)-4B	54 x 60	101	98	9.7	4" NPT	55.75	12	12 x 16	2" NPS	4 x 6	6	1000
UQ-5472(?)-4B	54 x 72	113	113	9.7	4" NPT	67.75	12	12 x 16	2" NPS	4 x 6	6	1430
UQ-6060(?)-4B	60 x 60	103	122	12.9	4" NPT	55.75	12	12 x 16	2" NPS	4 x 6	6	1385
UQ-6072(?)-4B	60 x 72	115	142	12.9	4" NPT	67.75	12	12 x 16	2" NPS	4 x 6	6	1505
UQ-6660(?)-4B	66 x 60	103	147	15.3	4" NPT	55.75	12	12 x 16	2" NPS	4 x 6	6	1865
UQ-6672(?)-4B	66 x 72	115	171	15.3	4" NPT	67.75	12	12 x 16	2" NPS	4 x 6	6	2040
UQ-7260(?)-4B	72 x 60	107	182	21.4	4" NPT	55.75	12	12 x 16	2" NPS	4 x 6	6	2130
UQ-7272(?)-4B	72 x 72	119	210	21.4	4" NPT	67.75	12	12 x 16	2" NPS	4 x 6	6	2320

(?) Substitute P for epoxy lined and primed; or C for epoxy lined and finish coated in safety blue epoxy. Example: UQ-2460P-2B is 24 x 60 lined and primed.

* Head Volume includes the straight flange of the head.

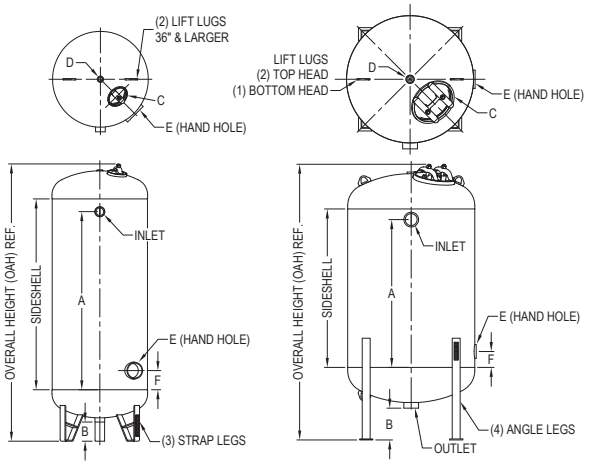
The above listed tanks are usually available in 7 to 10 days. Custom tanks (see Form 1194C – Steel Tank Config) take 4 to 6 weeks.
Flanges and other sized openings also available (see Form 1194C – Steel Tank Config).
Galvanized and stainless steel tanks also available. Contact your SWT representative for more information.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1194
EFFECTIVE
APRIL 2016

STEEL TANKS

LINED AND PRIMED/COLORED STEEL TANKS
ASME CODE



20 TO 42 INCH DIAMETER TANKS

48 TO 72 INCH DIAMETER TANKS

SWT's ASME *Code Steel Tanks* *are produced in accordance with Section VIII, Division 1 of the ASME Boiler and Pressure Vessel Code.They come fully lined and primed/colored to meet NSF/ANSI Standard 61 for coatings.*

These steel tanks have two large top and bottom access openings to simplify distributor system assembly; FPT x FPT full coupling inlet and outlet openings located at the top-side wall and center-bottom of the tank; and a top-center spud to bleed air. All tanks larger than 36 inches in diameter come standard with lift lugs and a 12 x 16 inch covered manway. SWT's steel tanks are durable, rustproofed, and built to last. Made in USA.

- Meets all requirements for both FDA and US Dept. of Agriculture
- 2:1 semi-elliptical domes standard on ASME code tanks
- 100 psi max. operating pressure, 140ºF max. operating temperature
- Standardized equipment means faster shipping
- Custom designs available (see Form 1194C – Steel Tank Config)

Part Number	Tank Size Inches	Overall Height Inches	Total Volume Cu.Ft.	Head* Volume Cu.Ft.	Inlet and Outlet	Dim A Inches	Dim B Inches	Dim C Inches	Dim D Inches	Dim E Inches	Dim F Inches	Approx. Weight Lbs.
UQ-2054(?)-2B-ASME	20 x 54	75	11	0.8	2" NPT	50	6	4 x 6	1" NPT	4 x 6	6	140
UQ-2060(?)-2B-ASME	20 x 60	81	12	0.8	2" NPT	55.75	6	4 x 6	1" NPT	4 x 6	6	159
UQ-2454(?)-2B-ASME	24 x 54	77	16	1.3	2" NPT	50	6	4 x 6	1" NPT	4 x 6	6	195
UQ-2460(?)-2B-ASME	24 x 60	83	18	1.3	2" NPT	55.75	6	4 x 6	1" NPT	4 x 6	6	210
UQ-3054(?)-2B-ASME	30 x 54	81	26	2.6	2" NPT	50	6	4 x 6	1" NPT	4 x 6	6	325
UQ-3060(?)-2B-ASME	30 x 60	87	29	2.6	2" NPT	55.75	6	4 x 6	1" NPT	4 x 6	6	345
UQ-3054(?)-3B-ASME	30 x 54	84	26	2.6	3" NPT	50	9	4 x 6	1" NPT	6 x 8	8	340
UQ-3060(?)-3B-ASME	30 x 60	90	29	2.6	3" NPT	55.75	9	4 x 6	1" NPT	6 x 8	8	360
UQ-3660(?)-3B-ASME	36 x 60	95	43	4.6	3" NPT	55.75	9	12 x 16	1" NPT	6 x 8	7	525
UQ-3672(?)-3B-ASME	36 x 72	107	50	4.6	3" NPT	67.75	9	12 x 16	1" NPT	6 x 8	7	605
UQ-4260(?)-3B-ASME	42 x 60	97	60	7.2	3" NPT	55.75	9	12 x 16	1" NPT	6 x 8	7	700
UQ-4272(?)-3B-ASME	42 x 72	109	70	7.2	3" NPT	67.75	9	12 x 16	1" NPT	6 x 8	7	765
UQ-4860(?)-4B-ASME	48 x 60	104	80	10.2	4" NPT	55.75	12	12 x 16	2" NPT	4 x 6	6	1025
UQ-4872(?)-4B-ASME	48 x 72	116	93	10.2	4" NPT	67.75	12	12 x 16	2" NPT	4 x 6	6	1120
UQ-5460(?)-4B-ASME	54 x 60	109	107	14.2	4" NPT	55.75	12	12 x 16	2" NPT	4 x 6	6	1200
UQ-5472(?)-4B-ASME	54 x 72	121	122	14.2	4" NPT	67.75	12	12 x 16	2" NPT	4 x 6	6	1515
UQ-6060(?)-4B-ASME	60 x 60	111	134	19.2	4" NPT	55.75	12	12 x 16	2" NPT	4 x 6	6	1565
UQ-6072(?)-4B-ASME	60 x 72	123	154	19.2	4" NPT	67.75	12	12 x 16	2" NPT	4 x 6	6	1725
UQ-6660(?)-4B-ASME	66 x 60	115	167	25.1	4" NPT	55.75	12	12 x 16	2" NPT	4 x 6	6	2040
UQ-6672(?)-4B-ASME	66 x 72	127	190	25.1	4" NPT	67.75	12	12 x 16	2" NPT	4 x 6	6	2228
UQ-7260(?)-4B-ASME	72 x 60	117	203	32.2	4" NPT	55.75	12	12 x 16	2" NPT	4 x 6	6	2525
UQ-7272(?)-4B-ASME	72 x 72	129	230	32.2	4" NPT	67.75	12	12 x 16	2" NPT	4 x 6	6	2760

(?) Substitute P for epoxy lined and primed; or C for epoxy lined and finish coated in safety blue epoxy. Example: UQ-2460P-2B is 24 x 60 lined and primed.

* Head Volume includes the straight flange of the head.

The above listed tanks are usually available in 7 to 10 days. Custom tanks (see Form 1194C – Steel Tank Config) take 4 to 6 weeks.
Flanges and other sized openings also available (see Form 1194C – Steel Tank Config).
Galvanized and stainless steel tanks also available. Contact your SWT representative for more information.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1194
EFFECTIVE
APRIL 2016

Tank Size (All Tanks Are Carbon Steel)
_____ Tank Diameter
_____ Side Shell Length (Not Tangent-to-Tangent)
_____ Maximum Overall Height (If Required)

Head Shape
☐ Flanged & Dished (Standard for Non-Code)
☐ 2:1 Semi-Elliptical (Standard for ASME Code)

Design Pressure
☐ 100 PSI ☐ 150 PSI ☐ Full Vacuum
☐ 125 PSI ☐ Other _____

Code Requirements
☐ ASME Code ☐ Non-Code
☐ Non-Code with Hydro Test

Tank Lining (Tank Interior)
☐ Standard Epoxy ☐ Prep for Rubber
☐ Prep for Vinylester ☐ Other _____
☐ NSF Lining Required

Tank Coating (Tank Exterior)
☐ Standard Primer ☐ Urethane
☐ Standard Epoxy ☐ Other _____

Tank Legs & Support Skid [1]
☐ Strap Legs ☐ Jack Saddles
☐ Angle Legs ☐ Jack Saddles with Stands
☐ Beam Legs ☐ Skid – W-Beam
☐ Pipe Legs ☐ Single ☐ Double ☐ Triple
☐ Ring Base ☐ Skid – Other _____

[1] Strap Legs for Ø42 inch max. tank.
When Seismic required, Structural Legs will be used.

Seismic Requirements ☐ Yes
If yes, complete Seismic Data Request on next page.

Support Clips
☐ Internal: Qty _____ ☐ Carbon ☐ Stainless
☐ External: Qty _____ ☐ Carbon ☐ Stainless

Special Requirements
☐ Lift Lugs ☐ False Bottom
☐ Distributor Plate — Differential Pressure _____
Qty of Holes _____
Size of Holes _____

Installation of Customer Supplied Materials
(Must provide detailed prints to be included in quote)
☐ Internals ☐ External Piping & Valves

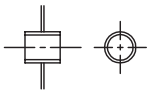
CRN (Canadian Registration Number) Province _____

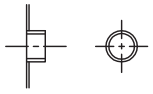
American Iron & Steel Act (Federal EPA $) ☐ Yes

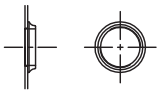
Document Package [2] (All ASME Tanks Include U-1A)
☐ Level 1 ($200) ☐ Level 3 ($550)
☐ Level 2 ($350) ☐ Level 4 ($750)

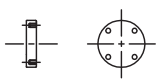
[2] Document Package prices shown are for up to three (3) tanks.
For details, see Document Package Options on next page.

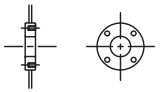
Available Fittings
All Fittings Are Carbon Steel Unless Noted in Schedule of Openings as SS (Stainless Steel).

FC (Full Coupling)


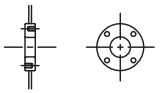
HC (Half Coupling)


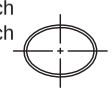
SP (Spud)


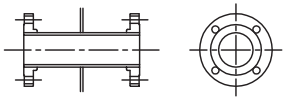
BF (Blind Flange)


SD (Single Drilled Pad Flange)


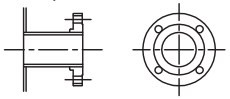
SW (Sight Window)
3 x 12 inch


DD (Double Drilled Pad Flange)


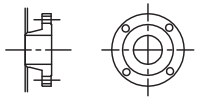
HH (Hand Hole)
4 x 6 inch
6 x 8 inch


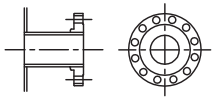
FS (Full Spool ANSI Flange)
RF (Raised Face) (Std)
FF (Flat Face)


MW (Manway)
Elliptical:
11 x 15 inch
12 x 16 inch (Std)
14 x 18 inch (Std)
18 x 24 inch


HS (Half Spool ANSI Flange)
RF (Raised Face) (Std)
FF (Flat Face)


Round (Davited):
16 inch
18 inch
20 inch
24 inch
30 inch

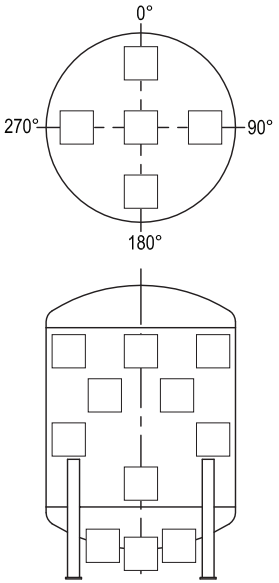

WN (Weld Neck ANSI Flange)
RF (Raised Face) (Std)
FF (Flat Face)


SN (Half Spool SNA Flange):
6 inch Flat Face


Customer Notes (Include Any In-Shop Inspection Visits)

Company _____
Contact _____
Phone _____ **Fax** _____
Email _____
Quantity _____ ☐ Left Hand / Right Hand
Service Type ☐ Water ☐ Water & Acid ☐ Water & Caustic
☐ Other _____

Show letter (from "Mark" column) in appropriate box for fittings listed in "Schedule of Openings." Location in head or shell is important (exact position is not).



Price Ea. $_____
Skid/Wrap Ea. $_____
Weight Ea. _____
Ship _____ Weeks After Drawing Approval

Schedule of Openings

Mark	Type*	Size	Service
A			
B			
C			
D			
E			
F			
G			
H			

* Add "SS" for Stainless Steel. Example: MWSS = Manway Stainless Steel

Safe Water Technologies, Inc.
996 Bluff City Blvd, Elgin, IL 60120 USA
847-888-6900 | www.swtwater.com

STEEL TANKS

SEISMIC DATA REQUEST

Company _____ **PO#** _____ **PO Date** _____

Contact _____ **SO#** _____ **Model #** _____

A. Existing Information: Please forward any information provided by the end user.

B. Installation Location: ☐ United States ☐ Canada ☐ Other Country

Complete Section C for ALL installation locations. If installed in Other Country, complete Sections C & D.

C. For ALL Installation Locations:

1. Installation Address _____

   City/Town _____ State/Prov. _____ Zip/Postal Code _____

2. Facility Type (check below or fill in other) Other _____

Occupancy Category III	Occupancy Category IV
☐ Buildings with capacity above 250	☐ Hospital & Other Health Care
☐ Daycare with capacity above 150	☐ Emergency—Fire, Rescue, Police
☐ Jail or Detention Facility	☐ Emegency Shelters
☐ Municipal Water / Sewage Treatment	☐ Emergency Comms/Ops Centers
☐ Telecommunication Center	☐ Aviation Control Towers
☐ Manufacture or Storage of Chemicals or Hazardous Materials in Quantities that would put Public at Risk if Released	☐ Areas Critical to National Defense
	☐ Chemicals of Very High Hazard

3. Special regulations applicable to facility (example: California OSHPD, DOD)

   _____

4. Will the vessel(s) be bolted direct to concrete? ☐ Yes ☐ No

   NOTE: If bolted to a skid NOT provided by SWT, only structural calculations for vessel legs will be provided (no anchor calculations).

   Calculations for vessel or skid anchors to concrete require data for concrete:

   Thickness: _____ inches Strength: 4,000 psi or _____ psi

D. For Installations Located in Other Countries:

1. Is it permissible to use the International Building Code (IBC)? ☐ Yes ☐ No

   If yes, provide seismic acceleration values Ss and S1:

   Ss: _____ xg S1: _____ xg (NOTE: 1.15xg = seismic acceleration is 115% of gravity)

2. If not IBC, is there a different seismic code required? ☐ Yes ☐ No

   If yes, can the end user provide the seismic calculations? ☐ Yes ☐ No

ASME DOCUMENT PACKAGE OPTIONS FOR STEEL TANKS

U-1A is included with all ASME Tanks

Level 1
As-Built Drawings
Material Test Report (MTR) for Head & Shell

Level 2
Level 1 Items
Weld Details
Weld Procedures
- Welding Procedure Specification (WPS)
- Procedure Qualification Record (PQR)

Paint Reports
- Holiday Free
- Mil Thickness

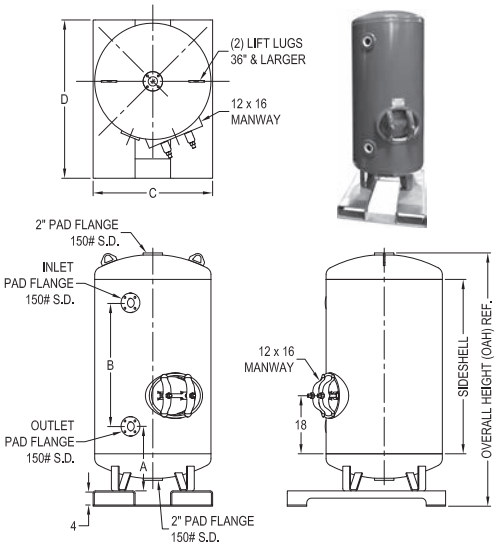
Level 3
Level 2 Items
ASME Calculations
Weld Map
Welders Quality Log
Nameplate Image
Non Destructive Examination (NDE) Reports

Level 4
Level 3 Items
Material Test Report (MTR) for All
Pressure Boundry Parts

Safe Water Technologies, Inc.
996 Bluff City Blvd, Elgin, IL 60120 USA
847-888-6900 | www.swtwater.com

STEEL TANKS

MOBILE STEEL TANKS



SWT's Mobile Steel Tanks have two 2 inch pad flange top and bottom openings; 2 or 3 inch pad flange inlet and outlet openings located on the side wall of the tank; a 12 x 16 inch manway; and a bolted-on galvanized fork tube base. All tanks larger than 36 inches in diameter come standard with lift lugs. SWT's steel tanks are durable, rustproofed, and built to last. Made in USA.

These pressure vessels are available in non-code and ASME code construction; and with polyethylene (PE) or Plasite 4110 vinyl ester (VE) lining.

- Meets all requirements for both FDA and US Department of Agriculture
- Single drilled pad flanges
- Polyethylene (PE) lining is repairable with heat in the field
- Max. operating pressure: 100 psi
- Max. operating temperature: Polyethylene 100°F; Plasite 4110 Vinyl Ester 140°F
- Standardized equipment means faster shipping
- Custom designs available
- Optional sight glass available

Part Number	Lining Material	Tank Size Inches	Inlet and Outlet	Volume		Dimensions				
				Total Volume Cu.Ft.	Head * Volume Cu.Ft.	Overall Height Inches	Dim A Inches	Dim B Inches	Dim C Inches	Dim D Inches
Non-Code Tanks										
UQ-2460MPE-2(?)	Polyethylene	24 x 60	2" PAD	17	0.8	77	14	46.50	28	37
UQ-2460MVE-2(?)	Vinyl Ester									
UQ-3057MPE-2(?)	Polyethylene	30 x 57	2" PAD	26	1.9	79	18	41.25	31	43
UQ-3057MVE-2(?)	Vinyl Ester									
UQ-3654MPE-2(?)	Polyethylene	36 x 54	2" PAD	37	3.0	79	20	38.25	37	49
UQ-3654MVE-2(?)	Vinyl Ester									
UQ-4252MPE-3(?)	Polyethylene	42 x 52	3" PAD	50	4.6	79	21	36.25	43	55
UQ-4252MVE-3(?)	Vinyl Ester									
UQ-4848MPE-3(?)	Polyethylene	48 x 48	3" PAD	63	7.0	79	23	32.25	49	61
UQ-4848MVE-3(?)	Vinyl Ester									
ASME Code Tanks										
UQ-2460MPE-2(?)-ASME	Polyethylene	24 x 60	2" PAD	—	—	81	15.7	46.50	28	37
UQ-2460MVE-2(?)-ASME	Vinyl Ester									
UQ-3057MPE-2(?)-ASME	Polyethylene	30 x 57	2" PAD	—	—	84	20.2	41.25	31	43
UQ-3057MVE-2(?)-ASME	Vinyl Ester									
UQ-3654MPE-2(?)-ASME	Polyethylene	36 x 54	2" PAD	—	—	85	22.7	38.25	37	49
UQ-3654MVE-2(?)-ASME	Vinyl Ester									
UQ-4252MPE-3(?)-ASME	Polyethylene	42 x 52	3" PAD	—	—	86	24.2	36.25	43	55
UQ-4252MVE-3(?)-ASME	Vinyl Ester									
UQ-4848MPE-3(?)-ASME	Polyethylene	48 x 48	3" PAD	—	—	85	25.8	32.25	49	61
UQ-4848MVE-3(?)-ASME	Vinyl Ester									

(?) Substitute B for safety blue epoxy finish coat; or W for white epoxy finish coat. Example: UQ-2460MPE-2B is 24 x 60 blue colored tank with PE lining.

* Head Volume includes the straight flange of the head.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1469
EFFECTIVE
JULY 2018

Tank Size (All tanks are carbon steel)
Diameter x Side Shell Length (Not tangent-to-tangent)

- ☐ 24 x 60 inch (70 inch maximum side shell)
- ☐ 30 x 57 inch (65 inch maximum side shell)
- ☐ 36 x 54 inch (62 inch maximum side shell)
- ☐ 42 x 52 inch (60 inch maximum side shell)
- ☐ 48 x 48 inch (60 inch maximum side shell)
- _____ Other Side Shell Length (If required)
- _____ Maximum Overall Height (If required)

Head Shape

- ☐ Flanged & Dished (Standard for Non-Code)
- ☐ ASME Flanged & Dished (Standard for ASME Code)

Design Pressure

- ☐ 100 PSI ☐ 125 PSI ☐ 150 PSI
- ☐ Full Vacuum (ASME Code tanks only)
- ☐ Other _____

Code Requirements

- ☐ ASME Code ☐ Non-Code
- ☐ Non-Code with Hydro Test

Tank Lining (Tank Interior)

- ☐ Polyethylene Rotomolded ☐ Vinyl Ester

Tank Coating (Tank Exterior)

- ☐ Standard Epoxy (Blue)
- ☐ Urethane (Outdoors White)
- ☐ Urethane (Oxblood Red)
- ☐ Other _____

Tank Legs & Support Skid

- ☐ Strap Legs
- ☐ Skid – Forklift, Galvanized (Not coated)

Support Clips

- ☐ External: Qty _____

Installation of SWT Materials
(Must provide detailed prints to be included in quote)

- ☐ Internals ☐ External Piping & Valves

American Iron & Steel Act (Federal EPA $)

- ☐ Yes (ASME Code tanks only)

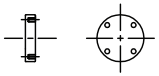
Document Package [1] (All ASME tanks include U-1A)

- ☐ Level 1 ($200) ☐ Level 3 ($550)
- ☐ Level 2 ($350) ☐ Level 4 ($750)

[1] Document Package prices shown are for up to three (3) tanks.
For details, see ASME Document Package Options in next column.

Available Fittings
All fittings are carbon steel

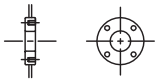
BF (Blind Flange)



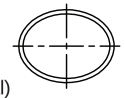
HH (Hand Hole)
Offset on top
4 x 6 inch
6 x 8 inch
(36 inch dia. tank min.)



SD (Single Drilled Pad Flange)

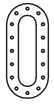


MW (Manway) [2]
Elliptical
12 x 16 inch (Std)
14 x 18 inch (Vertical)
(42 inch dia. tank min.)



[2] 45°, 90° or 180° from In/Out

SW (Sight Window)
3 x 12 inch



ASME Document Package Options for Steel Tanks
U-1A is included with all ASME Code tanks

Level 1
- As-Built Drawings
- Material Test Report (MTR) for Head & Shell

Level 2
- Level 1 Items
- Weld Details
- Weld Procedures
  - Welding Procedure Specification (WPS)
  - Procedure Qualification Record (PQR)
- Paint Reports
  - Holiday Free
  - Mil Thickness

Level 3
- Level 2 Items
- ASME Calculations
- Weld Map
- Welders Quality Log
- Nameplate Image
- Non-Destructive Examination (NDE) Reports

Level 4
- Level 3 Items
- Material Test Report (MTR) for All Pressure Boundry Parts

Customer Notes (Include any in-shop inspection visits)

Company _____

Contact _____

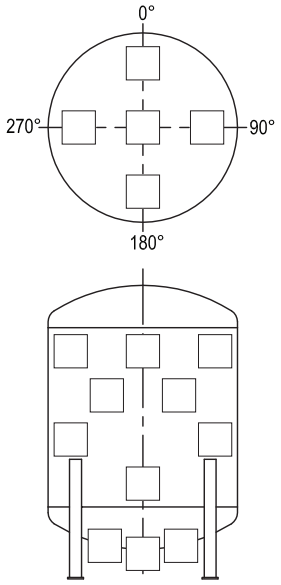
Phone _____ **Fax** _____

Email _____

Quantity _____ **Quote No.** _____

Service Type ☐ Water ☐ Water & Acid ☐ Water & Caustic
☐ Other _____

Show letter (from "Mark" column) in appropriate box for fittings listed in "Schedule of Openings." Location in head or shell is important (exact position is not).



Ship _____ weeks after drawing approval

Schedule of Openings

Mark	Type	Size	Service
A			
B			
C			
D			
E			
F			
G			
H			

MOBILE STEEL TANKS

Safe Water Technologies, Inc.
996 Bluff City Blvd, Elgin, IL 60120 USA
847-888-6900 | www.swtwater.com

Retention Tanks

FIBERGLASS WRAPPED & PE LINER



***Retention Tanks** are designed to provide extended contact time when adding chemicals into the water stream. They are perfect for chlorine, KmNO4, phosphate, or acid feeds, and more. When used in conjunction with a static mixer, these vessels will make sure that the chemicals are properly blended into the water supply. Retention Tanks are designed for long life in corrosive environments and when working with strong chemical additives or oxidizing agents.*

Features

- Seamless inner shell of molded polyethylene for impact and corrosion resistance
- Wound with miles of epoxy covered fiberglass filament for superior strength and light weight
- FDA and/or NSF-approved materials
- Equipped with bottom drain port
- Available in blue
- 5 year warranty
- **Made in USA**

Operating Parameters

- 75 psi maximum operating pressure
- 120°F maximum operating temperature

Part Number	Tank Size Inches	System Connections (PVC)		Height		Capacity		
		Top	Bottom	Inches	Millimeters	Gallons	Liters	Cubic Feet
TS-CT30-QC	16 x 40	1.25" Socket QC (for 1.66" O.D. Pipe)	1.25" MNPT	44.0	1,117.6	30.0	113.6	4.0
TS-CT40-QC	16 x 53	1.25" Socket QC (for 1.66" O.D. Pipe)	1.25" MNPT	56.0	1,422.4	40.0	151.4	5.3
TS-CT40SQ-QC	21 x 32	1.25" Socket QC (for 1.66" O.D. Pipe)	1.25" MNPT	35.0	889.0	40.0	151.4	5.3
TS-CT80-QC	24 x 50	1.25" Socket QC (for 1.66" O.D. Pipe)	1.25" MNPT	67.0	1,701.8	80.0	302.8	10.7
TS-CT120-QC	24 x 70	1.25" Socket QC (for 1.66" O.D. Pipe)	1.25" MNPT	73.0	1,854.2	120.0	454.2	16.0

Related Equipment Available from SWT:
Inline Static Mixer (Recommended—See illustration on reverse side.)
Chemical Feed Pumps

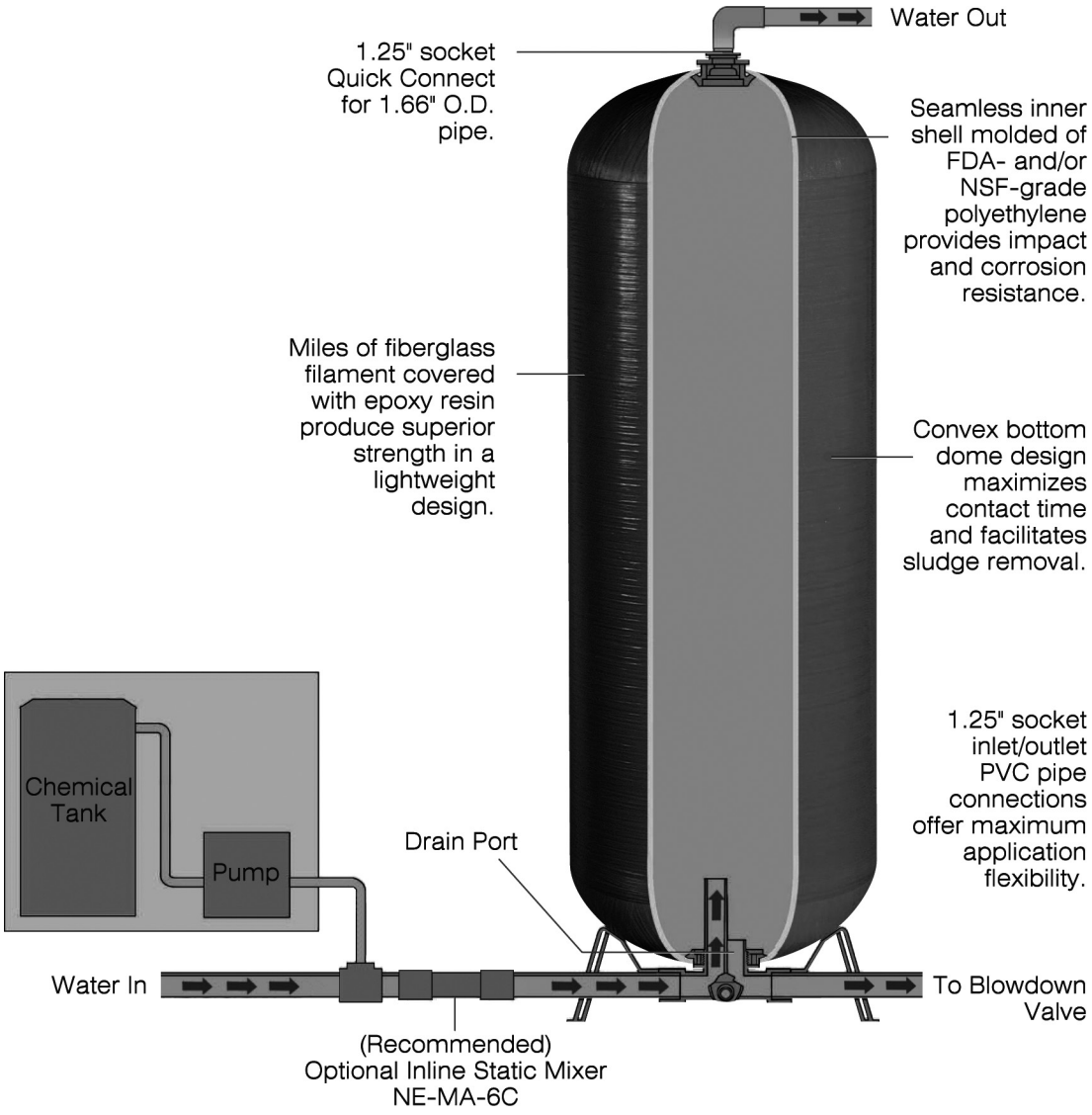
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1391
EFFECTIVE
SEPTEMBER 2025

RETENTION TANKS

FIBERGLASS WRAPPED & PE LINER



SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

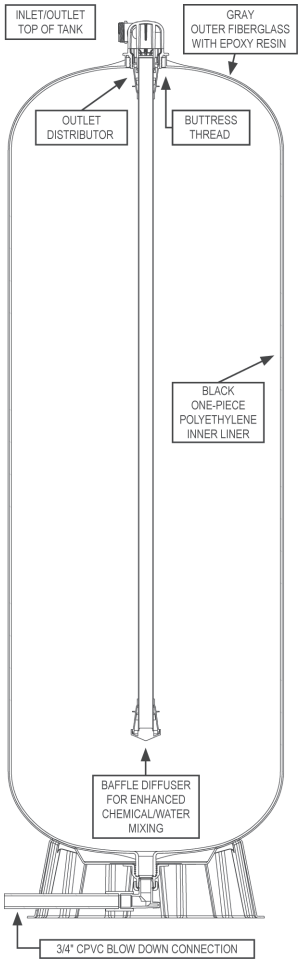
MEMBER Water Quality ASSOCIATION

FORM 1391
EFFECTIVE
SEPTEMBER 2025

Retention Tanks

FIBERGLASS WRAPPED & PE LINER





Features

- Convenient inlet/outlet piping connection at the top of the tank
- Inlet/outlet adapter easily accommodates the use of a vacuum breaker
- Inlet/outlet buttress thread for strength
- Full 3/4" (1.050" O.D.) pipe quick connect blowdown drain at lowest point of tank
- 360 degree drain orientation
- Black one piece polyethylene liner for impact and corrosion resistance
- Includes 1-1/4" socket and 1-1/2" spigot PVC straight solvent fitting kit (P/N LC-V3007-07) and 1-1/4" plastic straight male NPT fittings (P/N LC-V3317)
- Bypass valve option available (P/N LC-V3006)
- 5 year limited warranty
- Tested and Certified by NSF International against NSF/ANSI/CAN Standard 61 for material requirements and NSF/ANSI/CAN 372
- Made in USA

Specifications

- 75 psi (517 kPa) maximum operating pressure
- 120°F (49°C) maximum operating temperature
- 0 maximum allowable operating vacuum
- A vacuum/pressure relief valve of adequate size must be incorporated in the plumbing

Part Number	Tank Assembly Diameter		Tank Assembly Height		Capacity		Shipping Weight		Carton Qty.
	inch	mm	inch	mm	gallon	liter	lb	kg	
LC-RT40	21	533	40.5	1,029	40	151	37	17	1
LC-RT80	21	533	67.5	1,715	80	303	66	30	1
LC-RT120	24	607	78.5	1,994	120	454	80	36	1

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1540
EFFECTIVE
AUGUST 2022

MAXIMUM CONTACT TANKS

FIBERGLASS WRAPPED & PE LINER



Features

- Convenient inlet/outlet piping connection at the top of the tank
- Inlet/outlet adapter easily accommodates the use of a vacuum breaker
- Inlet/outlet buttress thread for strength
- Full 3/4" (1.050" O.D.) pipe quick connect blowdown drain at lowest point of tank
- 360 degree drain orientation
- Black one piece polyethylene liner for impact and corrosion resistance
- Includes 1-1/4" socket and 1-1/2" spigot PVC straight solvent fitting kit (P/N LC-V3007-07) and 1-1/4" plastic straight male NPT fittings (P/N LC-V3317)
- Bypass valve option available (P/N LC-V3006)
- 5 year limited warranty
- Tested and Certified by NSF International against NSF/ANSI/CAN Standard 61 for material requirements and NSF/ANSI/CAN 372
- Made in USA

Specifications

- 75 psi (517 kPa) maximum operating pressure
- 120°F (49°C) maximum operating temperature
- 0 maximum allowable operating vacuum
- A vacuum/pressure relief valve of adequate size must be incorporated in the plumbing

Part Number	Tank Assembly Diameter		Tank Assembly Height		Capacity		Shipping Weight		Carton Qty.
	inch	mm	inch	mm	gallon	liter	lb	kg	
LC-CT120	24	607	78.5	1,994	120	454	80	36	1

NOTE: This Maximum Contact Tank is designed specifically for use as a bacteriological disinfection contact tank and is not designed for use as an oxidation contact tank. The baffle diffuser assembly mounted at the bottom of the inlet distributor piping is located at the bottom of the tank for maximum chemical/water mixing and does not allow area for any buildup of precipitated or oxidized matter in the bottom of the tank.

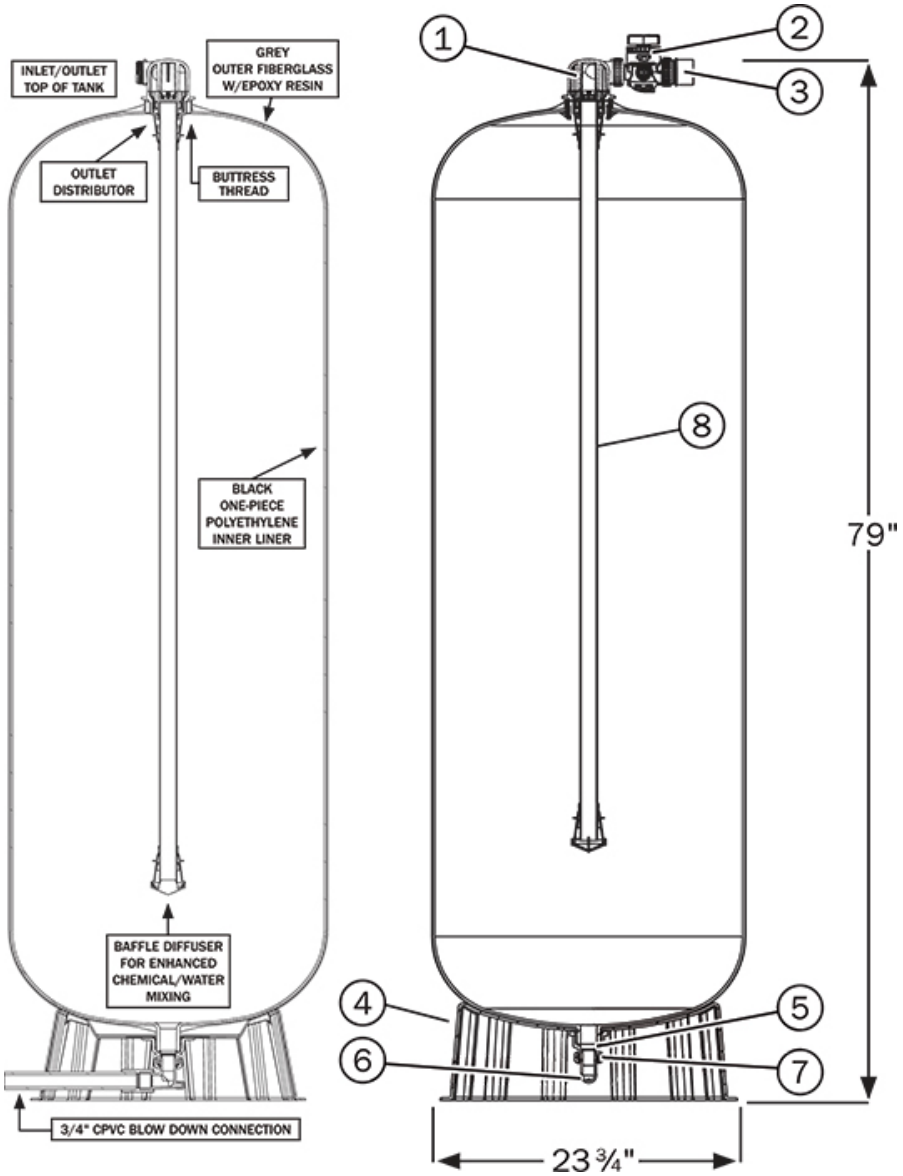
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1541
EFFECTIVE
AUGUST 2025

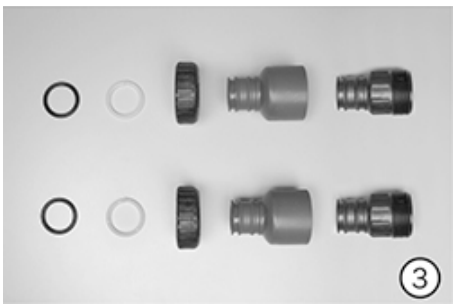
MAXIMUM CONTACT TANKS

FIBERGLASS WRAPPED & PE LINER



Item	Description
1	In/ Out Head
2	LC-V3006 WSI Bypass Valve (optional)
3	WSI 1-1/4" x 1-1/2" Solvent Kit WSI 1-1/4" Plastic Male NPT
4	RT Tank Base
5	RT Tank Drain Adapter O-ring for Drain Adapter
6	WS1 Elbow 3/4" Quick Connect 3/4" x 10" CPVC Pipe
7	WS1 Nut 1" Quick Connect WS1 Split Ring WS1 O-ring
8	Riser





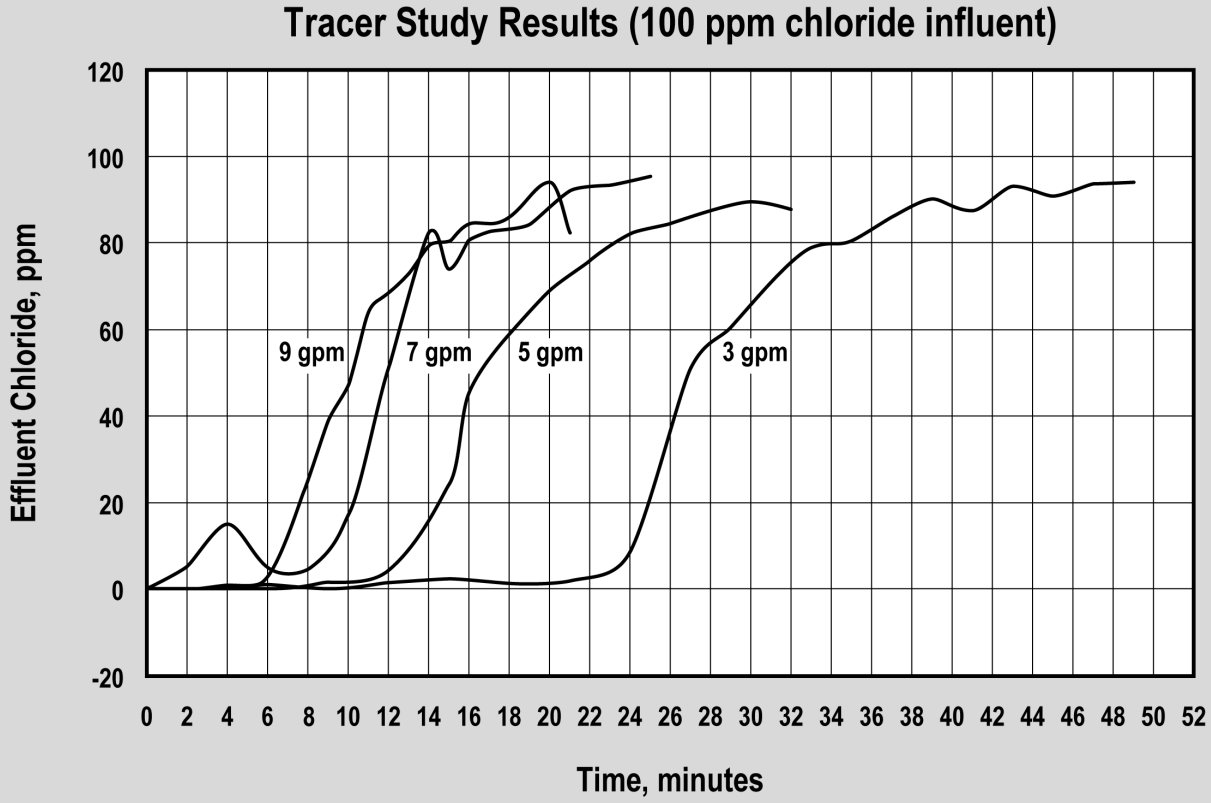
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1541
EFFECTIVE
AUGUST 2025

MAXIMUM CONTACT TANKS

FIBERGLASS WRAPPED & PE LINER



Average Baffle Factor: 0.56

Tank Volume gallon	Flow Rate gpm	T* minutes	T10** minutes	Baffling Factor T10/T
120	3	40.0	24.25	0.61
120	5	24.0	13.10	0.55
120	7	17.1	9.25	0.54
120	9	13.3	6.85	0.52

* T is the contact time (tank volume divided by flow rate).

** T10 is the time at which 10% of the influent concentration is measured at the effluent of the tank.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1541
EFFECTIVE
AUGUST 2025

RO Storage Tanks

FIBERGLASS WRAPPED & PEU AIR CELL



Made in USA

RO Storage Tanks *are high-performance, high-value vessels specifically designed for reverse osmosis systems. These small vessels offer big advantages over competitive steel tanks via 100% corrosion-free, seamless, composite construction, and the ability to discharge in any position.*

Features

- Pre-installed inlet/outlet assembly saves time and money
- Fully replaceable interior air cell is constructed of heavy-gauge engineered polymer (polyether urethane)
- Built-in union for easy installation and service
- Fiberglass-wound and epoxy resin-sealed outer shell
- High density, seamless, molded polyethylene inner shell
- Durable Noryl® plumbing connections
- Environmentally safe and 100% lead-free
- Certified to NSF/ANSI Standard 61
- **Made in USA**

Operating Parameters

- 125 psi maximum operating pressure
- 120°F maximum operating temperature

Part Number	Model Number	Dimensions		Capacity		System Connection	Height of Inlet/Outlet to Floor	
		Inches	Centimeters	Gallons	Liters		Inches	cm
TS1626RO15	RO15	16 x 26	41 x 66	14.5	55	1 inch MNPT	1.75	4.4
TS1632RO20	RO20	16 x 32	41 x 81	19.8	75	1 inch MNPT	1.75	4.4
TS1644RO30	RO30	16 x 44	41 x 112	29.6	112	1 inch MNPT	1.75	4.4
TS1657RO40	RO40	16 x 57	41 x 145	40.4	153	1 inch MNPT	1.75	4.4
TS2441RO60	RO60	24 x 41.5	61 x 105	60.0	227	1.25 inch MNPT	2.25	5.7
TS2455RO80	RO80	24 x 55.25	61 x 140	86.6	328	1.25 inch MNPT	2.25	5.7
TS2474RO120	RO120	24 x 74.25	61 x 189	119.7	453	1.25 inch MNPT	2.25	5.7

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

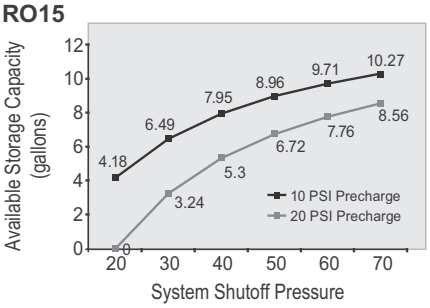
FORM 1392
EFFECTIVE
SEPTEMBER 2025

RO Storage Tanks

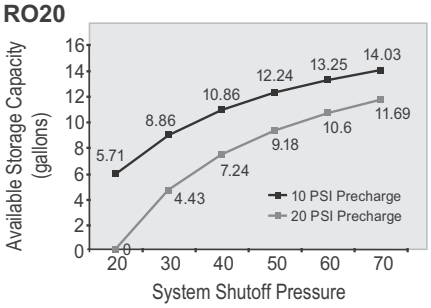
FIBERGLASS WRAPPED & PEU AIR CELL

Draw Down Curves

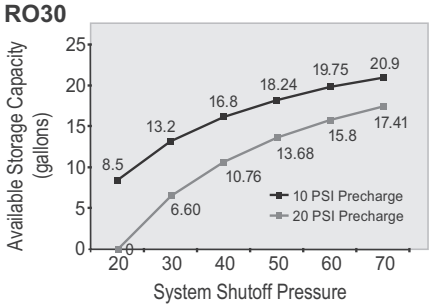
RO15



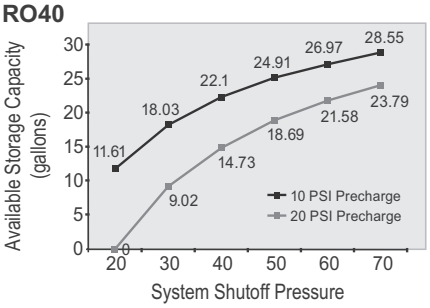
RO20



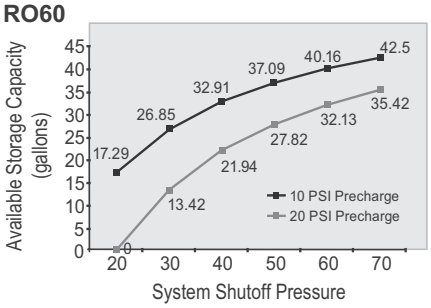
RO30



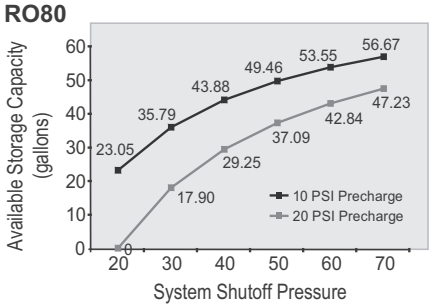
RO40



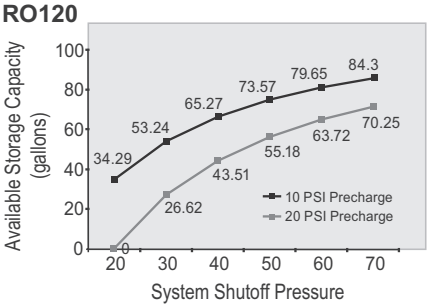
RO60



RO80



RO120



SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1392
EFFECTIVE
SEPTEMBER 2025

Storage Tanks

RESIDENTIAL BRINE TANKS



Blow Molded Handle Cover



Residential Brine Tanks are very durable, non-toxic, and resistant to ultraviolet light. They are available in capacities ranging from 156 to 450 pounds of salt, with sizes ranging from 11 inches (small enough to fit in a closet) to 18 inches in diameter. All tanks and covers are black.

Features:

- Made of one piece, rigid, non-toxic, high-density polyethylene
- Integral structural design delivers strength in stress-prone areas to minimize bulging when filled with brine salt
- Stylish design and all-black color
- Blow molded cover or attractive injection molded cover
- Trouble-free performance
- Optional injection molded grids promote uniform brining and reduced salt bridging.

Rectangular Brine Tanks — Blow Molded

Part Number	Description	Cover*	Capacity Gallons (Liters)	Salt Capacity Lb (kg)
LC-BT1138BLK	11 x 11 x 36 inch high (28 x 28 x 97 cm)	BMH	19 (72)	156 (71)
LC-BT1434BLK	14 x 14 x 34 inch high (36 x 36 x 87 cm)	BMH	25 (95)	225 (102)
LC-BT151733BLK	15 x 17 x 33 inch high (38 x 43 x 84 cm)	IM	33 (125)	275 (125)

Cylindrical Brine Tanks — Blow Molded

Part Number	Description	Cover*	Capacity Gallons (Liters)	Salt Capacity Lb (kg)
LC-BT1833BLK	18 dia. x 33 inch high (46 x 84 cm)	BM	36 (136)	375 (170)
LC-BT1840BLK	18 dia. x 40 inch high (46 x 102 cm)	BM	43 (163)	450 (205)

* BM = Blow Molded Cover; BMH = Blow Molded Handle Cover; IM = Injection Molded Cover

Available Grid Plates:

LC-H1071-01 – 15 x 17 inch Molded Grid Plate with 4 inch Brine Well Hole
LC-H1072-01 – 18 inch Round Molded Grid Plate with 4 inch Brine Well Hole
LC-H1072-02 – 18 inch Round Molded Grid Plate with 3.5 inch Brine Well Hole

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1219
EFFECTIVE
OCTOBER 2012

Storage Tanks

BRINE AND CHEMICAL STORAGE TANKS
ROTATIONALLY MOLDED



Rotationally Molded Brine and Chemical Storage Tanks are very durable, non-toxic, and resistant to ultraviolet light. They are available in capacities ranging from 95 to 500 gallons, with sizes ranging from 24 to 50 inches in diameter. All tanks and covers are black.

Features:

- Made of one piece, rigid, high impact, non-toxic polyethylene
- High chemical resistance
- Ultraviolet inhibitors
- 1/4 inch seamless walls won't bulge
- Complies with Federal Food, Drug and Cosmetic Act Section 121.2501 dated February 19, 1966

Brine and Chemical Storage Tanks — Rotationally Molded

Part Number	Description	Capacity Gallons (Liters)	Salt Capacity Lb (kg)	Weight Lb (kg)
LC-BT2448	Cylindrical: 24 diameter x 48 inch high (61 x 122 cm)	95 (360)	800 (363)	30 (14)
LC-BT2460	Cylindrical: 24 diameter x 60 inch high (61 x 152 cm)	115 (435)	1000 (454)	32 (15)
LC-BT3048	Cylindrical: 30 diameter x 48 inch high (76 x 122 cm)	145 (549)	1200 (544)	48 (22)
LC-BT3060	Cylindrical: 30 diameter x 60 inch high (76 x 152 cm)	180 (681)	1600 (726)	56 (25)
LC-BT3948	Cylindrical: 39 diameter x 48 inch high (99 x 122 cm)	250 (946)	2200 (998)	67 (30)
LC-BT3960	Cylindrical: 39 diameter x 60 inch high (99 x 152 cm)	300 (1136)	2700 (1225)	80 (36)
LC-BT4260	Cylindrical: 42 diameter x 60 inch high (107 x 152 cm)	350 (1325)	3100 (1406)	84 (38)
LC-BT5060	Cylindrical: 50 diameter x 60 inch high (127 x 152 cm)	500 (1893)	4500 (2041)	107 (49)

Accessories

LC-H1080	Plastic Grid Plate: 24 inch diameter (61 cm)
LC-H1032	Plastic Grid Plate: 30 inch diameter (76 cm)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1214
EFFECTIVE
APRIL 2012

Storage Tanks

BRINE AND CHEMICAL STORAGE TANKS
BLOW MOLDED



Blow Molded Brine and Chemical Storage Tanks *are available in 24 and 30 inch diameters. The 30 inch diameter tank is the largest blow molded brine tank for commercial and industrial applications. These round tanks are molded of high density polyethylene for exceptional stress and crack resistant properties. These tanks feature heavy wall thickness for increased durability. All tanks and covers are black.*

Features:

- Made of one piece, rigid, high impact, non-toxic polyethylene
- High chemical resistance
- Ultraviolet inhibitors
- Ideal for commercial and industrial applications
- Available in 24 and 30 inch diameters

Brine and Chemical Storage Tanks — Blow Molded

Part Number	Description	Capacity Gallons (Liters)	Salt Capacity Lb (kg)	Weight Lb (kg)
LC-BT2441	Cylindrical: 24 diameter x 41 inch high (61 x 104 cm)	80 (303)	700 (318)	24 (11)
LC-BT2450	Cylindrical: 24 diameter x 50 inch high (61 x 127 cm)	100 (379)	900 (408)	27 (12)
LC-BT3050	Cylindrical: 30 diameter x 50 inch high (76 x 127 cm)	150 (568)	1400 (635)	49 (22)

Accessories

LC-H1080	Plastic Grid Plate: 24 inch diameter (61 cm)
LC-H1032	Plastic Grid Plate: 30 inch diameter (76 cm)

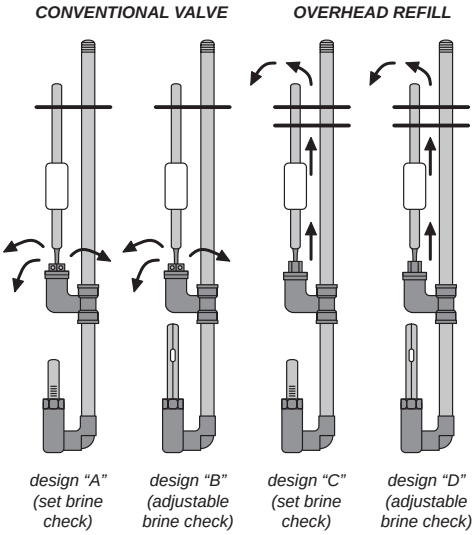
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1214
EFFECTIVE
APRIL 2012

BRINE CONTROL VALVES

BRINE TANK SAFTEY FLOATS



- Requires no electrical power to operate
- All components operate hydraulically
- Tested for operation and leakage at the factory prior to shipment
- All components are compatable with saturated brine solution
- Standard 48 inch overall length
- Max. operating temperature: 140°F (60°C)
- Available in any overall length

SWT Brine Valves add reliability and security to your water treatment system with four primary checks to prevent excessive brine draw or overfill. During a power outage, the main control valve can freeze in "brine draw" or "brine refill" mode. These conditions can cause water to overfill the brine tank or allow a wasted amount of brine solution to be sent to the drain. SWT brine valves prevent these potentially damaging results because each brine valve is equipped with a safety backup float and check to close the paths to and from the brine tank.

This valve is widely used with automatic multi-cycle control valves such as Autotrol, Fleck, Clack, etc. There are four distinct adjustable designs which allow the valve to be used in a wide variety of applications:

Type A has a factory preset brine draw level and adjustable brine refill float.

Type B has an adjustable brine draw level and brine refill float.

Type C has a factory preset brine draw level and adjustable brine refill float with overhead refill. Overhead design is used in large or odd-shaped brine tanks where refill water needs to be dispersed over a large area. The overhead refill design allows for connection of tubing to be located as needed.

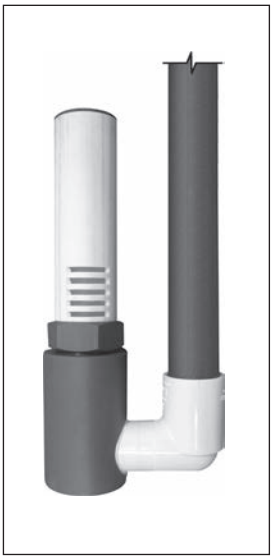
Type D has an adjustable brine draw level and brine refill float with overhead refill.

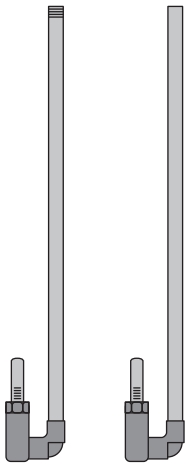
Part Number	Size	Approximate draw	Approximate Refill	Fits Brine Well Size
SM-IC438DA	3/8" MNPT	1 to 4 GPM	2 GPM @ 45 PSI	4 inch
SM-IC438DB	3/8" MNPT	1 to 4 GPM	2 GPM @ 45 PSI	4 inch
SM-IC438DC	3/8" MNPT	1 to 4 GPM	2 GPM @ 45 PSI	4 inch
SM-IC438DD	3/8" MNPT	1 to 4 GPM	2 GPM @ 45 PSI	4 inch
SM-IC412DA	1/2" MNPT	2 to 6 GPM	2 GPM @ 45 PSI	4 inch
SM-IC412DB	1/2" MNPT	2 to 6 GPM	2 GPM @ 45 PSI	4 inch
SM-IC412DC	1/2" MNPT	2 to 6 GPM	2 GPM @ 45 PSI	4 inch
SM-IC412DD	1/2" MNPT	2 to 6 GPM	2 GPM @ 45 PSI	4 inch
SM-IC434DA	3/4" MNPT	4 to 8 GPM	2 GPM @ 45 PSI	4 inch
SM-IC434DB	3/4" MNPT	4 to 8 GPM	2 GPM @ 45 PSI	4 inch
SM-IC434DC	3/4" MNPT	4 to 8 GPM	2 GPM @ 45 PSI	4 inch
SM-IC434DD	3/4" MNPT	4 to 8 GPM	2 GPM @ 45 PSI	4 inch
SM-IC4100DA	1" MNPT	8 to 12 GPM	2 GPM @ 45 PSI	5 inch
SM-IC4100DB	1" MNPT	8 to 12 GPM	2 GPM @ 45 PSI	5 inch
SM-IC4100DC	1" MNPT	8 to 12 GPM	2 GPM @ 45 PSI	5 inch
SM-IC4100DD	1" MNPT	8 to 12 GPM	2 GPM @ 45 PSI	5 inch
SM-IC4125DA	1-1/4" MNPT	10 to 30 GPM	2 GPM @ 45 PSI	5 inch
SM-IC4125DB	1-1/4" MNPT	10 to 30 GPM	2 GPM @ 45 PSI	5 inch

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1216
EFFECTIVE
AUGUST 2021

BRINE PICKUP WITH AIR CHECK





SWT Brine Pickups with Air Check *prevent drawing air to add reliability and security to your water treatment system. During a power outage, the main control valve can freeze in "brine draw" mode. This condition will result in air being drawn when the brine tank empties. SWT brine pickups prevent this costly result because each brine pickup is equipped with a check to close the path from the brine tank.*

- Requires no electrical power to operate
- All components operate hydraulically
- All components are compatable with saturated brine solution
- Standard 48 inch overall length
- Max. operating temperature: 140°F (60°C)
- 3/8 thru 1 inch brine pickups fit 4 inch brine wells
  1-1/4 inch brine pickups fit 5 inch brine wells
- Available in any overall length

Part Number	Connection	Approximate Draw	Approximate Refill
BPU-3848-AC	3/8" MNPT	1 to 4 gpm	No Refill
BPU-3848-AC-SPIG	3/8" Spigot	1 to 4 gpm	No Refill
BPU-3848-AC-R	3/8" MNPT	1 to 4 gpm	2.4 gpm @ 6 fps
BPU-3848-AC-SPIG-R	3/8" Spigot	1 to 4 gpm	2.4 gpm @ 6 fps
BPU-1248-AC	1/2" MNPT	2 to 6 gpm	No Refill
BPU-1248-AC-SPIG	1/2" Spigot	2 to 6 gpm	No Refill
BPU-1248-AC-R	1/2" MNPT	2 to 6 gpm	4.1 gpm @ 6 fps
BPU-1248-AC-SPIG-R	1/2" Spigot	2 to 6 gpm	4.1 gpm @ 6 fps
BPU-3448-AC	3/4" MNPT	4 to 8 gpm	No Refill
BPU-3448-AC-SPIG	3/4" Spigot	4 to 8 gpm	No Refill
BPU-3448-AC-R	3/4" MNPT	4 to 8 gpm	7.7 gpm @ 6 fps
BPU-3448-AC-SPIG-R	3/4" Spigot	4 to 8 gpm	7.7 gpm @ 6 fps
BPU-1048-AC	1" MNPT	8 to 12 gpm	No Refill
BPU-1048-AC-SPIG	1" Spigot	8 to 12 gpm	No Refill
BPU-1048-AC-R	1" MNPT	8 to 12 gpm	12.9 gpm @ 6 fps
BPU-1048-AC-SPIG-R	1" Spigot	8 to 12 gpm	12.9 gpm @ 6 fps
BPU-12548-AC	1-1/4" MNPT	10 to 30 gpm	No Refill
BPU-12548-AC-SPIG	1-1/4" Spigot	10 to 30 gpm	No Refill
BPU-12548-AC-R	1-1/4" MNPT	10 to 30 gpm	23.2 gpm @ 6 fps
BPU-12548-AC-SPIG-R	1-1/4" Spigot	10 to 30 gpm	23.2 gpm @ 6 fps

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

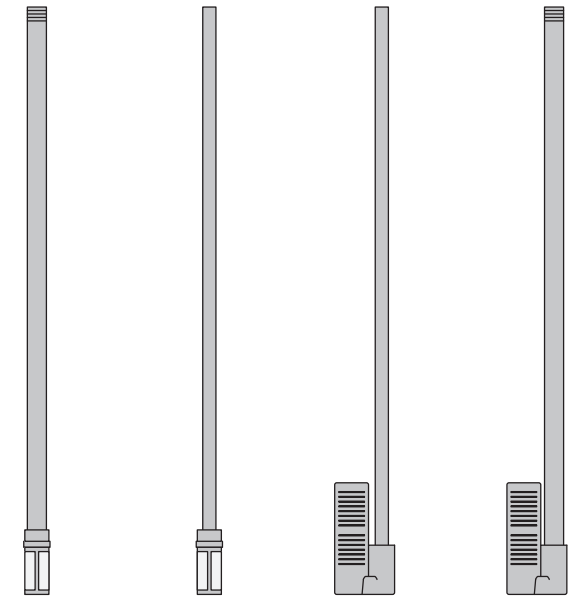
MEMBER Water Quality ASSOCIATION

FORM 1442
EFFECTIVE
APRIL 2018

BRINE PICKUPS



SM-BPUAC SM-MPU14



Type 5 Type 6 Type 8 Type 9

Part Number	Description
SM-BPUAC	Brine Air Check — 3/8 inch and 0.54 inch OD 2-step socket, molded ABS body, Buna ball and o-ring
SM-MPU14	Brine Strainer — 3/8 inch and 0.54 inch OD 2-step socket, molded ABS body, polypropylene 0.014 inch screen (approx. 45 mesh)

Part Number	Length	Description
BPU530	30 inch	Type 5 Brine Pickup — 1/4 inch MNPT Sch. 80 PVC pipe (0.54 inch OD) with SM-MPU14
BPU540	40 inch	Type 5 Brine Pickup — 1/4 inch MNPT Sch. 80 PVC pipe (0.54 inch OD) with SM-MPU14
BPU636	36 inch	Type 6 Brine Pickup — 3/8 inch socket PVC rigid tubing (3/8" OD) with SM-MPU14
BPU648	48 inch	Type 6 Brine Pickup — 3/8 inch socket PVC rigid tubing (3/8" OD) with SM-MPU14
BPU836	36 inch	Type 8 Brine Pickup — 3/8 inch socket PVC rigid tubing (3/8" OD) with SM-BPUAC
BPU848	48 inch	Type 8 Brine Pickup — 3/8 inch socket PVC rigid tubing (3/8" OD) with SM-BPUAC
BPU930	30 inch	Type 9 Brine Pickup — 1/4 inch MNPT Sch. 80 PVC pipe (0.54 inch OD) with SM-BPUAC
BPU936	36 inch	Type 9 Brine Pickup — 1/4 inch MNPT Sch. 80 PVC pipe (0.54 inch OD) with SM-BPUAC

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1443
EFFECTIVE
OCTOBER 2017

Brine Wells

ROUND BRINE WELLS



Round brine wells are made from FDA grade polystyrene material.

Part Number	Diameter x Length Inches	Slots	Color
3.5 inch Brine Wells with 2 Caps			
RG-BW326S2C	3.5 x 26	Slotted	White
RG-BW328S2C	3.5 x 28	Slotted	White
RG-BW329S2C	3.5 x 29	Slotted	White
RG-BW330S2C	3.5 x 30	Slotted	White
RG-BW332S2C	3.5 x 32	Slotted	White
RG-BW336S2C	3.5 x 36	Slotted	White
RG-BW348S2C	3.5 x 48	Slotted	White
4 inch Brine Wells with 2 Caps			
RG-BW426S2C	4 x 26	Slotted	White
RG-BW427S2C	4 x 27	Slotted	White
RG-BW428S2C	4 x 28	Slotted	White
RG-BW429S2C	4 x 29	Slotted	White
RG-BW430S2C	4 x 30	Slotted	White
RG-BW432S2C	4 x 32	Slotted	White
RG-BW436S2C	4 x 36	Slotted	White
RG-BW460S2C	4 x 60	Slotted	White
5 inch Brine Wells without Caps			
RG-BW548S	5 x 48	Slotted	Black
RG-BW560S	5 x 60	Slotted	Black
RG-BW572S	5 x 72	Slotted	Black
~~**6 inch Brine Wells without Caps**~~ **(discontinued 05/2025)**			
~~RG-BW648S~~	~~6 x 48~~	~~Slotted~~	~~Black~~
~~RG-BW660S~~	~~6 x 60~~	~~Slotted~~	~~Black~~
~~RG-BW672S~~	~~6 x 72~~	~~Slotted~~	~~Black~~



Brine Well Caps

Part Number	Description
RG-BWC3	Cap to fit 3.5 inch diameter brine wells
RG-BWC4	Cap to fit 4 inch diameter brine wells
RG-BWC5	Cap to fit 5 inch diameter brine wells
~~RG-BWC6~~	~~Cap to fit 6 inch diameter brine wells~~ (discontinued 05/2025)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1441
EFFECTIVE
MAY 2025

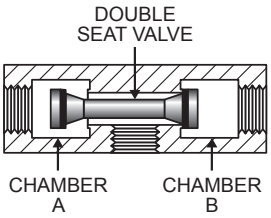
BRINE DIRECTOR

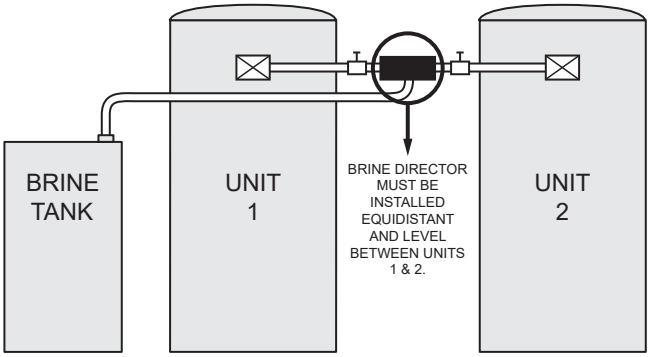
PVC BRINE DIRECTOR VALVE



SWT's Brine Directors offer water treatment professionals a means of decreasing the cost of labor and materials when installing a twin softener system. Brine directors eliminate the need for a second set of brine components.

Made in USA.





Operation:

When Unit 1 in the illustration above begins regeneration, the pressure drop in the tank causes the double seat valve in the director to move to the left. The water pressure in Unit 2 presses the valve against the seat in Chamber B, holding Chamber A open. Brine is drawn from the brine tank, through Chamber A, and into Unit 1. The brine tank is refilled via the same route. When Unit 1 has finished its cycle and is back in service, the pressure becomes equal in both tanks, returning the brine director to neutral. When Unit 2 begins regeneration, the double seat valve moves to the right and the process repeats. The brine draw and refill level are controlled by the brine valve in the brine tank as in a conventional brining system.

Materials: PVC or CPVC

Seals: EPDM

Maximum Operating Temperature: 140°F (60°C)

Part Number	Pipe Size	Diameter	Length	Material	Flow Rate
SM-BDC34	3/4 inch NPT	2 inch	5-1/2 inch	PVC	0–5 gpm
SM-BDC34-CPVC	3/4 inch NPT	2 inch	5-1/2 inch	CPVC	0–5 gpm
SM-BDC100	1 inch NPT	3 inch	6-5/8 inch	PVC	3–12 gpm
SM-BDC100-CPVC	1 inch NPT	3 inch	6-5/8 inch	CPVC	3–12 gpm
SM-BDC125	1-1/4 inch Socket	3 inch	6-5/8 inch	PVC	3–20 gpm
SM-BDC125-CPVC	1-1/4 inch Socket	3 inch	6-5/8 inch	CPVC	3–20 gpm

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1425
EFFECTIVE
SEPTEMBER 2019

MANUAL BACKWASHING CONTROL VALVES
RESIDENTIAL/COMMERCIAL FILTER APPLICATIONS



275/BW/MAN

FEATURES:

- NO ELECTRICITY required
- Three-position lever (backwash, rapid rinse, service) ensures simple, reliable operation
- Easy installation and setup
- Solid, lead-free brass valve body for superior strength and durability
- WQA Tested and Certified to NSF/ANSI Standard 61 Section 8 Material Safety Only and Annex G
- Made in USA

MANUAL BACKWASHING FILTER VALVE SPECIFICATIONS

	1 INCH MANUAL VALVE	1.5 INCH MANUAL VALVE
Part Number	275/BW/MAN	285/BW/MAN
Valve Material	Lead Free Brass	Lead Free Brass
Inlet/Outlet Ports	1 inch MNPT	1-1/2 inch FNPT
Distributor (Riser) Port	3/4 inch Pipe (1.050 O.D.)	1-1/2 inch Pipe (1.900 O.D.)
Backwash/Drain Line Port	3/4 inch MNPT	1 inch MNPT
Mounting Base	2.5 inch – 8 NPSM	4 inch – 8 UN
Valve Height (from top of tank)	6.75 inch	6.75 inch
Continuous Flow @ 15 psid Valve Only	26 gpm	51 gpm
Peak Flow @ 25 psid Valve Only	33 gpm	66 gpm
Cv @ 1 psid Valve Only	6.8	13.2
Maximum Backwash @ 25 psid Valve Only	25 gpm	49 gpm
Backwash	Upflow	Upflow
Pressure	Hydrostatic: 300 psi Working: 20 to 125 psi	Hydrostatic: 300 psi Working: 20 to 125 psi
Temperature	34 to 110 degrees F	34 to 110 degrees F

NOTE: Backwash Flow Controls available.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1131
EFFECTIVE
MARCH 2013

Control Valves

255 SERIES RESIDENTIAL CONTROL VALVES WITH 3/4 INCH INTERNAL PORTING

Autotrol 255 Series Valves

Service Flow @ 15 psi . . . . 15.5 gpm (3.52 m³h)
Backwash @ 25 psi . . . . . 6.0 gpm (1.36 m³h)
Service . . . . . Cv = 3.99 (Kv = 3.4)
Backwash . . . . . Cv = 1.20 (Kv = 1.0)

For Tank Sizes * . . . . . 6 thru 14 inch diameter
Tank Thread . . . . . 2.5"#8 NPSM
Riser Port . . . . . 1.050" OD pipe (3/4" NPS)

* Application dependent



255 Series 3/4 Inch Valve Body with 440i Clock Control without Cover



440i Clock Control



740 Logix Electronic Clock Control



460i Demand Control



760 Metered Demand Control

3/4" Softener Control Valves — Must choose (IN) Injector and (BW) Backwash Flow Control (See below).

Requires Plumbing Connections (See other side for Manifold Kits or Optional Manual Bypass Valves & Bypass Adapter Kits).

Part Number	Description	Regen. Cycle	Qty./ Carton	Carton Weight
2544-(IN)(BW)	255/440i Clock Control, w/ Cover — Basic Settings	6 or 7 Day	8	51 lbs.
2574-(IN)(BW)	255/740 Logix Electronic Clock Control, w/ Cover — Semi-Programmable	7 or 99 Day	4	30 lbs.
25742-(IN)(BW)	255/742 Logix Electronic Clock Control, w/ Cover — Fully-Programmable	7 or 99 Day	4	30 lbs.
2546-(IN)(BW)	255/460i Metered Demand Control, w/ Cover — Semi-Programmable	Demand	8	54 lbs.
2576-(IN)(BW)	255/760 Logix Metered Demand Control, w/ Cover — Semi-Programmable	Demand	4	30 lbs.
25762-(IN)(BW)	255/762 Logix Metered Demand Control, w/ Cover — Fully-Programmable	Demand	4	30 lbs.

3/4" Filter Control Valves — Must choose (BW) Backwash Flow Control (See below).

Requires Plumbing Connections (See other side for Manifold Kits or Optional Manual Bypass Valves & Bypass Adapter Kits).

Part Number	Description	Regen. Cycle	Qty./ Carton	Carton Weight
2344-(BW)	253/440i Clock Control, w/ Cover — Basic Settings	6 or 7 Day	8	51 lbs.
2374-(BW)	253/740F Logix Electronic Clock Control, w/ Cover — Semi-Programmable	7 or 99 Day	4	30 lbs.
23742-(BW)	253/742F Logix Electronic Clock Control, w/ Cover — Fully-Programmable	7 or 99 Day	4	30 lbs.
2376-(BW)	253/760F Logix Metered Demand Control, w/ Cover — Semi-Programmable	Demand	4	30 lbs.
23762-(BW)	253/762F Logix Metered Demand Control, w/ Cover — Fully-Programmable	Demand	4	30 lbs.

(IN) Injectors & (BW) Backwash Flow Controls — Must choose from the following when ordering Control Valves.

Option Code (x)	Description
(IN) = A, B, or C	440i, 460i, 960 Control Injector Nozzle: (A: 6"-7" Tanks), (B: 8"-12" Tanks), (C: 10"-14" Tanks)
(IN) = E, F, G, H, J, K, or L	740, 742, 760, 762 Control Injector Nozzle: (E: 6" Tank), (F: 7" Tank), (G: 8" Tank), (H: 9" Tank), (J: 10" Tank), (K: 12" Tank), (L: 13" or 14" Tank)
(BW) = 00	No Backwash Flow Control — "Open"
(BW) = PL	No Backwash Flow Control — "Plugged"
(BW) = 06, 07, 08, 09, 10, or 12	Backwash Flow Control: (06: 0.9 GPM, 6" Tank), (07: 1.2 GPM, 7" Tank), (08: 1.6 GPM, 8" Tank), (09: 2.0 GPM, 9" Tank), (10: 2.5 GPM, 10" Tank), (12: 3.5 GPM, 12" Tank) **Tank sizes are for typical softener applications.**
(BW) = 13 or 14	Backwash Flow Control: (13: 4.5 GPM, 13" Tank), (14: 5.3 GPM, 14" Tank) **Tank sizes are for typical softener applications.**

50 Hz available at additional cost.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1130
EFFECTIVE
JUNE 2023

Control Valves

255 SERIES RESIDENTIAL CONTROL VALVES WITH 3/4 INCH INTERNAL PORTING


I-Lid Cover


Logix Cover


Stainless Steel Manifold Kit


Noryl Manifold Kit


Noryl Turbine Manifold Kit


Manual Bypass Valve


Bypass Adapter Kit

Manifold Kits — Required for Control Valves if NOT using Optional Manual Bypass Valves & Bypass Adapter Kits

Part Number	Description
UA-3023763	3/4 inch NPT Stainless Steel Manifold Kit with Installation Hardware and O-rings
UA-1040279	3/4 inch NPT Noryl Manifold Kit with Installation Hardware and O-rings
UA-3023761	3/4 inch BSPT Stainless Steel Manifold Kit with Installation Hardware and O-rings
UA-1040283	3/4 inch BSPT Noryl Manifold Kit with Installation Hardware and O-rings
UA-1234253	3/4 inch MNPT Male Manifold Kit with Installation Hardware and O-rings
UA-1234257	3/4 inch MNPT Male Manifold Kit with Turbine, Installation Hardware, and O-rings
UA-3023749	1 inch NPT Stainless Steel Manifold Kit with Installation Hardware and O-rings
UA-3023747	1 inch BSPT Stainless Steel Manifold Kit with Installation Hardware and O-rings
UA-1234254	1 inch MNPT Male Manifold Kit with Installation Hardware and O-rings
UA-1234258	1 inch MNPT Male Manifold Kit with Turbine, Installation Hardware, and O-rings

Manual Bypass Valves — Optional — Requires Bypass Adapter Kit (See below)

Part Number	Description
UA/BV256	Manual Bypass Valve for All 255 Valves

Bypass Adapter Kits — Required for Control Valves using Optional Manual Bypass Valves (See above)

Part Number	Description
UA-1001606	3/4 inch Copper Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 0.875" OD
UA-1001613	3/4 inch CPVC Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 3/4" Spigot, 1.050" OD
UA-1001769	3/4 inch NPT ABS Plastic Threaded Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-1001604	3/4 inch BSPT ABS Plastic Threaded Pipe Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-3023824	3/4 inch BSPT Stainless Steel Pipe Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-1001670	1 inch Copper Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 1.125" OD
UA-1001614	1 inch CPVC Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 1" Spigot, 1.315" OD
UA-1001603	1 inch NPT ABS Plastic Threaded Pipe Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-1001605	1 inch BSPT ABS Plastic Threaded Pipe Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-3023828	1 inch NPT Stainless Steel Threaded Pipe Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-3023807	1 inch BSPT Stainless Steel Threaded Pipe Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-1041210	1.25 inch Copper Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 1.625" OD
UA-1001608	22mm Copper Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 22 mm OD
UA-1001615	25mm CPVC Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 25 mm OD
UA-1040547	Special 90° Elbow Adapter Kit (Must order above adapters for installation) — No longer available

Covers

Part Number	Description
UA-1000062	Black "i-Lid" Cover with Smoke Lens for All Valves with 400 Series Controls
UA-1236246	Dark Gray Logix Valve Cover for All Valves with 700 Series Controls

Other special covers are available upon request.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1130
EFFECTIVE
JUNE 2023

RESIDENTIAL
CONTROL
VALVES



255 Control Valves



Pentair Water® offers a full range of Autotrol® Control Valves to meet all residential water conditioning applications.

Logix™ Series

740 Time Clock

- Simple, economic electronic time clock (chronometric)
- 7- or 99-day regeneration setting
- High efficiency regeneration sequence
- 12-volt operation
- Filter or conditioner setting in one control
- Operates 255, 263, 268 with one controller

742 Time Clock

Same features as the 740 Time Clock, plus:

- Fully programmable cycle times
- Salt setting in 1-pound increments
- Optional no-salt detector
- Operates 255, 263, 268, 278, and Magnum® IT with one controller

760 Demand

- Simple, economic electronic demand (volumetric)
- Calendar override
- 12-volt operation
- 28-day variable reserve
- High efficiency regeneration sequence
- Automatic capacity calculations
- Operates 255, 263, 268 with one controller

762 Demand

Same features as the 760, plus:

- Fully programmable cycle times
- Salt setting in 1-pound increments
- Optional no-salt detector
- Operates 255, 263, 268, 278, and Magnum IT with one controller

764 Demand

Same features as the 762, plus:

- Multi-tank applications (twin alternating, multi-tank parallel)
- Control lockout
- Remote regeneration

Autotrol
Pentair Water

255 Control Valves

Specifications

Electrical

Controller Operating Voltage	12 Volt – AC (Requires use of Pentair Water®-supplied transformer)
Input Supply Frequency	50 or 60 Hz (Controller configuration dependent)
Motor Input Voltage	12 Volt – AC
Controller System Power Consumption	3 Watts average

Transformer – All Controllers

All Controllers require the use of a Pentair Water-supplied transformer.

Transformer Output Voltage	12 Volt – AC 400mA
Transformer Input Options	115 Volt – AC 50/60 Hz; 230 Volt – AC 50/60 Hz; 100 Volt – AC 50/60 Hz
Transformer Plug Options	Indoor North American Plug Outdoor North American (UL Listed for outdoor use) Japanese Plug Taiwan/Korea Plug Australian Plug United Kingdom Plug Mainland Europe Plug

Additional transformers may be available – call for more information.

Design Specifications/Ratings

Valve Body	Glass-filled thermoplastic – NSF Listed material
Rubber Components	Compounded for cold water – NSF Listed material
Valve Materials Certification	WQA Gold Seal Certified to ORD 0902 and NSF/ANSI 44 Rated component for material safety
Weight (Valve with Control)	4 lbs (1.8 kg)
Recommended Operating Pressure Canada	20 - 120 psi (1.38 - 8.27 bar) 20 - 100 psi (1.38 - 6.89 bar)
Hydrostatic Test Pressure	300 psi (20.69 bar)
Water Temperature	35° - 100°F (2° - 38°C)
Ambient Temperature*	35° - 120°F (2° - 48.9°C)

*Recommend use of outdoor cover for direct sunlight applications.

Options

Turbine for Demand Units	Standard manifold, 1-inch Autotrol® Turbine
Bypass Valve	Thermoplastic, 1-inch flow path, 1/2-inch (13mm) NPT male, drain
Bypass Inlet-Outlet Fitting Kits:	
Copper, Sweat Tube Adapter	1-inch or 3/4-inch (25 mm or 19 mm)
CPVC, Solvent Weld Tube Adapter	1-inch or 3/4-inch (25 mm or 19 mm)
Plastic NPT or BSPT Pipe Adapter	1-inch male or 3/4-inch male (25 mm or 19 mm)
Stainless steel NPT or BSPT Pipe Adapter	1-inch male or 3/4-inch male (25 mm or 19 mm)
Brine Refill Controls	.33 gpm (1.25 Lpm) fixed .14 gpm (.53 Lpm) fixed – optional for small tank applications
Compatible with Regenerants/Chemicals	Sodium chloride, potassium chloride, potassium permanganate, sodium bisulfite†, sodium hydroxide†, hydrochloric acid†, chlorine†† and chloramines††

†See owners manual for specific concentrations. ††Valve for use on potable water supply.

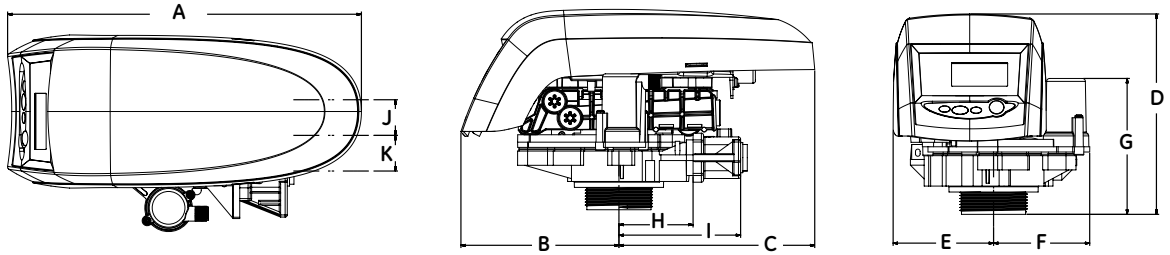


Dimensions

Valve Connections

Tank Thread	2-1/2-inches – 8, male
Inlet/Outlet Manifold *(brass or thermoplastic)*	1-inch NPT or BSPT, female 3/4-inch NPT or BSPT, female 3/4-inch NPT or BSPT, male (thermoplastic) 1/2-inch NPT or BSPT, male (thermoplastic)
Drain Line	1/2-inch (manifold dependent)
Brine Line	1/4-inch or 3/8-inch NPT, male; air check built into valve
Distributor Tube *(diameter)*	1.050 inches (27 mm) or 13/16-inch (20.6 mm)
Distributor Tube *(length)*	1-1/8 ± 1/8 inches (29 mm ± 3 mm) above top of tank

Outline Dimensions



Units	A	B	C	D	E	F	G	H	I	J	K
inches	14.9	6.6	8.2	8.4	4.2	4.0	5.7	3.1	5.1	1.5	1.5
cm	37.8	16.8	20.8	21.3	10.7	10.2	14.5	7.9	13.0	3.8	3.8

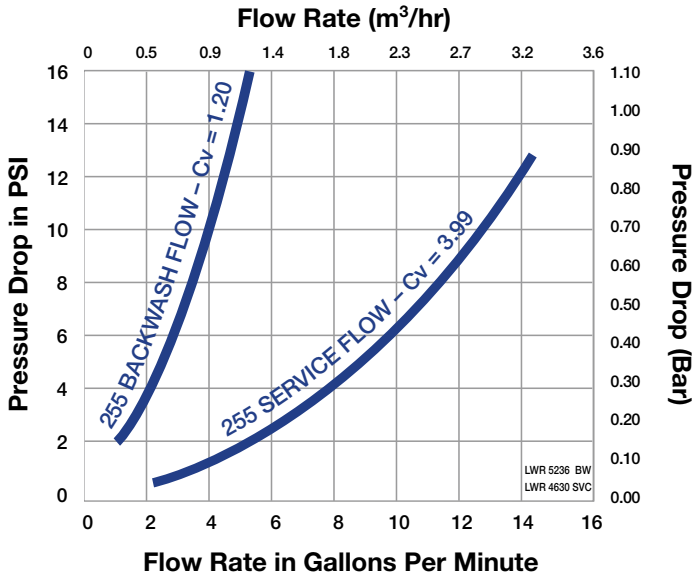
Performance

Flow Rates (Valve Only)

Service @ 15 psi (1.03 bar) drop	15.5 gpm (3.52 m^3/h)
Backwash @ 25 psi (1.72 bar) drop	6.0 gpm (1.36 m^3/h)
Service	Cv = 3.99 (Kv = 3.4)
Backwash	Cv = 1.20 (Kv = 1.0)

Note: Tested with a 3/4-inch brass manifold

Logix 764 Performance Flow Rate Characteristics



Backwash Flow Control Table

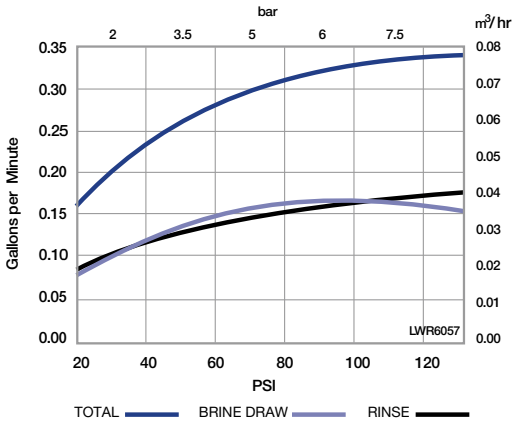
Backwash Number*	Flow Rate (gpm)	Flow Rate (lpm)
7	1.3	4.9
8	1.7	6.4
9	2.2	8.3
10	2.7	10.2
12	3.9	14.76
13	4.5	17.0
14	5.3	20.0

*Backwash flow controls sized for 5.0 gpm/ft^2.

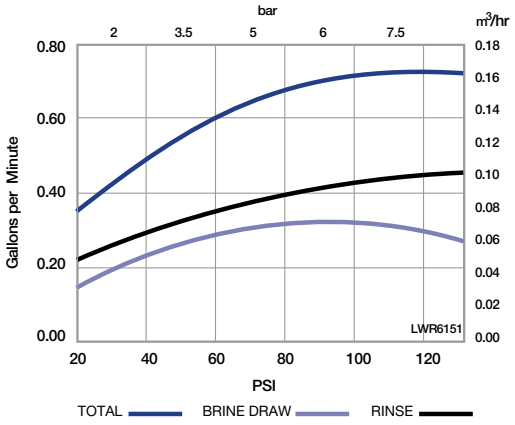
Injector* Performance

Logix™ Series Controllers

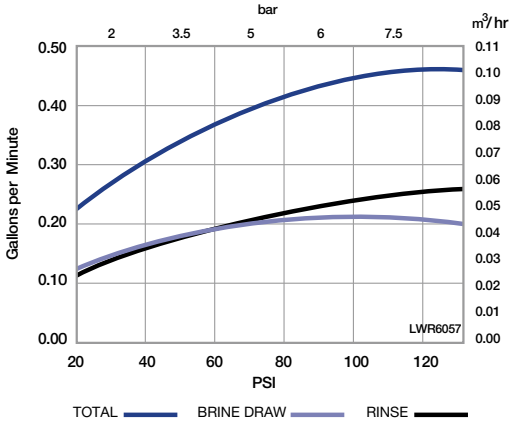
Injector "F" (Peach) For 7-inch Tanks



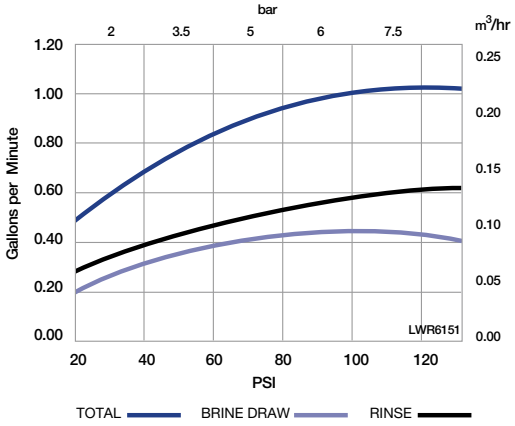
Injector "J" (Light Blue) For 10-inch Tanks



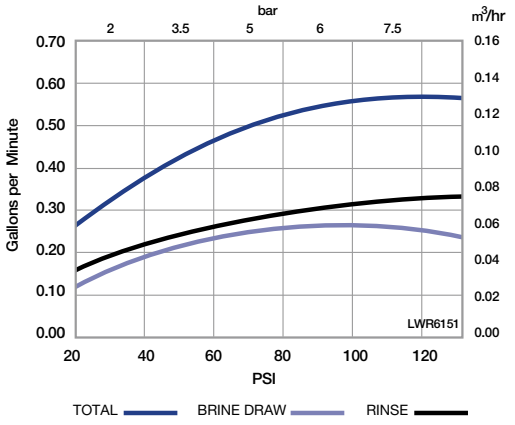
Injector "G" (Tan) For 8-inch Tanks



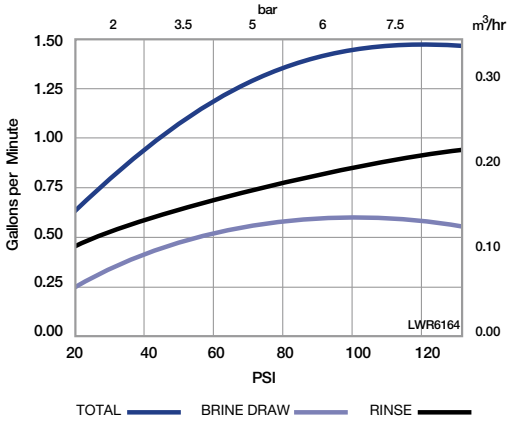
Injector "K" (Pink) For 12-inch Tanks



Injector "H" (Light Purple) For 9-inch Tanks



Injector "L" (Orange) For 13- and 14-inch Tanks



*New injectors for high-efficiency regeneration sequence are standard with Logix Controllers.

NOTE: Actual injector performance is dependent on the resin used, tank geometry, elevated drain, etc. This injector data was taken using an empty tank (no resin).

Pentair Water

20580 Enterprise Avenue
Brookfield, WI 53045
Tel: 262.784.4490
Fax: 262.784.7794

5730 North Glen Park Road
Milwaukee, WI 53209
Tel: 262.238.4400
Fax: 262.238.4402

©2010 Pentair Residential Filtration, LLC

1018069 Rev D FE10

Customer Care: 800.279.9404 www.pentairwatertreatment.com

Control Valves

PERFORMA SERIES CONTROL VALVES
RESIDENTIAL / LIGHT COMMERCIAL
WITH 1 INCH INTERNAL PORTING

Performa Series Valves

Service Flow @ 15 psi . . 25.0 gpm (5.7 m³h)
Backwash @ 25 psi . . . . 20.0 gpm (4.5 m³h)
Service . . . . . Cv = 6.50 (Kv = 5.6)
Backwash . . . . . Cv = 4.00 (Kv = 3.5)

For Tank Sizes * . . . . . 6 thru 14 inch diameter
Tank Thread . . . . . 2.5"#8 NPSM
Riser Port . . . . . 1.050" OD pipe (3/4" NPS)

* Application dependent



Performa 1 Inch Valve Body with 760 Logix Demand Control and Cover



440i Clock Control



740 Logix Electronic Clock Control



460i Demand Control



760 Metered Demand Control

1" Softener Control Valves — Must choose (IN) Injector and (BW) Backwash Flow Control (See below).
Requires Plumbing Connections (See other side for Adapter Kits and Optional Manual Bypass Valves).

Part Number	Description	Regen. Cycle	Qty./ Carton	Carton Weight
26844-(IN)(BW)	268/440i Clock Control, w/ Cover — Basic Settings	6 or 7 Day	4	31 lbs.
268740-(IN)(BW)	268/740 Logix Electronic Clock Control, w/ Cover — Semi-Programmable	7 or 99 Day	4	31 lbs.
268742-(IN)(BW)	268/742 Logix Electronic Clock Control, w/ Cover — Fully-Programmable	7 or 99 Day	4	31 lbs.
26846-(IN)(BW)	268/460i Metered Demand Control, w/ Cover — Semi-Programmable	Demand	4	31 lbs.
268760-(IN)(BW)	268/760 Logix Metered Demand Control, w/ Cover — Semi-Programmable	Demand	4	33 lbs.
268762-(IN)(BW)	268/762 Logix Metered Demand Control, w/ Cover — Fully-Programmable	Demand	4	33 lbs.

1" Filter Control Valves — Must choose (BW) Backwash Flow Control (See below).
Requires Plumbing Connections (See other side for Adapter Kits and Optional Manual Bypass Valves).

Part Number	Description	Regen. Cycle	Qty./ Carton	Carton Weight
26344-(BW)	263/440i Clock Control, w/ Cover — Basic Settings	6 or 7 Day	4	31 lbs.
263740-(BW)	263/740F Logix Electronic Clock Control, w/ Cover — Semi-Programmable	7 or 99 Day	4	31 lbs.
263742-(BW)	263/742F Logix Electronic Clock Control, w/ Cover — Fully-Programmable	7 or 99 Day	4	31 lbs.
263760-(BW)	263/760F Logix Metered Demand Control, w/ Cover — Semi-Programmable	Demand	4	33 lbs.
263762-(BW)	263/762F Logix Metered Demand Control, w/ Cover — Fully-Programmable	Demand	4	33 lbs.

(IN) Injectors & (BW) Backwash Flow Controls — Must choose from the following when ordering Control Valves.

Option Code (x)	Description
(IN) = B, C, or D	440i, 460i, Injector Nozzle: (B: 9"-12" Tanks), (C: 10"-12" Tanks), (D: 13"-14" Tanks)
(IN) = E, F, G, H, J, K, or L	740, 742, 760, 762 Control Injector Nozzle: (E: 6" Tank), (F: 7" Tank), (G: 8" Tank), (H: 9" Tank), (J: 10" Tank), (K: 12" Tank), (L: 13" or 14" Tank)
(BW) = 00	No Backwash Flow Control — "Open"
(BW) = PL	No Backwash Flow Control — "Plugged"
(BW) = 06, 07, 08, 09, 10, or 12	Backwash Flow Control: (06: 0.9 GPM, 6" Tank), (07: 1.3 GPM, 7" Tank), (08: 1.7 GPM, 8" Tank), (09: 2.2 GPM, 9" Tank), (10: 2.7 GPM, 10" Tank), (12: 3.9 GPM, 12" Tank) **Backwash flow controls are sized for 5.0 gpm/sq.ft. Tank sizes are for typical softener applications.**
(BW) = 13 or 14	Backwash Flow Control: (13: 4.5 GPM, 13" Tank), (14: 5.3 GPM, 14" Tank) **Backwash flow controls are sized for 5.0 gpm/sq.ft. Tank sizes are for typical softener applications.**

50 Hz available at additional cost.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1253
EFFECTIVE
JUNE 2023

Control Valves

PERFORMA SERIES CONTROL VALVES
RESIDENTIAL / LIGHT COMMERCIAL
WITH 1 INCH INTERNAL PORTING


I-Lid Cover


Logix Cover


Adapter Kit


Manual Bypass Valve


Backwash Flow Control

Adapter Kits — Required for ALL Control Valves

Part Number	Description
UA-1001606	3/4 inch Copper Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 0.875" OD
UA-1001613	3/4 inch CPVC Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 3/4" Spigot, 1.050" OD
UA-1001769	3/4 inch NPT ABS Plastic Threaded Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-1001604	3/4 inch BSPT ABS Plastic Threaded Pipe Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-3023824	3/4 inch BSPT Stainless Steel Pipe Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-1001670	1 inch Copper Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 1.125" OD
UA-1001614	1 inch CPVC Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 1" Spigot, 1.315" OD
UA-1001603	1 inch NPT ABS Plastic Threaded Pipe Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-1001605	1 inch BSPT ABS Plastic Threaded Pipe Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-3023828	1 inch NPT Stainless Steel Threaded Pipe Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-3023807	1 inch BSPT Stainless Steel Threaded Pipe Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-1041210	1.25 inch Copper Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 1.625" OD
UA-1001608	22mm Copper Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 22 mm OD
UA-1001615	25mm CPVC Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 25 mm OD
UA-1040547	Special 90° Elbow Adapter Kit (Must order above adapters for installation) — No longer available

Manual Bypass Valves — Optional — Requires Adapter Kit (See above)

Part Number	Description
UA/BV1265	Manual Bypass Valve for All Performa Valves

External Backwash Flow Controls — Optional

Part Number	Description
BWFC-.75/5	3/4" FPT x 1/2" FPT Flow Control — 5 GPM (18.9 LPM)
BWFC-.75/6	3/4" FPT x 1/2" FPT Flow Control — 6 GPM (22.7 LPM)
BWFC-.75/7	3/4" FPT x 1/2" FPT Flow Control — 7 GPM (26.5 LPM)
BWFC-.75/8	3/4" FPT x 1/2" FPT Flow Control — 8 GPM (30.3 LPM)
BWFC-.75M/8	3/4" FPT x 3/4" MPT Flow Control — 8 GPM (30.3 LPM)
BWFC-.75M/9	3/4" FPT x 3/4" MPT Flow Control — 9 GPM (34.1 LPM)
BWFC-.75M/10	3/4" FPT x 3/4" MPT Flow Control — 10 GPM (37.9 LPM)
BWFC-.75M/12	3/4" FPT x 3/4" MPT Flow Control — 12 GPM (45.4 LPM)
BWFC-.75M/15	3/4" FPT x 3/4" MPT Flow Control — 15 GPM (56.8 LPM)
BWFC-.75M/20	3/4" FPT x 3/4" MPT Flow Control — 20 GPM (75.7 LPM)

Covers

Part Number	Description
UA-1000062	Black "i-Lid" Cover with Smoke Lens for All Valves with 400 Series Controls
UA-1236246	Dark Gray Logix Valve Cover for All Valves with 700 Series Controls

Other special covers are available upon request.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1253
EFFECTIVE
JUNE 2023

RESIDENTIAL
CONTROL
VALVES



Performa™ Control Valves

263 and 268 Configurations



Pentair Water® offers a full range of Autotrol® Control Valves to meet all residential water conditioning applications.

Logix™ Series

740 Time Clock

- Simple, economic electronic time clock (chronometric)
- 7- or 99-day regeneration setting
- High efficiency regeneration sequence
- 12-volt operation
- Filter or conditioner setting in one control
- Operates 255, 263, 268 with one controller

742 Time Clock

Same features as the 740 Time Clock, plus:

- Fully programmable cycle times
- Salt setting in 1-pound increments
- Optional no-salt detector
- Operates 255, 263, 268, 278, and Magnum® IT with one controller

760 Demand

- Simple, economic electronic demand (volumetric)
- Calendar override
- 12-volt operation
- 28-day variable reserve
- High efficiency regeneration sequence
- Automatic capacity calculations
- Operates 255, 263, 268 with one controller

762 Demand

Same features as the 760, plus:

- Fully programmable cycle times
- Salt setting in 1-pound increments
- Optional no-salt detector
- Operates 255, 263, 268, 278, and Magnum IT with one controller

764 Demand

Same features as the 762, plus:

- Multi-tank applications (twin alternating, multi-tank parallel)
- Control lockout
- Remote regeneration

Autotrol
Pentair Water

RESIDENTIAL CONTROL VALVES

Performa™ Control Valves

263 and 268 Configurations

Specifications

Electrical

Controller Operating Voltage	12 Volt – AC (Requires use of Pentair Water®-supplied transformer)
Input Supply Frequency	50 or 60 Hz (Controller configuration dependent)
Motor Input Voltage	12 Volt – AC
Controller System Power Consumption	3 Watts average

Transformer – All Controllers

All Controllers require the use of a Pentair Water-supplied transformer.

Transformer Output Voltage	12 Volt – AC 400mA
Transformer Input Options	115 Volt – AC 50/60 Hz; 230 Volt – AC 50/60 Hz; 100 Volt – AC 50/60 Hz
Transformer Plug Options	Indoor North American Plug Outdoor North American (UL Listed for outdoor use) Japanese Plug Taiwan/Korea Plug Australian Plug United Kingdom Plug Mainland Europe Plug

Additional transformers may be available – call for more information.

Design Specifications/Ratings

Valve Body	Glass-filled thermoplastic – NSF Listed material
Rubber Components	Compounded for cold water – NSF Listed material
Valve Materials Certification	WQA Gold Seal Certified to ORD 0902 and NSF/ANSI 44 Rated component for material safety
Weight (Valve with Control)	5.34 lbs (2.42 kg)
Recommended Operating Pressure Canada	20 - 120 psi (1.38 - 8.27 bar) 20 - 100 psi (1.38 - 6.89 bar)
Hydrostatic Test Pressure	300 psi (20.69 bar)
Water Temperature	35° - 100°F (2° - 38°C)
Ambient Temperature*	35° - 120°F (2° - 48.9°C)

*Recommend use of outdoor cover for direct sunlight applications.

Options

Turbine for Demand Systems	Internal Standard Autotrol® 1-inch (25 mm) turbine
Bypass Valve, Model 1265	Thermoplastic, 1-inch flow path
Bypass Fitting Kits:	
Copper, Sweat Tube Adapter	1-1/4-inches, 1-inch or 3/4 inch (32 mm, 25 mm or 19 mm)
CPVC, Solvent Weld Tube Adapter	1-inch or 3/4-inch (25 mm or 19 mm)
Plastic NPT or BSPT Pipe Adapter	1-inch male or 3/4-inch male (25 mm or 19 mm)
Stainless Steel NPT or BSPT Pipe Adapter	1-inch male or 3/4-inch male (25 mm or 19 mm)
Brine Refill Controls	.14 gpm (.53 Lpm) fixed; .33 gpm (1.25 Lpm) fixed; .74 gpm (2.8 Lpm) fixed; 1.3 gpm (4.92 Lpm) fixed
Compatible with Regenerants/Chemicals	Sodium chloride, potassium chloride, potassium permanganate, sodium bisulfite†, sodium hydroxide†, hydrochloric acid†, chlorine†† and chloramines††

†See owners manual for specific concentrations. ††Valve for use on potable water supply.

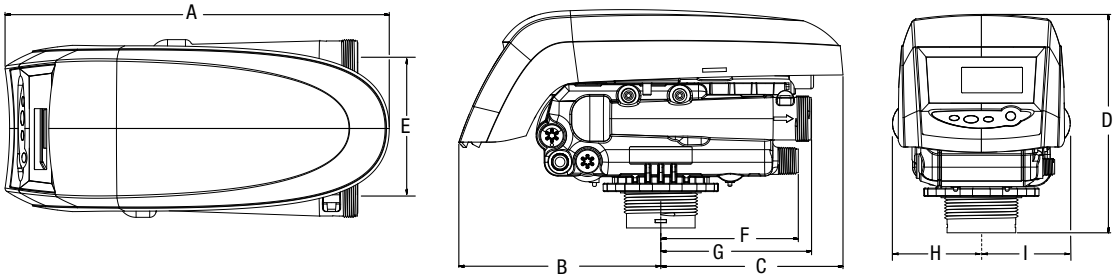


Dimensions

Valve Connections

Tank Thread	2-1/2-inches – 8, male
Inlet/Outlet Threads	1-3/4-inches – 12 UNC-2A male
Drain Line	3/4-inch NPT, male
Brine Line	3/8-inch NPT, male
Distributor Tube Diameter	1.050 inches (27 mm)
Distributor Tube Length	1/2 ± 1/2-inches (13 ± 13 mm) above top of tank

Outline Dimensions



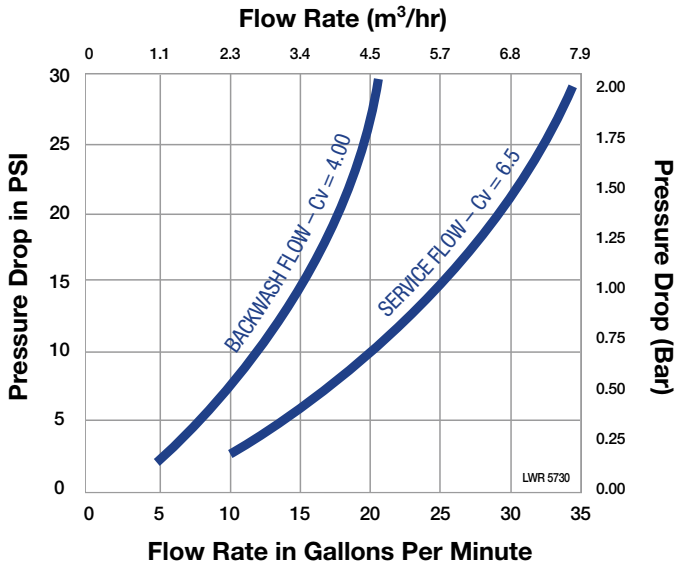
Units	A	B	C	D	E	F	G	H	I
inches	14.9	7.8	7.1	8.5	5.0	5.3	5.8	3.4	3.4
cm	37.8	19.9	17.9	21.5	12.7	13.5	14.8	8.7	8.7

Performance

Flow Rates (Valve Only)

Service @ 15 psi (1.03 bar) drop	25.0 gpm (5.7 m^3/h)
Backwash @ 25 psi (1.72 bar) drop	20.0 gpm (4.5 m^3/h)
Service	Cv = 6.50 (Kv = 5.6)
Backwash	Cv = 4.00 (Kv = 3.5)

Logix™ Series Controller Flow Rate Characteristics



Backwash Flow Control Table

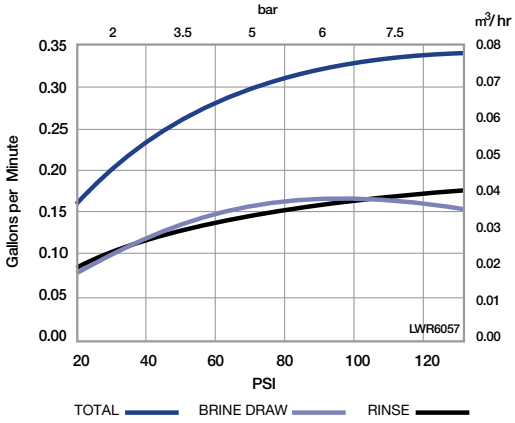
Backwash Number*	Flow Rate (gpm)	Flow Rate (lpm)
7	1.3	4.9
8	1.7	6.4
9	2.2	8.3
10	2.7	10.2
12	3.9	14.76
13	4.5	17.0
14	5.3	20.0

*Backwash flow controls sized for 5.0 gpm/ft^2.

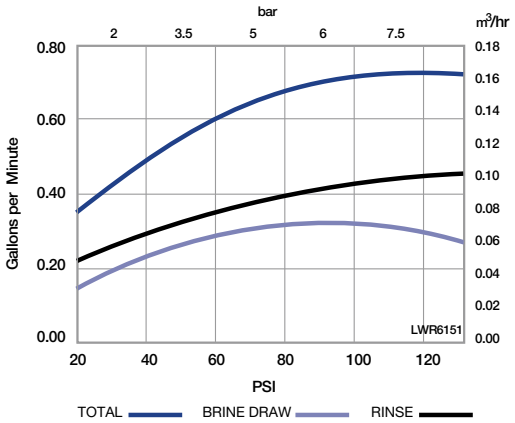
Injector* Performance

Logix™ Series Controllers

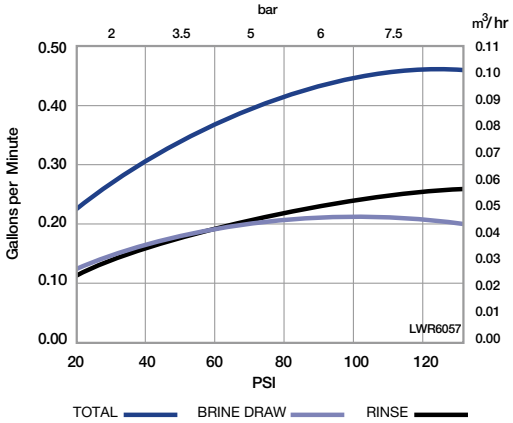
Injector "F" (Peach) For 7-inch Tanks



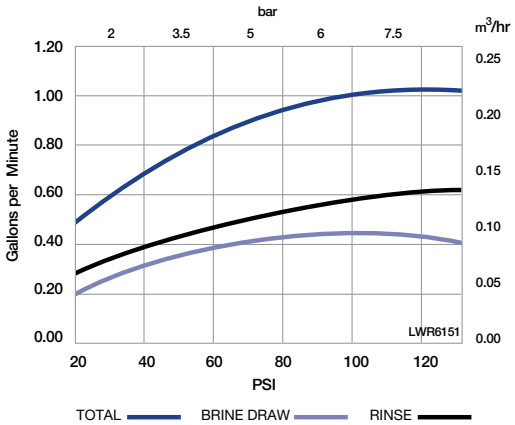
Injector "J" (Light Blue) For 10-inch Tanks



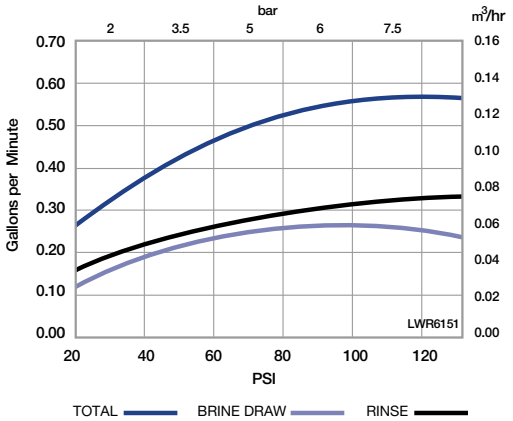
Injector "G" (Tan) For 8-inch Tanks



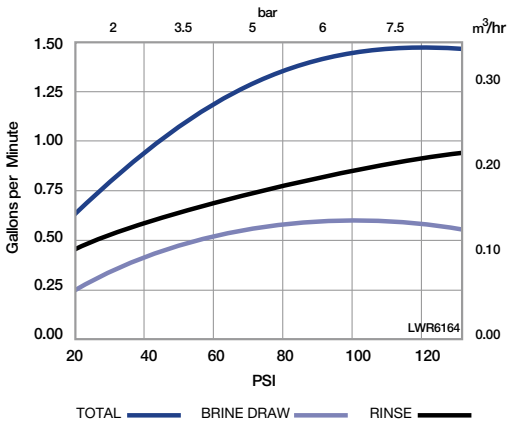
Injector "K" (Pink) For 12-inch Tanks



Injector "H" (Light Purple) For 9-inch Tanks



Injector "L" (Orange) For 13- and 14-inch Tanks



*New injectors for high-efficiency regeneration sequence are standard with Logix Controllers.

NOTE: Actual injector performance is dependent on the resin used, tank geometry, elevated drain, etc. This injector data was taken using an empty tank (no resin).

Pentair Water

20580 Enterprise Avenue
Brookfield, WI 53045
Tel: 262.784.4490
Fax: 262.784.7794

5730 North Glen Park Road
Milwaukee, WI 53209
Tel: 262.238.4400
Fax: 262.238.4402

©2010 Pentair Residential Filtration, LLC

1223489 Rev D FE10

Customer Care: 800.279.9404 www.pentairwatertreatment.com

CONTROL VALVES

PERFORMA CV SERIES CONTROL VALVES
RESIDENTIAL / LIGHT COMMERCIAL
WITH 1 INCH INTERNAL PORTING

Performa Cv Series Valves

Tank Thread	2.5"#8 NPSM
Drain Line	3/4 inch MNPT
Brine Line	3/8 inch MNPT
For Tank Sizes *	14 thru 21 inch diameter
Riser Port	1.050" OD pipe (3/4" NPS)

Design Specifications

Operating Pressure	20 to 120 psi (1.38 to 8.27 bar)
Water Temperature	35 to 100°F (2 to 38°C)

Flow Rates (Valve Only)

Service @ 15 psi (1.03 bar) drop	25 gpm (5.7 m^3/hr)
Backwash @ 25 psi (1.72 bar) drop	20 gpm (4.5 m^3/hr)
Service	Cv = 6.50 (Kv = 5.6)
Backwash	Cv = 4.00 (Kv = 3.5)

* Application dependent



Performa Cv 1 Inch Valve Body with 762 Logix Demand Control and Cover



742 Logix Electronic Clock Control



762 Metered Demand Control

1" Softener Control Valves — Must choose (IN) Injector and (BW) Backwash Flow Control (See below).
Requires Plumbing Connections (See other side for Adapter Kits and Optional Manual Bypass Valves).

Part Number	Description	Regen. Cycle	Qty./ Carton	Carton Weight
278742-(IN)(BW)	278/742 Logix Electronic Clock Control, w/ Cover — Fully-Programmable	7 or 99 Day	4	31 lbs.
278762-(IN)(BW)	278/762 Logix Metered Demand Control, w/ Cover — Fully-Programmable	Demand	4	33 lbs.

1" Filter Control Valves — Must choose (BW) Backwash Flow Control (See below).
Requires Plumbing Connections (See other side for Adapter Kits and Optional Manual Bypass Valves).

Part Number	Description	Regen. Cycle	Qty./ Carton	Carton Weight
273742-(BW)	273/742F Logix Electronic Clock Control, w/ Cover — Fully-Programmable	7 or 99 Day	4	31 lbs.
273762-(BW)	273/762F Logix Metered Demand Control, w/ Cover — Fully-Programmable	Demand	4	33 lbs.

(IN) Injectors & (BW) Backwash Flow Controls — Must choose from the following when ordering Control Valves. [1]

Option Code (x)	Description
(IN) = M, N, Q, R	742, 762 Control Injector Nozzle: (M: 14" Tank), (N: 16" Tank), (Q: 18" Tank), (R: 21" Tank)
(BW) = 00	No Backwash Flow Control — "Open"
(BW) = PL	No Backwash Flow Control — "Plugged"
(BW) = 14 [1]	Backwash Flow Control: (14: 5.3 GPM, 14" Tank) **Backwash flow controls are sized for 5.0 gpm/sq.ft. Tank sizes are for typical softener applications.**

[1] External backwash flow controls required for 16 inch (7 gpm), 18 inch (9 gpm), and 21 inch (12 gpm) tanks. See next page.
50 Hz available at additional cost.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1256
EFFECTIVE
JUNE 2023

Control Valves

PERFORMA CV SERIES CONTROL VALVES
RESIDENTIAL / LIGHT COMMERCIAL
WITH 1 INCH INTERNAL PORTING


Logix Cover


Adapter Kit


Manual Bypass Valve


Backwash Flow Control

Adapter Kits — Required for ALL Control Valves

Part Number	Description
UA-1001606	3/4 inch Copper Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 0.875" OD
UA-1001613	3/4 inch CPVC Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 3/4" Spigot, 1.050" OD
UA-1001769	3/4 inch NPT ABS Plastic Threaded Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-1001604	3/4 inch BSPT ABS Plastic Threaded Pipe Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-3023824	3/4 inch BSPT Stainless Steel Pipe Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-1001670	1 inch Copper Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 1.125" OD
UA-1001614	1 inch CPVC Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 1" Spigot, 1.315" OD
UA-1001603	1 inch NPT ABS Plastic Threaded Pipe Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-1001605	1 inch BSPT ABS Plastic Threaded Pipe Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-3023828	1 inch NPT Stainless Steel Threaded Pipe Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-3023807	1 inch BSPT Stainless Steel Threaded Pipe Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts
UA-1041210	1.25 inch Copper Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 1.625" OD
UA-1001608	22mm Copper Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 22 mm OD
UA-1001615	25mm CPVC Tube Adapter Kit with (2) Adapters, (2) Gaskets, (2) Durez Nuts — 25 mm OD
UA-1040547	Special 90° Elbow Adapter Kit (Must order above adapters for installation) — No longer available

Manual Bypass Valves — Optional — Requires Adapter Kit (See above)

Part Number	Description
UA/BV1265	Manual Bypass Valve for All Performa Valves

External Backwash Flow Controls

Part Number	Description
BWFC-.75/5	3/4" FPT x 1/2" FPT Flow Control — 5 GPM (18.9 LPM)
BWFC-.75/6	3/4" FPT x 1/2" FPT Flow Control — 6 GPM (22.7 LPM)
BWFC-.75/7	3/4" FPT x 1/2" FPT Flow Control — 7 GPM (26.5 LPM)
BWFC-.75/8	3/4" FPT x 1/2" FPT Flow Control — 8 GPM (30.3 LPM)
BWFC-.75M/8	3/4" FPT x 3/4" MPT Flow Control — 8 GPM (30.3 LPM)
BWFC-.75M/9	3/4" FPT x 3/4" MPT Flow Control — 9 GPM (34.1 LPM)
BWFC-.75M/10	3/4" FPT x 3/4" MPT Flow Control — 10 GPM (37.9 LPM)
BWFC-.75M/12	3/4" FPT x 3/4" MPT Flow Control — 12 GPM (45.4 LPM)
BWFC-.75M/15	3/4" FPT x 3/4" MPT Flow Control — 15 GPM (56.8 LPM)
BWFC-.75M/20	3/4" FPT x 3/4" MPT Flow Control — 20 GPM (75.7 LPM)

Covers

Part Number	Description
UA-1236246	Dark Gray Logix Valve Cover for All Valves with 700 Series Controls

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1256
EFFECTIVE
JUNE 2023

COMMERCIAL
CONTROL
VALVES



Performa™ Cv Control Valves

273 and 278 Configurations



Pentair Water® offers a full range of Autotrol® Control Valves to meet a wide range of water conditioning applications.

Logix™ Series

742 Time Clock

- Simple, economic electronic time clock (chronometric)
- 7- or 99-day regeneration setting
- 12-volt operation
- Filter or conditioner setting in one control
- Fully programmable cycle times
- Salt setting in 1-pound increments
- Operates 255, 263, 268, 273, 278, and Magnum® IT with one controller

762 Demand

- Simple, economic electronic demand (volumetric)
- Calendar override
- 12-volt operation
- 28-day variable reserve
- Automatic capacity calculations
- Fully programmable cycle times
- Salt setting in 1-pound increments
- Operates 255, 263, 268, 273, 278, and Magnum IT with one controller

764 Demand

Same features as the 762, plus:

- Multi-tank applications (twin alternating, multi-tank parallel)
- Control lockout
- Remote regeneration

Autotrol
Pentair Water

COMMERCIAL CONTROL VALVES

Performa™ Cv Control Valves

273 and 278 Configurations

Specifications

Electrical

Controller Operating Voltage	12 Volt – AC (Requires use of Pentair Water®-supplied transformer)
Input Supply Frequency	50 or 60 Hz (Controller configuration dependent)
Motor Input Voltage	12 Volt – AC
Controller System Power Consumption	3 Watts average

Transformer – All Controllers

All Controllers require the use of a Pentair Water-supplied transformer.

Transformer Output Voltage	12 Volt – AC 400mA
Transformer Input Options	115 Volt – AC 50/60 Hz; 230 Volt – AC 50/60 Hz; 100 Volt – AC 50/60 Hz
Transformer Plug Options	Indoor North American Plug Outdoor North American (UL Listed for outdoor use) Japanese Plug Taiwan/Korea Plug Australian Plug United Kingdom Plug Mainland Europe Plug

Additional transformers may be available – call for more information.

Design Specifications/Ratings

Valve Body	Glass-filled thermoplastic – NSF Listed material
Rubber Components	Compounded for cold water – NSF Listed material
Valve Materials Certification	WQA Gold Seal Certified to ORD0902 and NSF/ANSI 44 Rated component for material safety
Weight (Valve with Control)	5.34 lbs (2.42 kg)
Recommended Operating Pressure	20 - 120 psi (1.38 - 8.27 bar)
Canada	20 - 100 psi (1.38 - 6.89 bar)
Hydrostatic Test Pressure	300 psi (20.69 bar)
Water Temperature	35° - 100°F (2° - 38°C)
Ambient Temperature*	35° - 120°F (2° - 48.9°C)

*Recommend use of outdoor cover for direct sunlight applications.

Options

Turbine for Demand Systems	Internal Standard Autotrol® 1-inch (25 mm) turbine
Bypass Valve, Model 1265	Thermoplastic, 1-inch flow path
Bypass Fitting Kits:	
Copper, Sweat Tube Adapter	1-1/4-inches, 1-inch or 3/4 inch (32 mm, 25 mm or 19 mm)
CPVC, Solvent Weld Tube Adapter	1-inch or 3/4-inch (25 mm or 19 mm)
Plastic NPT or BSPT Pipe Adapter	1-inch male or 3/4-inch male (25 mm or 19 mm)
Stainless Steel NPT or BSPT Pipe Adapter	1-inch male or 3/4-inch male (25 mm or 19 mm)
Brine Refill Controls	.33 gpm (1.25 lpm) fixed; .74 gpm (2.8 lpm) fixed; 1.3 gpm (4.92 lpm) fixed
Compatible with Regenerants/Chemicals	Sodium chloride, potassium chloride, potassium permanganate, sodium bisulfite†, sodium hydroxide†, hydrochloric acid†, chlorine†† and chloramines††

†See owners manual for specific concentrations. ††Valve for use on potable water supply.

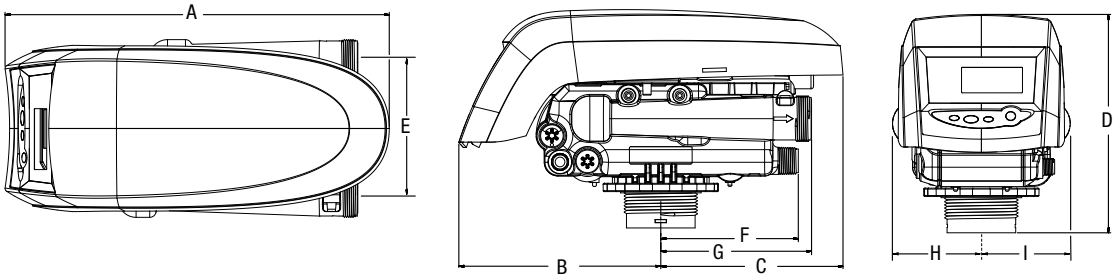


Dimensions

Valve Connections

Tank Thread	2-1/2-inches – 8, male
Inlet/Outlet Threads	1-3/4-inches – 12 UNC-2A male
Drain Line	3/4-inch NPT, male
Brine Line	3/8-inch NPT, male
Distributor Tube Diameter	1.050 inches (27 mm)
Distributor Tube Length	1/2 ± 1/2-inches (13 ± 13 mm) above top of tank

Outline Dimensions



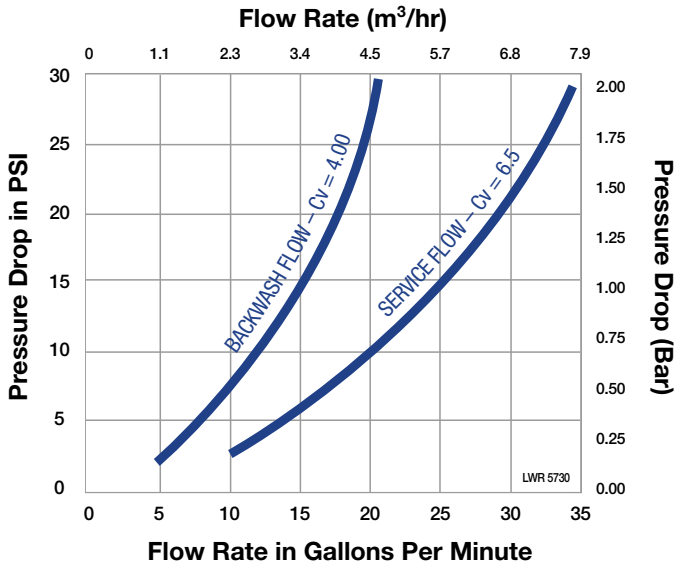
Units	A	B	C	D	E	F	G	H	I
inches	14.9	7.8	7.1	8.5	5.0	5.3	5.8	3.4	3.4
cm	37.8	19.9	17.9	21.5	12.7	13.5	14.8	8.7	8.7

Performance

Flow Rates (Valve Only)

Service @ 15 psi (1.03 bar) drop	25.0 gpm (5.7 m^3/h)
Backwash @ 25 psi (1.72 bar) drop	20.0 gpm (4.5 m^3/h)
Service	Cv = 6.50 (Kv = 5.6)
Backwash	Cv = 4.00 (Kv = 3.5)

Logix™ Series Controller Flow Rate Characteristics



Backwash Flow Control Table

Backwash Number*	Flow Rate (gpm)	Flow Rate (lpm)
9	2.2	8.3
10	2.7	10.2
12	3.9	14.76
13	4.5	17.0
14	5.3	20.0

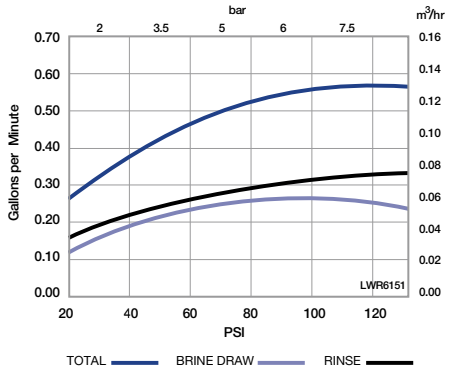
*Backwash flow controls sized for 5.0 gpm/ft^2.

NOTE: External drain line flow controls available for flow rates from 1.3 gpm (4.9 lpm) to 20 gpm (75.7 lpm).

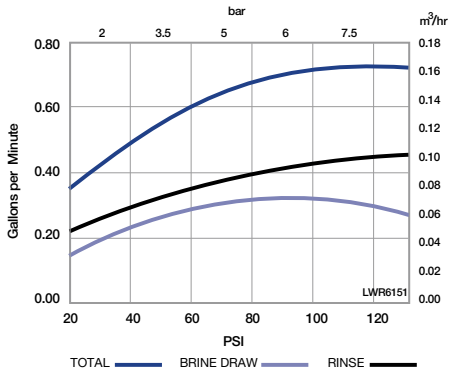
Injector* Performance

Logix™ Series Controllers

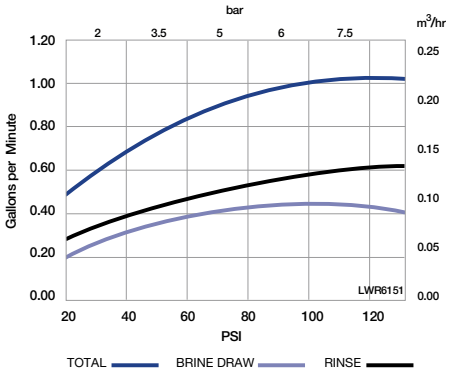
Injector "H" (Light Purple) For 9-inch Tanks



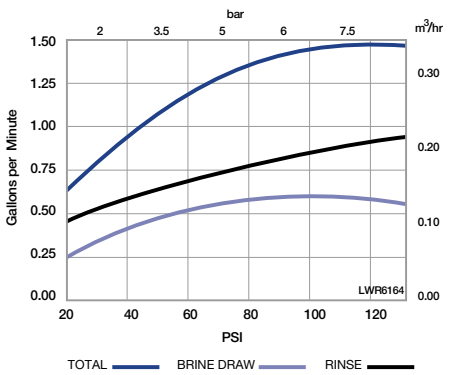
Injector "J" (Light Blue) For 10-inch Tanks



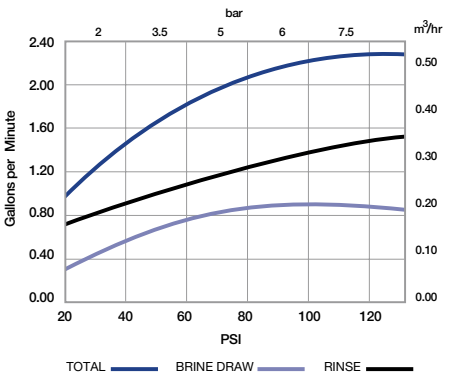
Injector "K" (Pink) For 12-inch Tanks



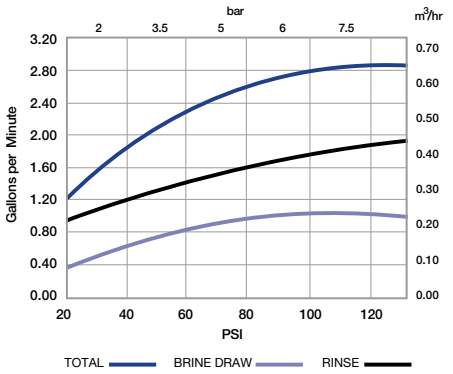
Injector "L" (Orange) For 13- and 14-inch Tanks



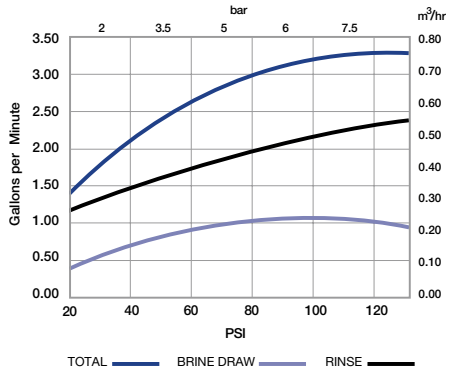
Injector "N" (Green) For 16-inch Tanks



Injector "Q" (Purple) For 18-inch Tanks



Injector "R" (Dark Grey) For 21-inch Tanks



*New injectors for high-efficiency regeneration sequence are standard with Logix Controllers.

NOTE: Actual injector performance is dependent on the resin used, tank geometry, elevated drain, etc. This injector data was taken using an empty tank (no resin).

Pentair Water

20580 Enterprise Avenue
Brookfield, WI 53045
Tel: 262.784.4490
Fax: 262.784.7794

5730 North Glen Park Road
Milwaukee, WI 53209
Tel: 262.238.4400
Fax: 262.238.4402

Customer Care: 800.279.9404 www.pentairaquapro.com

©2010 Pentair Residential Filtration, LLC

4000570 Rev A AP10

CONTROL VALVES

PERFORMA CV MULTI-TANK CONTROL VALVES RESIDENTIAL / LIGHT COMMERCIAL WITH 1 INCH INTERNAL PORTING

Performa Cv Twin Alternating, Single with Remote, and Multi-Single with Lockout Systems

Service Flow @ 15 psi . . . . 25 gpm (5.7 m³h)
Backwash @ 25 psi . . . . . 20 gpm (4.5 m³h)

Performa Cv Twin Parallel Systems

Service Flow @ 15 psi . . . . 50 gpm (11.3 m³h)
Backwash @ 25 psi . . . . . 20 gpm (4.5 m³h)

Service . . . . . Cv = 6.5 (Kv = 5.6)
Backwash . . . . . Cv = 4.0 (Kv = 3.5)
For Tank Sizes * . . . . . 9 thru 21 inch diameter
Tank Thread . . . . . 2.5"#8 NPSM
Riser Port . . . . . 1.050" OD pipe (3/4" NPS)

* Application dependent



NOTE: Covers sold separately (See next page).

1" Multi-Tank Softener Control Valves — Must choose (IN) Injectors and (BW) Backwash Flow Controls (See below). Requires Plumbing Connections (See next page).

Part Number	Description	Regen. Cycle	Qty./ Carton	Carton Weight
278TN-(IN)(BW)	278/764T Twin Alternating or Twin Parallel, NWB*	Demand	1 Set	16 lbs.
278LU-(IN)(BW)	278/764L Multi-Single with Lockout or Single with Remote, UWB*	Demand	1 Set	16 lbs.
278LN-(IN)(BW)	278/764L Multi-Single with Lockout or Single with Remote, NWB*	Demand	1 Set	16 lbs.

For Remote Start/Lockout Kit sold separately (P/N: UA-3020228).

1" Multi-Tank Filter Control Valves — Must choose (BW) Backwash Flow Controls (See below). Requires Plumbing Connections (See next page).

Part Number	Description	Regen. Cycle	Qty./ Carton	Carton Weight
273TN-(BW)	273/764T Twin Alternating or Twin Parallel, NWB*	Demand	1 Set	16 lbs.
273LU-(BW)	273/764L Multi-Single with Lockout or Single with Remote, UWB*	Demand	1 Set	16 lbs.
273LN-(BW)	273/764L Multi-Single with Lockout or Single with Remote, NWB*	Demand	1 Set	16 lbs.

For Remote Start/Lockout Kit sold separately (P/N: UA-3020228).

(IN) Injectors & (BW) Backwash Flow Controls — Must choose from the following when ordering Control Valves.

Option Code (x)	Description
(IN) = H, J, K, L, M, N, Q, R	Injector Nozzle: (H: 9" Tanks), (J: 10" Tanks), (K: 12" Tanks), (L: 13" Tanks), (M: 14" Tanks), (N: 16" Tanks), (Q: 18" Tanks), (R: 21" Tanks)
(BW) = 00	No Backwash Flow Control — "Open" **Requires External Backwash Flow Control (See next page).**
(BW) = PL	No Backwash Flow Control — "Plugged" **16", 18", 21" Tanks Standard — Requires External Backwash Flow Control (See next page).**
(BW) = 09, 10, 12	Backwash Flow Control: (09: 2.0 GPM, 9" Tank), (10: 2.5 GPM, 10" Tank), (12: 3.5 GPM, 12" Tank) **Backwash flow controls are sized for 5.0 gpm/sq.ft. Tank sizes are for typical softener applications.**
(BW) = 13, 14	Backwash Flow Control: (13: 4.5 GPM, 13" Tank), (14: 5.3 GPM, 14" Tank) **Backwash flow controls are sized for 5.0 gpm/sq.ft. Tank sizes are for typical softener applications.**

* NWB = No Unfiltered Water Bypass; UWB = Unfiltered Water Bypass

50 Hz available at additional cost.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • http:// www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1254
EFFECTIVE
JUNE 2023

PERFORMA CV MULTI-TANK CONTROL VALVES
RESIDENTIAL / LIGHT COMMERCIAL
WITH 1 INCH INTERNAL PORTING



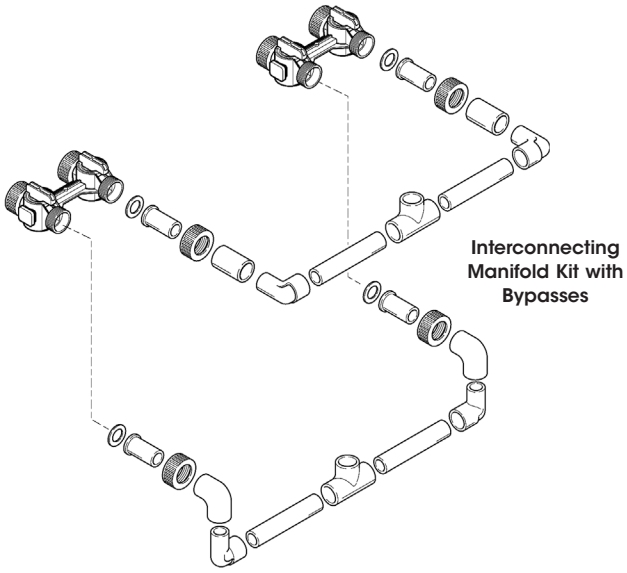
Logix Cover



1265 Manual
Bypass Valve



External Backwash
Flow Control



Interconnecting
Manifold Kit with
Bypasses

Interconnecting Piping Manifolds

Part Number	Description
UA-3019933	273/278 Interconnecting Manifold Kit with Bypasses includes 1" PVC Piping, (2) 1265 Bypasses, (4) CPVC Adapters, (4) Gaskets, (4) Durez Nuts
UA-3019932	273/278 Interconnecting Manifold Kit includes 1" PVC Piping, (4) CPVC Adapters, (4) Gaskets, (4) Durez Nuts

Manual Bypass Valves

Part Number	Description
UA-1040930	1265 Manual Bypass Valve (2 Needed)

External Backwash Flow Controls

Part Number	Description
BWFC-.75/5	3/4" FPT x 1/2" FPT Flow Control — 5 GPM (18.9 LPM)
BWFC-.75/6	3/4" FPT x 1/2" FPT Flow Control — 6 GPM (22.7 LPM)
BWFC-.75/7	3/4" FPT x 1/2" FPT Flow Control — 7 GPM (26.5 LPM)
BWFC-.75/8	3/4" FPT x 1/2" FPT Flow Control — 8 GPM (30.3 LPM)
BWFC-.75M/8	3/4" FPT x 3/4" MPT Flow Control — 8 GPM (30.3 LPM)
BWFC-.75M/9	3/4" FPT x 3/4" MPT Flow Control — 9 GPM (34.1 LPM)
BWFC-.75M/10	3/4" FPT x 3/4" MPT Flow Control — 10 GPM (37.9 LPM)
BWFC-.75M/12	3/4" FPT x 3/4" MPT Flow Control — 12 GPM (45.4 LPM)
BWFC-.75M/15	3/4" FPT x 3/4" MPT Flow Control — 15 GPM (56.8 LPM)
BWFC-.75M/20	3/4" FPT x 3/4" MPT Flow Control — 20 GPM (75.7 LPM)

Covers

Part Number	Description
UA-1236246	Dark Gray Logix Valve Cover for All Valves with 700 Series Controls (2 Needed)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • http:// www.swtwater.com

MEMBER
Water Quality ASSOCIATION

FORM 1254
EFFECTIVE
JUNE 2023

RESIDENTIAL
CONTROLLERS



Logix™ 764 Multi-Tank Controller



- Newest member of Pentair Water's® exclusive Logix Controller family
- One controller fits all
  - Single controller for any configuration
  - Softener and filter control
  - Twin alternating, twin parallel, single tank remote regeneration start and multi-single tank lockout capability
- Reliable and easy three-step program control
- Fully programmable or manual operation
- Available on Autotrol® 255, 273/278 (Performa™ Cv) and 293/298 (Magnum® IT) Control Valves
- Simple piping installation flow meter on each valve

Autotrol
Pentair Water

RESIDENTIAL CONTROLLERS

Logix™ 764

Multi-Tank Controller

Connection Size (inches)	If You Want:	With a Flow Rate of: (gals/min)	And the Application is:	Use the Following Valve:		Notes
				Configuration	Valve	
3/4 1 1 2 2	A constant supply of water	15 25 25 75 75	High Efficiency 8-Cycle Conditioner 3-Cycle Filter 5-Cycle Conditioner 3-Cycle Filter 5-Cycle Conditioner	Twin Alternating Configuration	255A 273A 278A 293A 298A	–
3/4 1 1 2 2	A higher flow that is available for high use time periods	30 50 50 150 150	High Efficiency 8-Cycle Conditioner 3-Cycle Filter 5-Cycle Conditioner 3-Cycle Filter 5-Cycle Conditioner	Twin Parallel Configuration	255P 273P 278P 293P 298P	–
3/4 1 1 2 2	External remote control of when to start regeneration	15 25 25 75 75	High Efficiency 8-Cycle Conditioner 3-Cycle Filter 5-Cycle Conditioner 3-Cycle Filter 5-Cycle Conditioner	Single Tank Remote Regeneration Configuration	255L 263L 268L 293L 298L	For remote regeneration start, use Lockout Cable P/N 3020228 and provide dry contact closure
3/4 1 1 2 2	Multiple single tanks must not regenerate at the same time	15 25 25 75 75	High Efficiency 8-Cycle Conditioner 3-Cycle Filter 5-Cycle Conditioner 3-Cycle Filter 5-Cycle Conditioner	Multiple Single Tank Lockout Configuration	255L 263L 268L 293L 298L	For lockout configuration, use Lockout Cable P/N 3020228 to connect multiple single tanks



Pentair Water

20580 Enterprise Avenue
Brookfield, WI 53045
Tel: 262.784.4490
Fax: 262.784.7794

5730 North Glen Park Road
Milwaukee, WI 53209
Tel: 262.238.4400
Fax: 262.238.4402

Customer Care: 800.279.9404 www.pentairwatertreatment.com

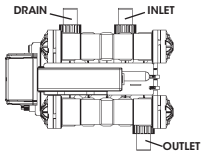
©2010 Pentair Residential Filtration, LLC
3023281 Rev C FE10

AUTOTROL MAGNUM IT COMMERCIAL SOFTENER VALVES

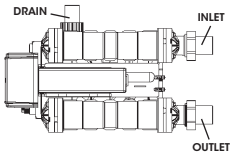
Optional
Top mount or side mount configuration available.



Magnum IT 764 Softener Valve



Magnum Cv Top View (FOR REF. ONLY)



Magnum IT Top View



Magnum IT 764 Twin Alternating

Valve Connections

Tank Thread	4 inch 8 UN
Inlet/Outlet	2 inch NPT or BSPT, Female, CPVC
Brine Line	3/4 inch NPT
Drain Line	1-1/2 inch NPT or BSPT, Female, CPVC
Riser Port	1.9 inch OD pipe (1-1/2 inch NPS)
Riser Installation	Above top of tank 5/8 inch (±1/8 inch)
Pilot Drain & Aux Hydraulic Output	1/4 inch tube fitting

Flow Rates (Valve Only)

Service @ 15 psi (1.03 bar) drop	76 gpm (17.3 m³/hr)
Backwash @ 25 psi (1.72 bar) drop	89 gpm (20.2 m³/hr)
Service	Cv = 19.5 (Kv = 17)
Backwash	Cv = 17.8 (Kv = 19.9)

Design Specifications

Operating Pressure	25 to 100 psi (1.7 to 6.9 bar)
Water Temperature	35 to 100°F (2 to 38°C)

Softener Control Valves

Configuration Matrix	Description	Regen. Cycle	Valve I/O Size	Riser Pilot	Approx. Ship.Wt.
MI74S-(BP)(IN)(BW)(AI)	Magnum IT 742 Electronic Time Clock Control	7 or 99 Day*	1.5" or 2"	1.5"	28 lbs.
MI76S-(BP)(IN)(BW)(AI)	Magnum IT 764 Electronic Metered Control SIngle Tank or Multi-Single Lockout Capable Recommended max. 4 units linked with UA-3020228	Demand	1.5" or 2"	1.5"	28 lbs.
UA-3020228	Lockout Cable – one less required than units linked	—	—	—	—
MI76TS-N(IN)(BW)(AI)	Magnum IT 764MS Twin Valves with Alternating or Parallel Master and Slave Controls with Lockout Cable, No Untreated Water Bypass	Demand	1.5" or 2"	1.5"	57 lbs.

Pilot feed adapter for low pressure applications (< 25 PSI) available. (P/N: UA-1040668)
50 Hz available.

* "7 Day" denotes day of the week; "99 Day" denotes number of days between regenerations (1- 99 days)

Included Softener Control Valve Options

Option Code (x)	Description
Must choose from the following bypass options for all softener valves with 742 & 764 controllers	
(BP) = H	Untreated Water Bypass (Not available for 764MS Twin Valve Controls)
(BP) = N	No Untreated Water Bypass (Required for 764MS Twin Valve Controls)
Must choose from the following injector size options for all softener valve configurations	
(IN) = 14, 16, 18, 21, 24, 30, 36	Injector Nozzle: Value = Tank Diameter (Softener Applications Only)
Must choose from the following backwash options for all softener valve configurations	
(BW) = 05 to 40	Internal Backwash Flow Control: 5 gpm to 40 gpm (Increments of 1 gpm)
(BW) = 41 to 89	External Backwash Flow Control: Up to 89 gpm @ 25 psid (Increments of 1 gpm)
Must choose from the following plumbing adapter kit options for all Magnum IT softener valve configurations	
(AI) = UA-3023849	(2) 2" S.S. NPT Adapter w/ Zinc Diecast Nut, (1) 1.5" S.S. NPT Adapter w/ Glass Filled Noryl Nut
(AI) = UA-3023674	(2) 2" S.S. BSP Adapter w/ Zinc Diecast Nut, (1) 1.5" S.S. BSP Adapter w/ Glass Filled Noryl Nut
(AI) = UA-1040784	(2) 2" CPVC Spigot Adapter w/ Zinc Diecast Nut, (1) 1.5" CPVC Spigot Adapter w/ Glass Filled Noryl Nut
(AI) = UA-3023732	1.5" S.S. NPT Reducer w/ Zinc Diecast Nut, (3) 1.5" S.S. NPT Adapter w/ Glass Filled Noryl Nut
(AI) = UA-3023736	1.5" S.S. BSP Reducer w/ Zinc Diecast Nut, (3) 1.5" S.S. BSP Adapter w/ Glass Filled Noryl Nut

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1171
EFFECTIVE
JUNE 2023

AUTOTROL MAGNUM IT COMMERCIAL FILTER VALVES

Filter Control Valves

Configuration Matrix	Description	Regen. Cycle	Valve I/O Size	Riser Pilot	Approx. Ship.Wt.
MI74F-(BP)(BW)(AI)	Magnum IT 742F Electronic Time Clock Control	7 or 99 Day*	1.5" or 2"	1.5"	28 lbs.
MI76F-(BP)(BW)(AI)	Magnum IT 764F Electronic Metered Control SIngle Tank or Multi-Single Lockout Capable Recommended max. 4 units linked with UA-3020228	Demand	1.5" or 2"	1.5"	28 lbs.
UA-3020228	Lockout Cable – one less required than units linked	—	—	—	—
MI76TF-N(BW)(AI)	Magnum IT 764FMS Twin Valves with Alternating or Parallel Master and Slave Controls with Lockout Cable, No Unfiltered Water Bypass	Demand	1.5" or 2"	1.5"	57 lbs.

Pilot feed adapter for low pressure applications (< 25 PSI) available. (P/N: UA-1040668)
50 Hz available.

* "7 Day" denotes day of the week; "99 Day" denotes number of days between regenerations (1- 99 days)

Included Filter Control Valve Options

Option Code (x)	Description
Must choose from the following bypass options for all filter valves with 742F & 764F controllers	
(BP) = U	Unfiltered Water Bypass (Not available for 764FMS Twin Valve Controls)
(BP) = F	No Unfiltered Water Bypass (Required for 764FMS Twin Valve Controls)
Must choose from the following backwash options for all filter valve configurations	
(BW) = 05 to 40	Internal Backwash Flow Control: 5 gpm to 40 gpm (Increments of 1 gpm)
(BW) = 41 to 89	External Backwash Flow Control: Up to 89 gpm @ 25 psid (Increments of 1 gpm)
Must choose from the following plumbing adapter kit options for all Magnum IT filter valve configurations	
(AI) = UA-3023849	(2) 2" S.S. NPT Adapter w/ Zinc Diecast Nut, (1) 1.5" S.S. NPT Adapter w/ Glass Filled Noryl Nut
(AI) = UA-3023674	(2) 2" S.S. BSP Adapter w/ Zinc Diecast Nut, (1) 1.5" S.S. BSP Adapter w/ Glass Filled Noryl Nut
(AI) = UA-1040784	(2) 2" CPVC Spigot Adapter w/ Zinc Diecast Nut, (1) 1.5" CPVC Spigot Adapter w/ Glass Filled Noryl Nut
(AI) = UA-3023732	1.5" S.S. NPT Reducer w/ Zinc Diecast Nut, (3) 1.5" S.S. NPT Adapter w/ Glass Filled Noryl Nut
(AI) = UA-3023736	1.5" S.S. BSP Reducer w/ Zinc Diecast Nut, (3) 1.5" S.S. BSP Adapter w/ Glass Filled Noryl Nut

Transformer Specifications

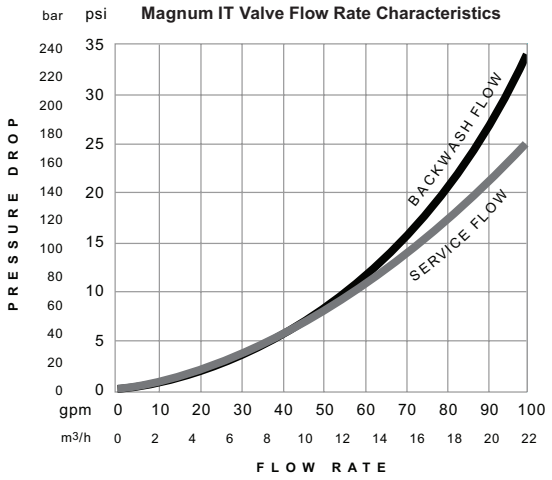
All controllers require the use of a Magnum IT supplied transformer.

Output Voltage . . . . . 12 Volt – AC 400mA

Input Options . . . . . 115 Volt – AC 50/60 Hz
230 Volt – AC 50/60 Hz
100 Volt – AC 50/60 Hz

Plug Options . . . . . Indoor North America (P/N UA-44149)
Indoor North America 230V (P/N UA-44193)
Outdoor North America (P/N UA-44156)
Japan (P/N UA-1000810)
Australia (P/N UA-1000812)
United Kingdom (P/N UA-1000813)
Mainland Europe (P/N UA-1000814)

Additional transformers may be available — call for more information.



SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1171
EFFECTIVE
JUNE 2023

COMMERCIAL
CONTROL
VALVES



Magnum® Control Valve



Pentair
Water

COMMERCIAL CONTROL VALVES

Magnum® Control Valve

Controller Options

The Pentair Water® Magnum Control Valve is one of the most versatile valves on the market.

Logix™ Series

- All-electronic control platform
- 24-hour super-capacitor backup – no battery necessary
- Remote mount kit allows programming module to be installed up to 40 feet away
- Universal controller – works on all Autotrol® brand valves
- Automatic capacity calculations – no math or salt tables necessary
- 12-volt operation



The Logix series offers the ultimate in control for the Magnum® valve. Simple 3-step programming and installation makes this electronic controller the industry leader.



742 Time Clock

- Simple, economic electronic time clock (chronometric)
- 7- or 99-day regeneration settings
- Filter or conditioner setting in one control
- Fully programmable cycle times
- Salt setting in 1-pound increments (lbs/cu ft)
- Single controller operates Autotrol 255, 263, 268, 278 models, and Pentair Water Magnum and Magnum IT with one controller

762 Demand

- Simple, economic electronic demand (volumetric)
- Calendar override – 99 day
- 28-day variable reserve
- Filter or conditioner setting in one controller
- Automatic capacity calculations
- Fully programmable cycle times
- Salt setting in 1-pound increments (lbs/cu ft)
- Operates 255, 263, 268, 278, and Magnum IT with one controller

764 Demand

Same features as the 762, plus:

- Multi-tank applications (twin alternating, multi-tank parallel)
- Control lockout
- Remote regeneration



Specifications

Electrical Specifications

Controller Operating Voltage	12 Volt – AC (Requires a transformer supplied by GE)
Input Supply Frequency	50 or 60 Hz (Controller configuration dependent)
Motor Input Voltage	12 Volt – AC
Control System Power Consumption	3 Watts average

Transformer Specifications – All Controllers

All Controllers require the use of a Pentair Water supplied transformer.

Transformer Output Voltage	12 Volt – AC 400mA
Transformer Input Options	115 Volt – AC 50/60 Hz; 230 Volt – AC 50/60 Hz; 100 Volt – AC 50/60 Hz
Transformer Plug Options	Indoor North American Plug Outdoor North American (UL Listed for outdoor use) Japanese Plug Taiwan/Korea Plug Australian Plug United Kingdom Plug Mainland Europe Plug

Additional transformers may be available – call for more information.

Flow Rates (Valve Only)

Service @ 15 psi (1.03 bar) drop	76 gpm (17.3 m^3/hr)
Backwash @ 25 psi (1.72 bar) drop	89 gpm (20.2 m^3/hr)
Service	Cv = 19.5 (Kv = 17)
Backwash	Cv = 17.8 (Kv = 19.9)

Valve Connections/Dimensions

Tank Thread	4-inch 8 UN
Inlet/Outlet	2-inch: connections NPT or BSPT, Female, CPVC
Brine Line	3/4-inch NPT
Drain Line*	1-1/2-inch: connections for NPT or BSPT, Female, CPVC
Riser Tube Diameter	1-1/2-inch
Riser Installation	Above top of tank 5/8-inch (±1/8-inch)
Pilot Drain and Auxiliary Hydraulic Output	1/4-inch tube fitting

*Valve installed drain flow controls available (5 – 40 gpm). If higher backwash flow is needed, an external flow control will be required.

Design Specifications/Ratings

Valve Body	Thermoplastic
O-rings	EPDM
Injector	7 sizes available: 14, 16, 18, 21, 24, 30, 36
Working Pressure	25 psi – 100 psi (1.72 bar – 6.9 bar)
Water Temperature	35° – 100°F (2° – 38°C), 120°F (49°C) Ambient

Options

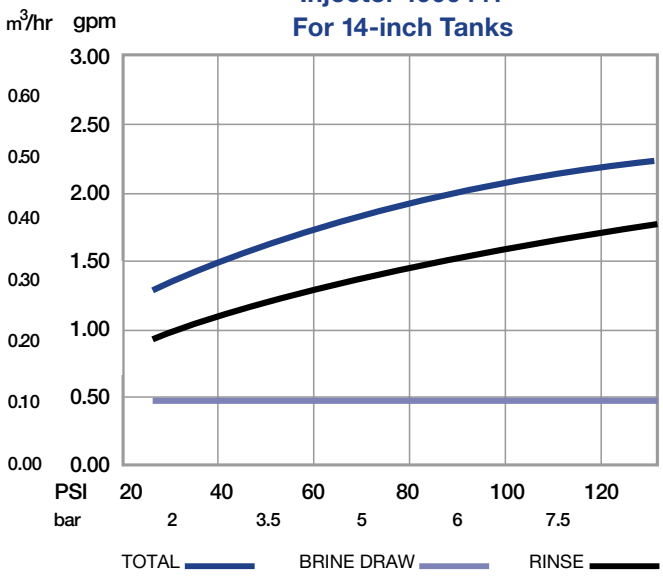
Top Mount or Side Mount Configuration

Pentair Water

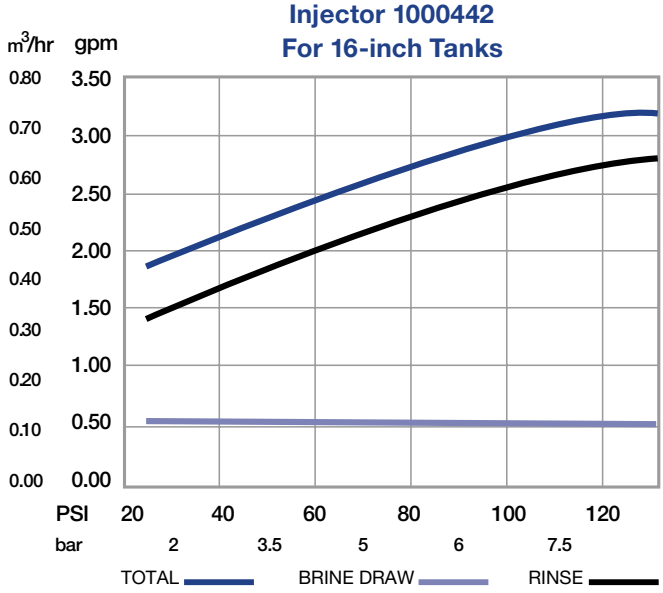
Magnum® Control Valve

Injector Performance – Magnum

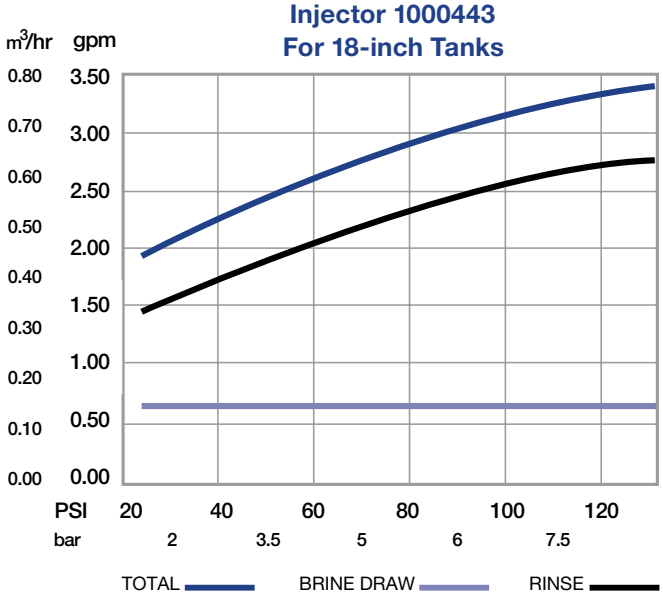
Injector 1000441
For 14-inch Tanks



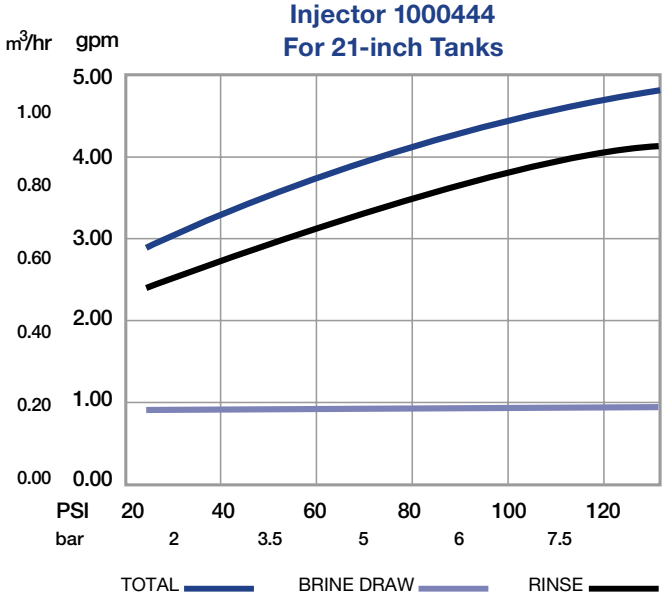
Injector 1000442
For 16-inch Tanks



Injector 1000443
For 18-inch Tanks

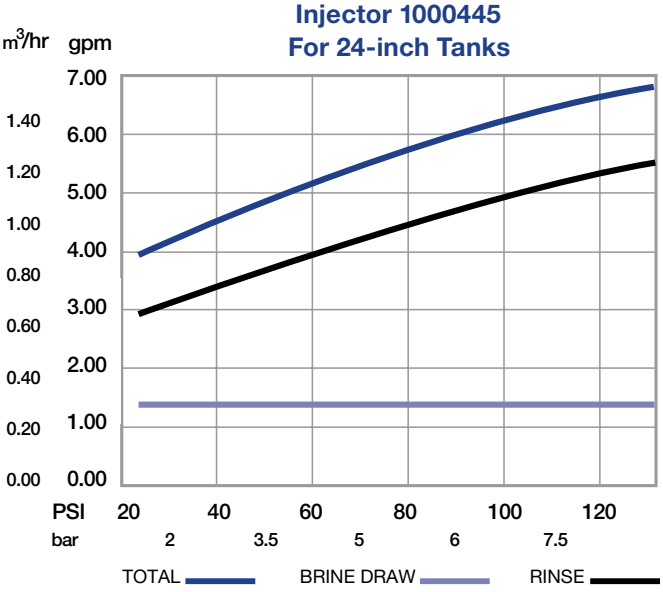


Injector 1000444
For 21-inch Tanks

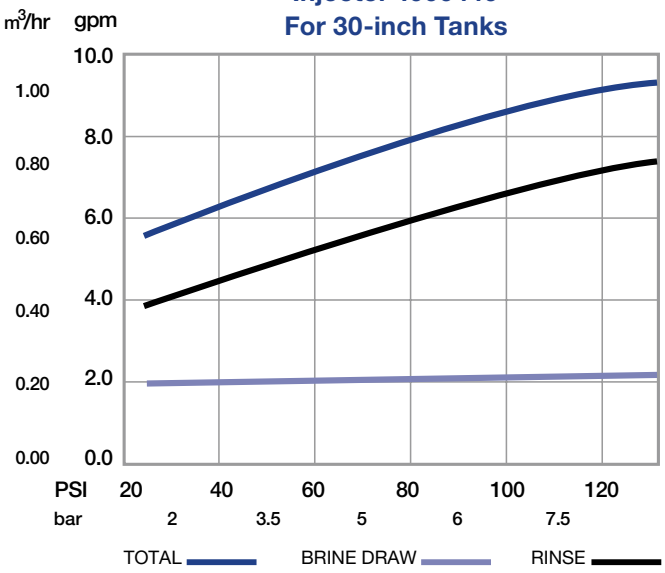




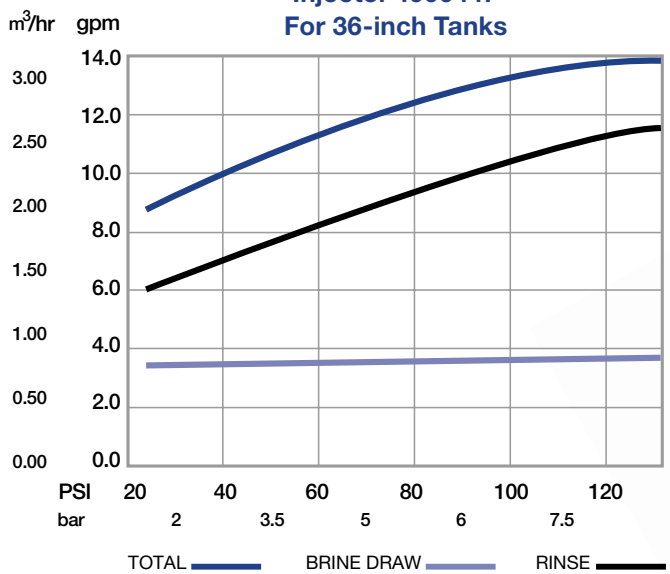
Injector 1000445
For 24-inch Tanks



Injector 1000446
For 30-inch Tanks



Injector 1000447
For 36-inch Tanks





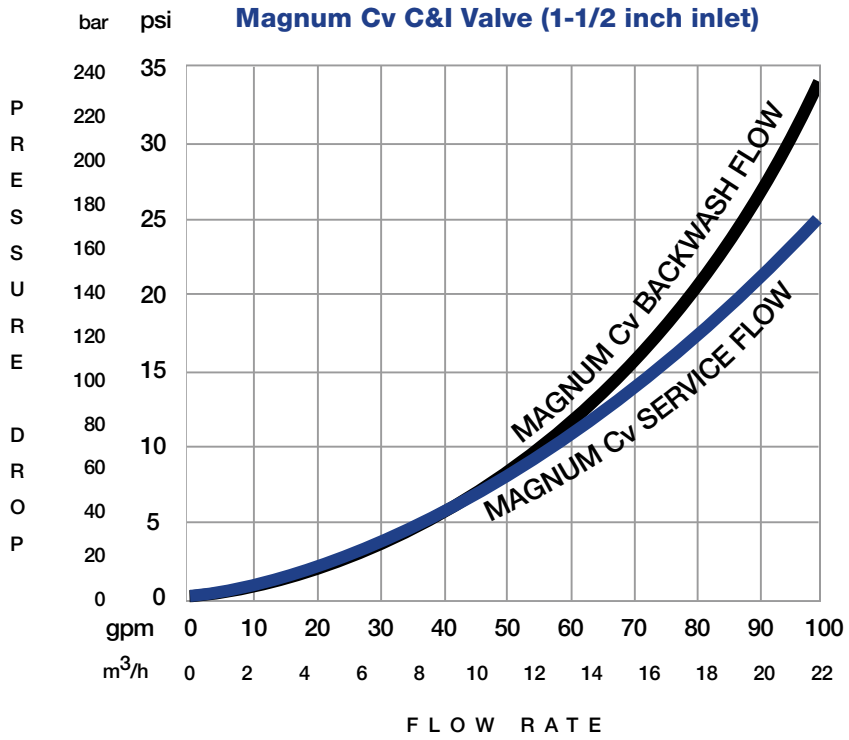
NOTE: Brine draw and rinse rates on empty tank.

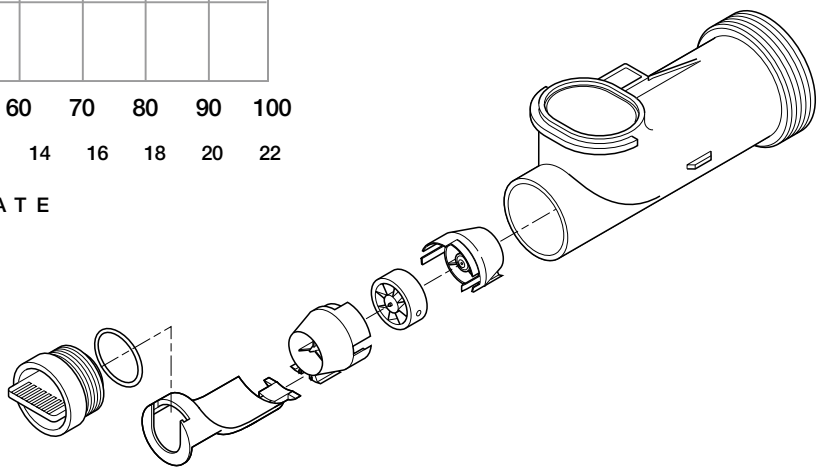
Pentair Water

COMMERCIAL CONTROL VALVES

Magnum® Control Valve

Valve Flow Rate Characteristics





Flow Sensor Options

Internal Turbine Unit

Normal Operating Range	2 - 80 gpm (0.45 - 18.1 m³/hr)
Peak Operating Range	1 - 100 gpm (0.22 - 22.7 m³/hr)
Normal Accuracy Range	±3%



External Flow Meter – 2.0 Inch

Normal Operating Range*	5.0 - 225 gpm (0.50 - 51.0 m³/hr)
Normal Accuracy Range	±3%
Connections	2-inch: connections NPT or BSPT, Female, CPVC

*Recommended maximum continuous duty flow rate of 2-inch turbine is 70% of maximum flow rate.

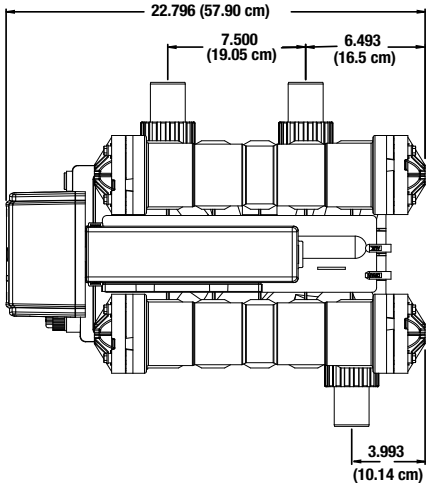
Tank Adapter Options

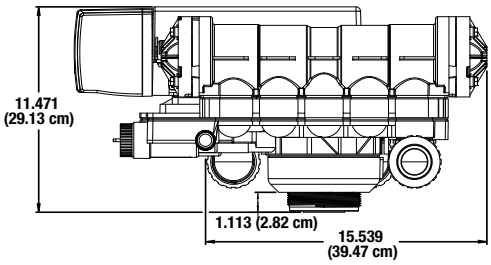
Threaded Stainless Steel	4-inch 8 UN
Flanged Stainless Steel	6-inch

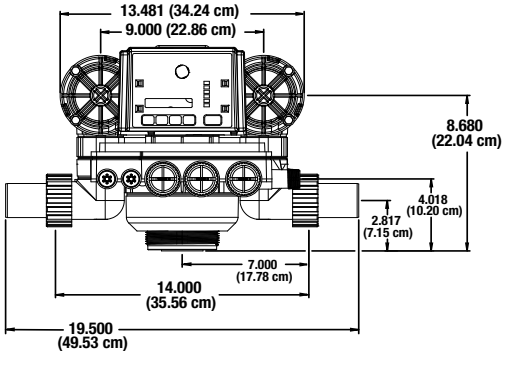


Magnum Valve Outline Dimensions

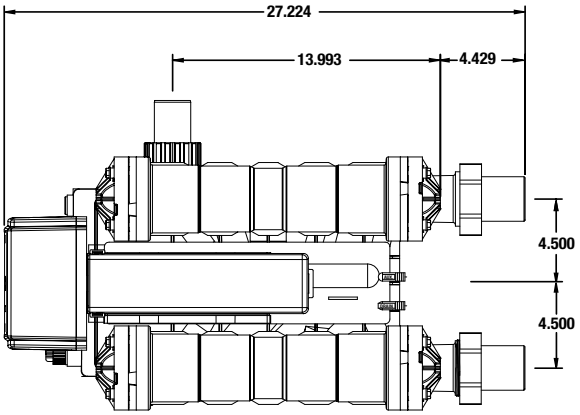
1-1/2-inch Magnum Cv

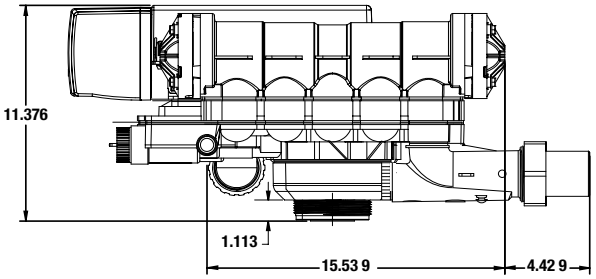


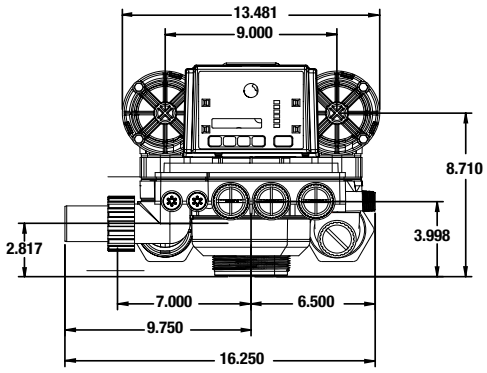




2-inch Magnum IT







Pentair Water

AquaMatic® Products

Valves, Stagers and Controllers

OVERVIEW



GE

Water & Process Technologies

GE



GE is a diversified manufacturer
of high technology equipment, controls and components that purify water, concentrate wastes, and enable clean water to be recycled or discharged back into the environment.

GE is an industry leader
offering AquaMatic brand specialty valves and controllers for fluid handling. AquaMatic offers stagers and controllers to automate valve operation for a variety of commercial and industrial applications.

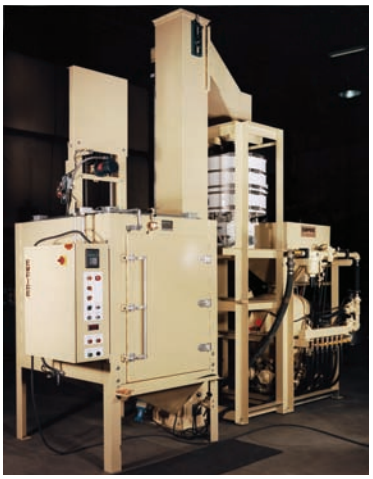
As with all members of the GE family,
AquaMatic brand products have a reputation for value, durability, ease of maintenance, full product support and low life-cycle costs.

Versatility



AquaMatic valves have earned worldwide recognition
for their high quality and value in the water treatment market. Value includes low initial purchase price and lower cost of operation during the life of the product when compared with our competitors. Our valves are simple to maintain, and easily serviced by your maintenance staff.

AquaMatic products have proven to be effective
in a vast array of diverse applications. One of our largest markets is heatless regenerative air dryers where we are one of the preferred suppliers in this specialized industry. The AquaMatic valve controls air flow with one cycle every ten minutes. Other applications where AquaMatic valves can provide reliable service and low life-cycle costs include:



- Center Pivot Irrigation Systems
- Conveying Equipment
- Sand Blasting Equipment
- Desalination Systems
- Car Wash Systems
- Milling Machines and Lathes
- Cooling Tower Float Valves
- Plastic Molding Machinery
- Laundry Equipment
- Sludge Removal Systems
- Bulk Solids Transfer Equipment



AquaMatic valves are available in a wide range of sizes
from three-quarters of an inch to six inches, and are offered in metal or composite materials. These valves share characteristics of excellent flow rates at low pressure drops. Discover the technical benefits of AquaMatic products on your application.

Commitment to Technical Support



Our engineers are committed
to providing technical support whenever needed. We draw on decades of experience to appropriately size AquaMatic valves and related components for both new installations and renovations.

Our deep-rooted commitment to customer satisfaction
has resulted in numerous long-term relationships. We take pride in helping our customers succeed as their operations expand and diversify. We are continuously improving quality systems and procedures to ensure that AquaMatic valves and controllers are manufactured to the highest of quality standards.



Completely Matched Systems



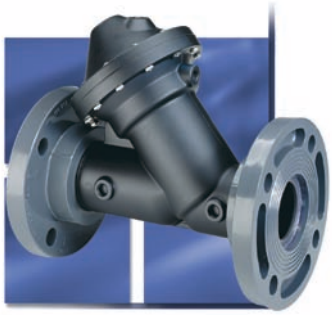
Behind every AquaMatic valve is a variety of complementary products such as stagers and controllers, which we will match to the precise requirements of your system. Stagers direct the opening and closing of each valve, whereas controllers set the stagers into action. These devices automatically control the valves in a process system. And because they're designed as an integrated system, they take the guesswork out of running your operation efficiently.

The bottom line is that AquaMatic is a brand you can trust from system startup right through to ongoing product support. It's all part of the GE heritage of providing strong partnerships with our customers. Because we take the time to understand our customers, we are becoming the preferred single source for water purification, fluid handling, filtration and separation products. It's that simple – no matter how complex your operation is.



Valves

Composite



K52 Series

The AquaMatic K52 Series valve provides the time proven advantages of the "Y" pattern design for pipe sizes from one-half inch to three inches. The body and cap are molded in strong, glass-filled Noryl* and the diaphragm is made of durable Buna N or Viton** materials. Various pipe end connections are available for your system design. Other AquaMatic valve options include spring-assist open, spring-assist close, flow control limit stop, poppet position indicator, Viton** seals, butyl seals, normally closed, and fail-safe spring closed products.

Pipe Size Inches	Pipe Size Millimeter, DN	Valve Model	Cv (1)	Cv (2)
1/2	15	K520	4.0	3.5
1	25	K521	15.0	13.0
1-1/2 – 2	40-50	K524	38.0	32.8
2-1/2 – 3	65-80	K526	100.0	86.5





K53 Series

The AquaMatic K53 Series valve is designed for controlling the flow of most fluids including deionized water, salt solutions, and corrosive fluids such as acids and caustics. The rugged construction employs strong corrosion-resistant glass-filled Noryl* components. The "Y" pattern design permits high flow with low pressure drop. Separate flow and control chambers provide positive closing without springs. Dual "O" ring design on the shaft prevents leakage between the flow and control chambers and the cap is easily removed for maintenance purposes. True union end design with female socket weld connections provide easy installation and servicing.

Pipe Size Inches	Pipe Size Millimeter, DN	Valve Model	Cv (1)	Cv (2)
1	25	K531	18.0	15.6
1-1/2	40	K534	48.0	41.5
2	50	K535	84.0	73.5
3	80	K537	200.0	173.0



(1) Flowrate in gallons per minute of water at 60ºF, 1 psi pressure drop.

(2) Flowrate in cubic meters per hour of water at 15.5ºC, 1 bar pressure drop.

*Noryl® is a registered trademark of General Electric Company.

**Viton® is a registered trademark of E.I. du Pont de Nemours and Company.

Note: For technical information, see the AquaMatic technical catalog.

Valves



V42 Series

The AquaMatic V42 Series valves are constructed of cast iron and are designed for air and water applications. A separate control chamber protects the diaphragm from line fluid and extends cycle life. Reinforced diaphragm of Buna N or Viton** materials are pre-formed and stress relieved to maximize responsiveness and product life. The valve is highly serviceable even while in line. A variety of options are available such as spring-assist open, spring-assist closed, flow control limit stop, normally closed, poppet position indicator, and high temperature EP or Viton** seals.



Pipe Size Inches	Pipe Size Millimeter	End Connectors (Female Thread)	Valve Model	Cv (1)	Cv (2)
3/4	20	NPT, BSPT	V42B	11.5	10.0
1	25	NPT, BSPT	V42C	13.0	11.2
1-1/4	32	NPT, BSPT	V42D	26.5	22.9
1-1/2	40	NPT, BSPT	V42E	32.5	28.1
2	50	NPT, BSPT	V42F	56.0	48.4
2	50	NPT, BSPT	V42G	68.0	58.8
2-1/2	65	NPT, BSPT	V42H	84.0	72.7
3	80	NPT, BSPT	V42J	135.0	117.0
3	80	Flanged	V42J	135.0	117.0
4	100	Flanged	V42K	275.0	238.0
6	150	Flanged	V42L	680.0	588.0



V82 Series – High Pressure

The AquaMatic V82 Series valves are constructed of brass and are identical in operation to the V42 Series. Body and cap are brass, and components are designed to withstand up to 250 psi (17 Bar).



Pipe Size Inches	Pipe Size Millimeter	End Connectors (Female Thread)	Valve Model	Cv (1)	Cv (2)
3/4	20	NPT, BSPT	V82B	11.5	10.0
1	25	NPT, BSPT	V82C	13.0	11.2
1-1/4	32	NPT, BSPT	V82D	26.5	22.9
1-1/2	40	NPT, BSPT	V82E	32.5	28.1
2	50	NPT, BSPT	V82G	68.0	58.8
2-1/2	65	NPT, BSPT	V82H	84.0	72.7
3	80	NPT, BSPT	V82J	135.0	117.0

Stager Valves



AquaMatic Stagers
AquaMatic Stagers are rotary pilot valves with multiple ports for directing fluid flows to operate various diaphragm valves installed in a process system. AquaMatic stager internal parts are constructed of durable, non-corroding, self-lubricating material for long, maintenance-free life.



Model Number	Body Material	Number of Ports	Typical Applications
48	Brass	6	Filters and softeners
51	Brass	8	More complex softener systems and sequential filter systems
58	PVC	16	Twin alternating systems and de-ionizers
59	Brass	16	and sequential filter systems
96	Brass	8	High pressure systems, up to 250 psi (17 BAR)

Electronic Stager Controls

AquaMatic 962 Stager Controls
AquaMatic 962 Stager Controls combine an AquaMatic stager with an Autotrol® 962 Series electronic control, mounted and prewired in a NEMA-rated enclosure.

The Series 962 electronic controls provide sophisticated, demand-based water conditioning by combining a microprocessor with a flow meter to electronically monitor the amount of water used. Time-based and/or external signal initiation is also available as a standard feature.This fully programmable series of controls provide the ability to fine-tune the operation to meet the application requirements.



Applications

Controls	Model Number	Description
Single Unit Controls		
Typical Softeners and Filters	E948*	962 Control w/model 48, 6-port stager
More Complex Softeners and Filters	E951*	962 Control w/model 51, 8-port stager
Multiple Unit Controls		
Twin-Alternating Softeners and Filters (w/Timed Brine Switch Output)	E958-TB	962 Control w/model 58-TB, 16-port stager
Twin-Alternating Softeners	E958-TA	962 Control w/model 58-TA, 16-port stager
Sequential Filters (Backwash Only)	E948	962 Control w/model 48, 6-port stager
2 Unit Sequential Filters (Backwash & Rinse)	E951	962 Control w/model 51, 8-port stager
3 or 4 Unit Sequential Filters	E958	962 Control w/model 58, 16-port stager

* Two-tank and three-tank parallel systems can be controlled by individual controls provided with lockout feature. Lockout feature is void when using the added relay output option.

Stager Controls



These controls combine an AquaMatic stager with a reliable Autotrol® timer, mounted and prewired in a NEMA-rated enclosure. Stagers are initiated by timeclock or impulse controls. The cycle times are programmable to accommodate a wide range of applications.

Base Model	Initiation	Filters/Softener Systems	Multi-Tank Systems	High Pressure Systems
A100	Time	A148, A151	A158	A196
A200	Impulse	A248, A251	A258	A296

Fluid Handling

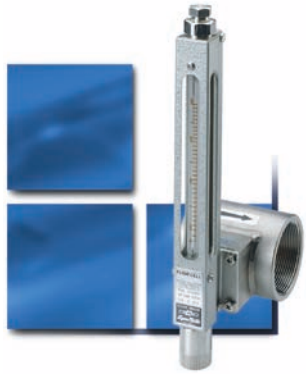
Ejectors



540 Series

540 Series PVC ejectors are available in one-half-inch through two-inch sizes with female NPT threads or female socket ends for US pipe. Specific applications are brine draw, acid draw, or caustic draw. This economical ejector is engineered to draw two parts of regenerant fluid for each three parts of water.

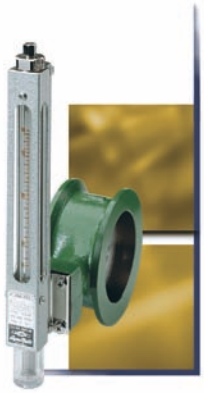
Pipe Size Inches	Model Number
1/2	540
3/4	541
1	542
1-1/2	544
2	546



Flow Cell Flowmeters

AquaMatic Flow Cell Flowmeters

AquaMatic Flow Cell Flowmeters are direct-reading devices which take advantage of the dominant features of the orifice and area type flowmeters. These flow meters are accurate to ±2% of full scale in a compact design requiring less than six inches of piping. The AquaMatic Flow Cell Flowmeter is available for 3/8-inch to 20-inch diameter pipes and can be installed to accommodate flow in any direction. Connections are available for NPT, BSP and flanged end connectors. The Flow Cell Flowmeter is constructed in ductile cast iron with nickel plated brass, 316 stainless steel, or PVC.





V46 Series

Stainless Steel Valves

The AquaMatic V46 valves have the same operational characteristics, and are constructed of 316 Stainless Steel material. These valves are available in 1-inch, 1-1/2-inch and 2-inch sizes, in either threaded or flanged ends. Flanged valves are rated for 150 PSI (10 bar) and threaded valves are rated for 250 PSI (17 bar). With all stainless steel internals and no internal threads, this series is ideal for corrosion resistance applications.

Pipe Size Inches	Pipe Size Millimeter, DN	Valve Model	Cv (1)	Cv (2)
1	25	V46C	13	11.3
1-1/2	40	V42E	32	27.8
2	50	V46F	54	47

Commitment to Partnerships with Customers

No two customers are alike. That means "standard" or "off the shelf" does not apply to the needs of everyone. In these situations, our engineers work closely with our customers to develop customized solutions to their specific application. The result is a unique combination of valves and related components that will provide years of reliable, trouble-free service.



One example of our commitment to partnerships with our customers can be found in the irrigation market. Based on the cost-reduction needs of a long-time GE customer, we created a valve especially for irrigation applications.



For More Information:
Contact the **Residential and Commercial Group** at **(815) 964-9421** or **(800) 245-9421** or visit **www.gewater.com**

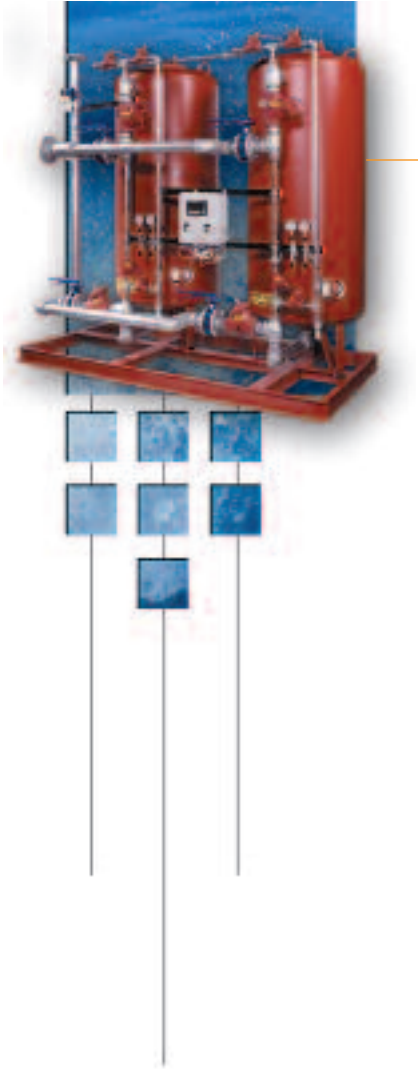
GE
Water & Process Technologies

North American Sales
2412 Grant Avenue
Rockford, IL
61103-3991
USA
(815) 964-9421 Phone
(815) 964-4449 Fax

Euro/Africa Operations
230 rue Robert Schurman
ZA des Uselles
F-77350 Le Mée sur Seine
FRANCE
+33 1 64 10 2000 Phone
+33 1 64 10 3747 Fax

Asia/Pacific Operations
1044/8 SOI 44/2
Sukhumvit Road Parkanog
Bangkok 10110
THAILAND
+66 2 38 14213 Phone
+66 2 39 18183 Fax

© Copyright 2006, General Electric Company
Printed in USA, P/N 1018192 Rev. H



GE
Water & Process Technologies

AquaMatic® Valves and Controls

Easy Nest℠ Kits

Performance Range (Single Tank Systems)

- Service Flow Rates ..... 80 gpm to 1300 gpm (18 m^3/h to 295 m^3/h)
- Backwash Flow Rates (Softeners) ..... 35 gpm to 392 gpm (8 m^3/h to 89 m^3/h)
- Backwash Flow Rates (Filters) ..... 35 gpm to 1200 gpm (18 m^3/h to 272 m^3/h)
- System Sizes..... 36" to 120" Diameter Tanks

System Configurations

- Softeners:
  - Single Tank ..... 4 Position
  - Multi-Tank..... 2, 3, and 4 Tank, Parallel
    2 Tank Alternating Softeners
- Filters:
  - Single Tank ..... 3 Position
  - Multi-Tank..... 2, 3, and 4 Tank, Sequential

Control Configurations

- Electronic: ..... Demand and Time Clock (Battery Back-Up)
  Programmable Regeneration Range ..... 0-255 Minutes Regeneration (Each Cycle)
- Electromechanical: ..... Time Clock, 6 or 7 Day
  Programmable Regeneration Range ..... 3-102 Minutes Complete Regeneration Cycle
- Stager Valves..... 6, 8, and 16 Ports

Piping Configurations

- Valves:
  - Cast Iron ..... 3/4" to 3" Female Thread, NPT, BSP, JIS
    3" to 6" Flanged
  - Noryl (Plastic)..... 1" to 3" Union, Female Solvent Weld
    2" to 3" Female Solvent Weld or Flange
- Injectors..... 1/2" to 2" Female NPT Thread, Solvent Weld
- Stager Tubing ..... 1/4" Poly Tubing

Design Specifications

- Valve Body..... Cast Iron or Glass-Filled Noryl
- Diaphragm..... Buna N/Polyamide
- Injector..... PVC
- Control Enclosures (Electro-Mechanical)..... Nema 1
- Control Enclosures (Electronic)..... Nema 4X Fiber Glass
- Operating Pressure ..... 20psi - 120 psi (1.38 - 8.27 bar)
- Operating Temperature..... 35°F - 120°F (2°C - 38°C)
- Operating Voltages..... 115V 50/60 Hz, 220V 50/60 Hz

Selecting the Appropriate Stager and Nest Kits

Selection of the stager and valve nest kit can be done with two part numbers. The part numbers for the stagers can be found on page 4 of this specification sheet. The valve nest kit part numbers can be found on page 3 (softeners) and page 4 (filters.) Backwash flow controls, brine valves, and water meters are not included as part of the Easy Nest Kits and must be ordered separately. Below are brief descriptions of the stagers and valves. A raw water bypass option for single tank units is available, but a normally closed valve must be ordered separately.

Control Features

Electromechanical Controllers
- Regenerates based on a set time

Electronic (Metered/Signal) Controllers
- Regenerates based on a set time, metered water usage or external signal

Valve Body Features

Cast Iron
- Requires Threaded/Flanged Piping
- Requires Union Connectors
- Susceptible to Corrosive Water

K520 (Composite)
- Solvent Weld
- Requires Union Connectors
- Corrosion Resistant

K530 (Composite)
- Solvent Weld
- No Union Connectors Needed*
- Corrosion Resistant

Selection Process

Control Choices Example (page 4):

Select electronic or electromechanical.....Electronic
Select the correct option for your application.....2 Tank Alternating Softener
Find part number.....1078842
Select quantity of controllers 1

Valve Nest Choices Example (page 3 or 4):

Select filter or softener .....Softener
Select valve type (Cast iron, K520, K530).....K530 Valve Series
Select size of system based on tank diameter, pipe size, or flow rate.....54" Tanks
Find part number.....1078803
Select quantity of nest kits.....2 (Alternating)

Sample Order:

GE Order Form

Qty.	PN	Description
1	1078842	2 Tank Alternating Softener Controller
2	1078803	S537-54 Nest Kit

**Drawings on pages 5, 6, and 7 show union connectors as part of the installation. When using the K530 valves, those union connectors are not necessary.*

Available Standard Softener Configurations

Model Number	Part Number	Tank Diameter Inches (cms)	Resin Amount Cu Ft (Liters)	Pipe Size Inches	Service Flowrate at Pressure Drop		Backwash Flowrate at Pressure Drop	
					GPM@/PSI (m^3/Hr.@bars)			
Cast Iron Valves								
S425-36	1078826	36 (92)	20 (565)	2"	100 @ 6.4	(22.7 @ .44)	36 @ 2.3	(8.1 @ .16)
S425-42	1078783	42 (106)	30 (850)	2"	150 @ 14.3	(34 @ .98)	48 @ 4.4	(10.9 @ .30)
S426-48	1078784	48 (120)	40 (1130)	2"	180 @ 14	(40.9 @ .96)	63 @ 7.5	(14.3 @ .51)
S426-54	1078785	54 (135)	50 (1415)	2 1/2"	220 @ 13.7	(50 @.94)	80 @ 12.2	(18 @ .84)
S427-60	1078786	60 (150)	60 (1700)	3"	300 @ 10.0	(68 @ .69)	98 @ 6.3	(22.2 @ .43)
S427-63	1078828	63 (160)	70 (1980)	3"	325 @ 11.6	(73.8 @ .80)	108 @ 7.5	(24.5 @ .51)
S428-72	1078787	72 (180)	85 (2400)	4"	425 @ 4.8	(96.6 @ .33)	140 @ 8.5	(31.8 @ .58)
S428-78	1078788	78 (200)	100 (2830)	4"	500 @ 6.6	(113.6 @.45)	165 @ 11.8	(37.5 @ .81)
S428-84	1078789	84 (215)	125 (3540)	4"	625 @ 10	(142 @ .69)	192 @ 10.5	(43.6 @ .72)
S428-90	1078790	90 (230)	140 (3965)	4"	700 @ 13	(159 @ .89)	220 @ 13.8	(50 @ .95)
S429-96	1078791	96 (245)	165 (4670)	6"	825 @ 4.0	(187.5 @ .27)	255 @ 7.6	(58 @ .52)
S429-102	1078792	102 (260)	185 (5240)	6"	925 @ 4.2	(210 @.29)	285 @ 9.2	(64.7 @ .63)
S429-108	1078793	108 (275)	210 (5945)	6"	1100 @ 6.0	(250 @ .41)	320 @ 11.5	(72.7 @ .79)
S429-114	1078794	114 (290)	235 (6655)	6"	1200 @ 7.0	(272 @ .48)	355 @ 3.5	(80.6 @ .24)
S429-120	1078795	120 (305)	260 (7360)	6"	1300 @ 8.3	(295 @.57)	390 @ 5.0	(88.6 @ .34)
Composite Valves Series K520								
S524-36	1078796	36 (92)	20 (565)	1 1/2"	80 @ 9.0	(18.1 @ .62)	35 @ 11	(7.9 @ .76)
S526-42	1078797	42 (106)	30 (850)	2 1/2"	150 @ 4.5	(34 @ .31)	48 @ 4.0	(10.9 @ .27)
S526-48	1078798	48 (120)	40 (1130)	2 1/2"	180 @ 7.0	(41 @ .48)	63 @ 5.6	(14.3 @ .38)
S526-54	1078799	54 (135)	50 (1415)	2 1/2"	220 @ 10	(50 @ .69)	80 @ 10	(18 @ .69)
Composite Valves Series K530								
S534-36	1078800	36 (92)	20 (565)	1 1/2"	100 @ 8.7	(22.7 @.60)	35 @ 7.5	(7.9 @ .51)
S535-42	1078801	42 (106)	30 (850)	2"	150 @ 6.4	(34 @ .44)	48 @ 2.0	(10.9 @ .14)
S535-48	1078802	48 (120)	40 (1130)	2"	180 @ 9.2	(41 @ .63)	63 @ 4.0	(14.3 @.27)
S537-54	1078803	54 (135)	50 (1415)	3"	220 @ 2.4	(50 @ .16)	80 @ 7.0	(18 @ .48)
S537-60	1078829	60 (150)	60 (1700)	3"	300 @ 4.5	(68.1 @ .31)	98 @ 8.4	(22.2 @ .57)
S537-63	1078804	63 (160)	65 (1840)	3"	325 @ 5.3	(73.8 @ .36)	110 @ 4.0	(25 @ .27)
S537-72	1078805	72 (182)	90 (2550)	3"	425 @ 9.0	(96.6 @.62)	140 @ 7.0	(31.8 @.48)

Note: *Data supplied herein is provided as a guide only. Actual results may vary depending upon actual water conditions and system layout. Flow rates shown are valves only, not the completed system.*

Available Standard Filter Configurations

Model Number	Part Number	Tank Diameter Inches (cm)	Pipe Size Inches	Service and Backwash Flowrate @ Pressure Drop GPM@PSI (m^3/Hr@bars) 5 GPM/ft^2	10 GPM/ft^2	15 GPM/ft^2
Cast Iron Valves						
F425-42	1078806	42 (106)	2"	48@1.5 (10.9@.10)	96@5.8 (21.8@.4)	145@13.2 (33@.91)
F426-48	1078807	48 (120)	2"	62@1.7 (14@.11)	125@6.7(28@.46)	190@15 (43.2@1.03)
F426-54	1078808	54 (135)	2 1/2"	80@2.8 (18.1@.19)	160@7.2 (36.2@.49)	240@16 (54.5@1.1)
F427-60	1078809	60 (150)	3"	97@1.1 (22.0@.07)	195@4.3 (44@.29)	295@9.5 (67@.65)
F428-72	1078810	72 (180)	4"	140@0.5(31.8@.034)	280@2.5 (63.6@.17)	425@5.5 (96.6@.38)
F428-78	1078811	78 (200)	4"	165@0.7 (36.3@.048)	330@3.2 (75@.22)	500@7.5 (113@.51)
F428-84	1078812	84 (215)	4"	190@1.0 (43@.069)	380@4.4 (87.5@.30)	580@10 (132@.69)
F428-96	1078813	96 (245)	4"	250@1.6 (56.8@.11)	500@7.4 (113.6@.51)	750@16 (170@1.1)
F429-108	1078814	108 (275)	6"	315@0.5 (71@.034)	635@2.0 (143.6@.13)	960@4.5 (218@.31)
F429-120	1078815	120 (305)	6"	390@0.8 (88.6@.055)	780@3.0 (177@.20)	1180@7.4 (268@.51)
Composite Valves Series K520						
F524-36	1078816	36 (90)	2"	35@1.7 (8.0@.11)	70@6.8 (16@.47)	105@15 (23.8@1.03)
F526-42	1078817	42 (105)	2 1/2"	48@0.46 (11@.032)	96@2.0 (22@.13)	145@4.2 (33@.29)
F526-48	1078818	48 (120)	3"	62.5@0.8 (14.2@.055)	125@3.2 (28.4@.22)	190@7.3 (43.2@.50)
F526-54	1078819	54 (135)	3"	80@1.3 (18.1@.09)	160@5.2 (36.2@.36)	240@11.5 (54.5@.79)
Composite Valves Series K530						
F534-36	1078820	36 (90)	1 1/2"	35@1.2 (8@.08)	70@4.3 (16@.29)	105@9.6 (23.8@.66)
F535-42	1078821	42 (105)	2"	48@0.6 (11@.041)	96@2.7 (22@.18)	145@6.0 (33@.41)
F535-48	1078822	48 (120)	2"	62.5@1.1 (14.2@.075)	125@4.5 (28.4@.31)	190@10.5 (43.2@.72)
F537-54	1078823	54 (135)	3"	80@0.4 (18.1@.027)	160@1.6 (36.2@.11)	240@3.5 (54.5@.24)
F537-60	1078829	60 (150)	3"	98@0.6 (22.2@.041)	195@2.2 (44.3@.15)	295@5.4 (67@.37)
F537-63	1078824	63 (160)	3"	107@0.7 (24@.048)	215@2.7 (48@.18)	325@7.0 (73.8@.48)
SF37-72	1078825	72 (180)	3"	140@1.2 (31.8@.082)	280@5.0 (63.6@.34)	425@11.4 (96.6@.78)

Note: Data supplied herein is provided as a guide only. Actual results may vary depending upon actual water conditions and system layout. Flow rates shown are valves only, not completed systems.

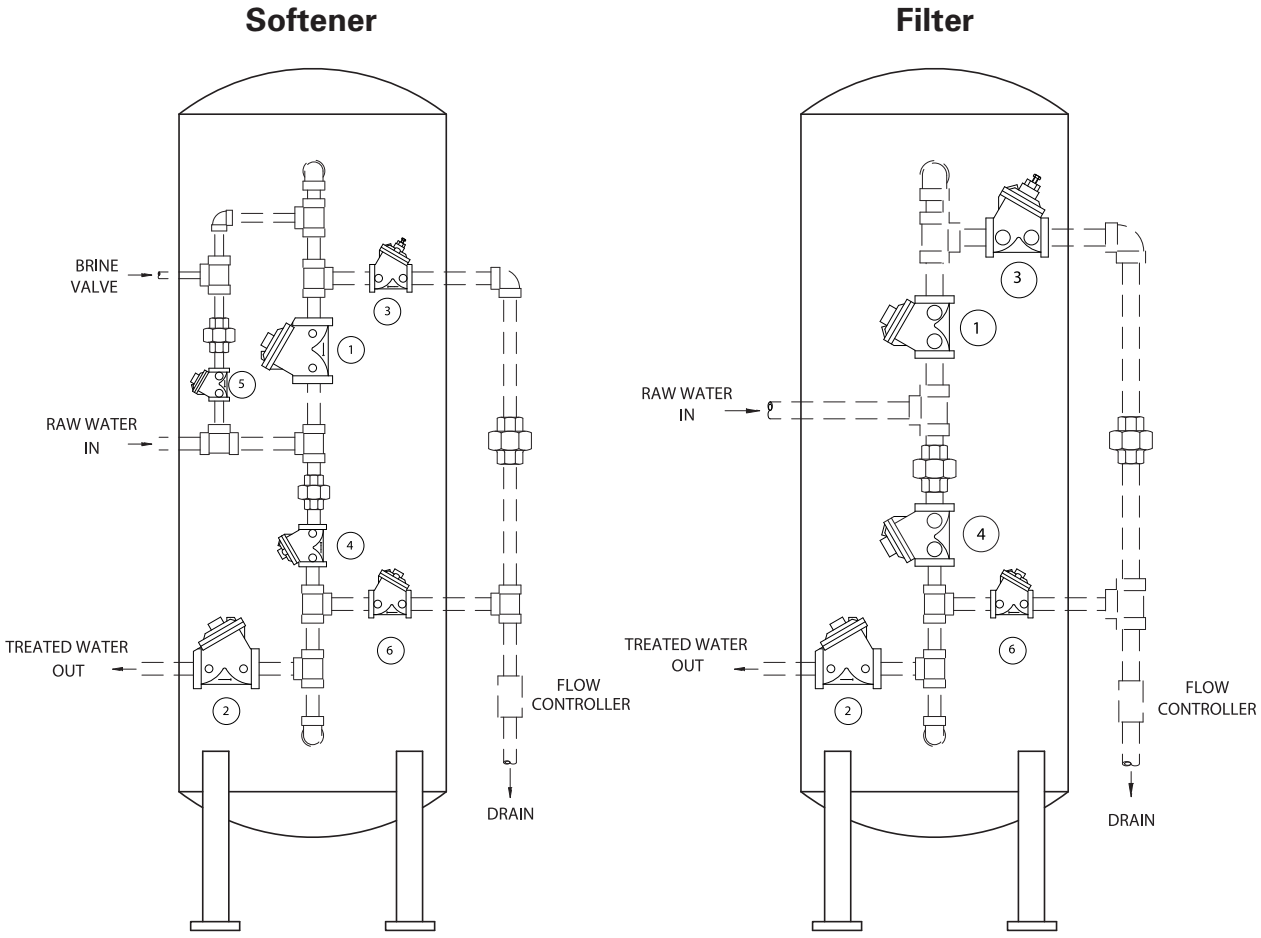
Electro-Mechanical Controllers

Description	Part No.
Single Tank, 4 Position Softener	P/N.1078830
Single Tank, 3 Position Filter	P/N.1078831
2 Tank Sequential Filter	P/N.1078832
3 Tank Sequential Filter	P/N.1078833
4 Tank Sequential Filter	P/N.1078834
2 Tank Alternating Softener	P/N.1078835
2 Tank Alternating Softener w/Rinse Down	P/N.1078836

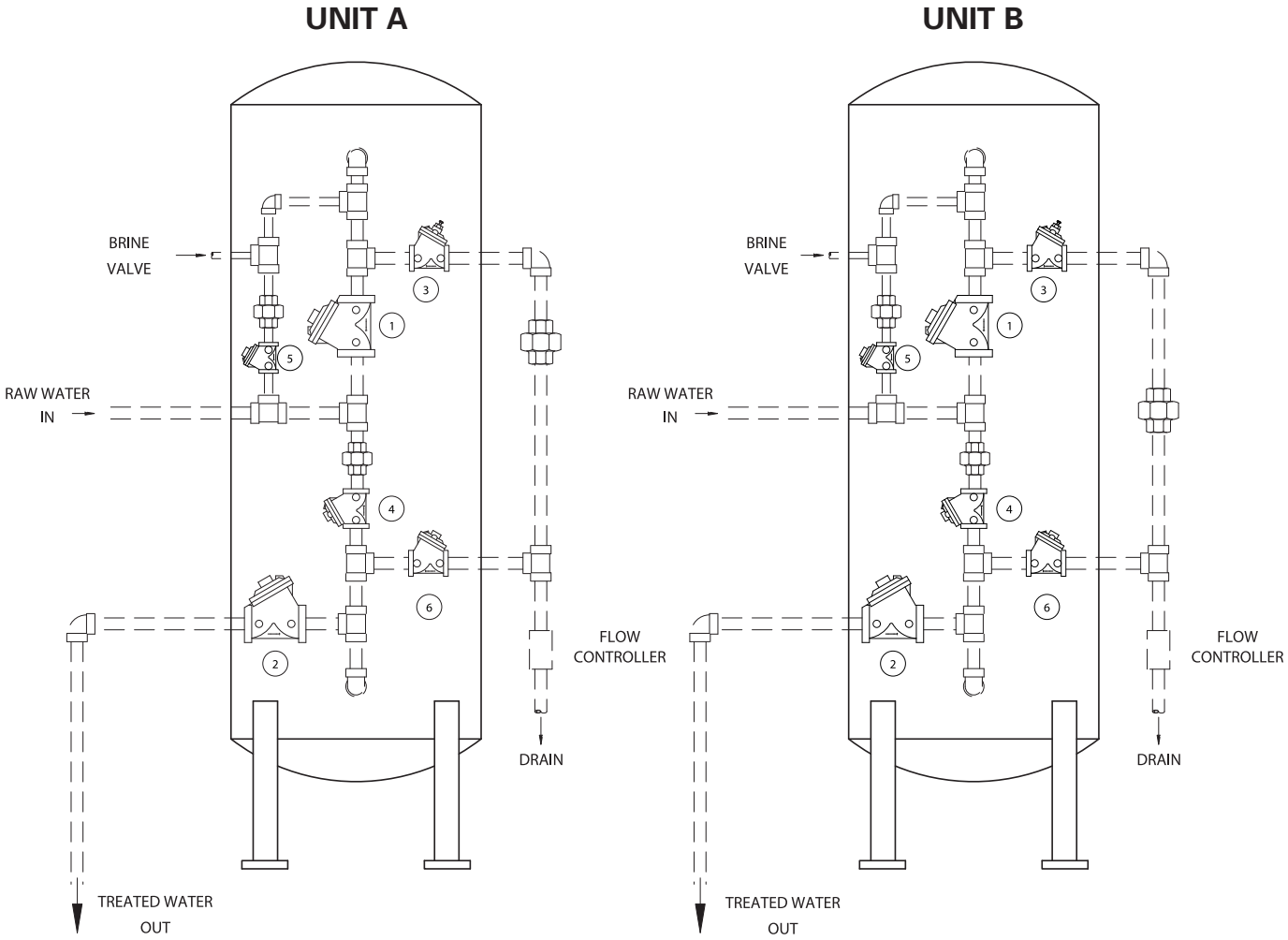
Electronic Controllers

Description	Part No.
Single Tank, 4 Position Softener	P/N.1078837
Single Tank, 3 Position Filter	P/N.1078838
2 Tank Sequential Filter	P/N.1078839
3 Tank Sequential Filter	P/N.1078840
4 Tank Sequential Filter	P/N.1078841
2 Tank Alternating Softener	P/N.1078842
2 Tank Alternating Softener w/Rinse Down	P/N.1078843

Standard System Layouts



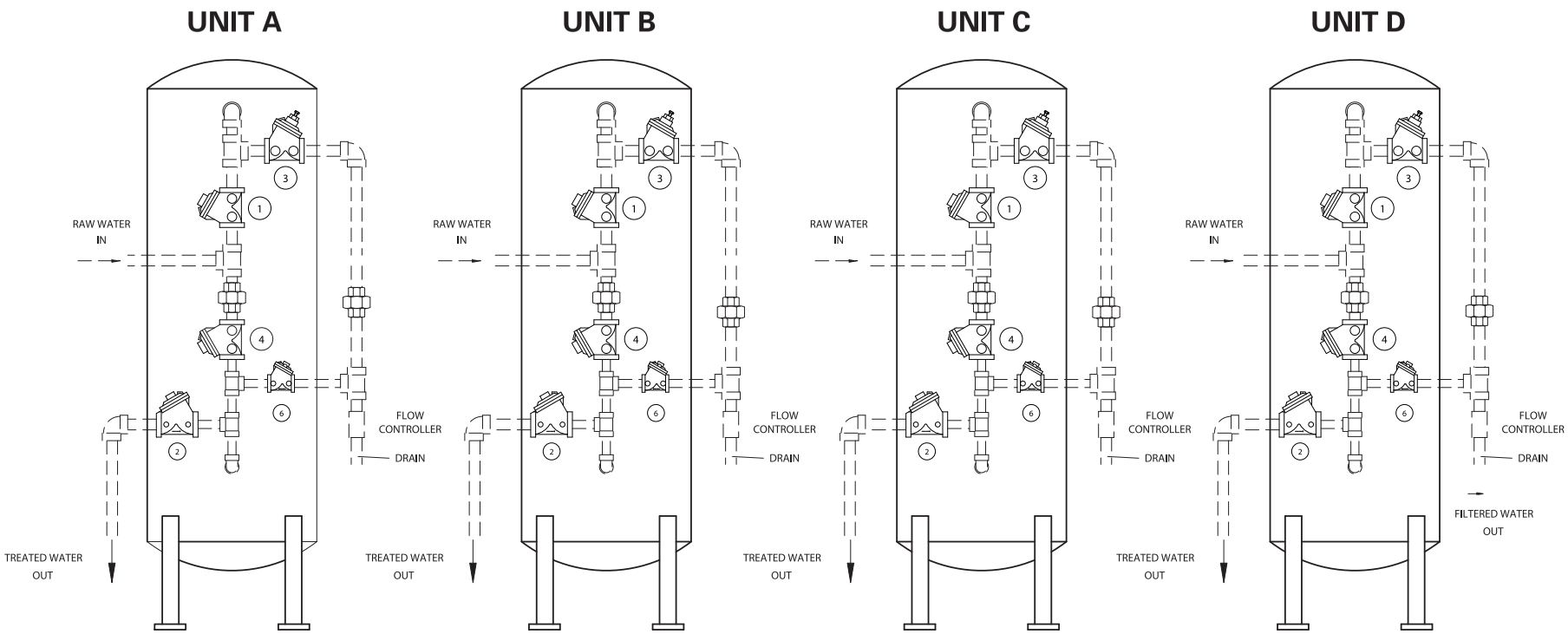
All systems are designed for guideline purposes only. Final authorship of engineering design and application is the responsibility of the assembling OEM. GE can not be responsible for the performance and integrity of the installed system.



Two Tank Alternating Softeners

All systems are designed for guideline purposes only. Final authorship of engineering design and application is the responsibility of the assembling OEM. GE can not be responsible for the performance and integrity of the installed system.

Standard System Layouts *(Continued)*



Four Tank Sequential Filter

All systems are designed for guideline purposes only. Final authorship of engineering design and application is the responsibility of the assembling OEM. GE can not be responsible for the performance and integrity of the installed system.

INDUSTRIAL VALVE CONTROLS

AQUAMATIC CONTROLLERS & STAGERS
FOR SOFTENERS & FILTERS



E Series Controller



NXT Series Controller

Each model includes an AquaMatic Controller and Stager. **Controllers:** Choose from E Series Electronic Demand/Metered Controller (AquaMatic 962) and NXT Series Electronic Controller. **Stagers:** Choose from Series 48 brass stager with 6 ports, Series 51 brass stager with 8 ports, and Series 58 PVC stager with 16 ports. The 48 stager can control typical softener or filter systems as well as sequential backwash filters. For more complex systems such as non-standard softeners, twin alternating softeners or filters, the 51 or 58 stagers are required.

Max. Pressure: 125 psi (8.6 bar) Max. Temperature: 140°F (60°C)

Softeners — AquaMatic Controller with Stager *(Flow Meter Not Included — See Next Page)*

Demand/Metered Control w/ Stager Model No.	Electronic Control w/ Stager Model No.	Description	Stager Port Size NPT		
			Inlet	Drain	Control
E948-00	NX48-00	Softener, 4 Cycle, **Single Tank**	1/8"	1/8"	1/8"
E948-12	—	Softener, 4 Cycle, **Single Tank** with Upflow Brine	1/8"	1/8"	1/8"
E948-03	—	Softener 4 Cycle, **Single Tank** with Butterfly Cam	1/8"	1/8"	1/8"
E951-07	—	Softener, 5 Cycle, **Single Tank** with Timed Brine	1/8"	1/8"	1/8"
E951-09	—	Softener, 5 Cycle, **Single Tank** with Timed Refill	1/8"	1/8"	1/8"
E951-06	NX51-06	Softener, 6 Cycle, **Single Tank** with Timed Brine and Refill	1/8"	1/8"	1/8"
E951-12	—	Softener, 6 Cycle, **Single Tank** with Brine Recycle	1/8"	1/8"	1/8"
E948-TA	—	Softener, **Twin Alternating** with Butterfly Cam	1/8"	1/8"	1/8"
E958-TA	—	Softener, **Twin Alternating** with Service Lights	1/4"	1/4"	1/8"
E958-TB	—	Softener, **Twin Alternating** with Timed Brine	1/4"	1/4"	1/8"

Please specify voltage requirement: 115VAC/50-60Hz or 230VAC/50-60Hz. Other voltages may be available, call for details.
E Series Models: Optional Relay Output available (P/N QA-1077737); PWA Circuit Board and Key Pad Assembly available (P/N QA-1078458)

Filters — AquaMatic Controller with Stager *(Flow Meter Not Included — See Next Page)*

Demand/Metered Control w/ Stager Model No.	Electronic Control w/ Stager Model No.	Description	Stager Port Size NPT		
			Inlet	Drain	Control
E948-04	—	Filter, 2 Cycle, **Single Tank**	1/8"	1/8"	1/8"
E948-01	—	Filter, 3 Cycle, **Single Tank**	1/8"	1/8"	1/8"
E948-12	—	Filter, 4 Cycle, **Single Tank** with Air Scour	1/8"	1/8"	1/8"
E951-11	—	Filter, 5 Cycle, **Single Tank** with Air Scour	1/8"	1/8"	1/8"
E958-01	—	Filter, 5 Cycle, **Single Tank** with Double Acting Valves	1/4"	1/4"	1/8"
E951-10	NX51-10	Filter, 3 Cycle, **2 Tank Parallel** with Sequential Backwash	1/8"	1/8"	1/8"
E948-83	—	Filter, 2 Cycle, **3 Tank Parallel** with Sequential Backwash	1/8"	1/8"	1/8"
E958-03	—	Filter, 3 Cycle, **3 Tank Parallel** with Sequential Backwash	1/4"	1/4"	1/8"
E948-84	—	Filter, 2 Cycle, **4 Tank Parallel** with Sequential Backwash	1/8"	1/8"	1/8"
E958-04	—	Filter, 3 Cycle, **4 Tank Parallel** with Sequential Backwash	1/4"	1/4"	1/8"
E948-85	—	Filter, 2 Cycle, **5 Tank Parallel** with Sequential Backwash	1/8"	1/8"	1/8"
E951-86	—	Filter, 2 Cycle, **6 Tank Parallel** with Sequential Backwash	1/8"	1/8"	1/8"
E951-87	—	Filter, 2 Cycle, **7 Tank Parallel** with Sequential Backwash	1/8"	1/8"	1/8"

Please specify voltage requirement: 115VAC/50-60Hz or 230VAC/50-60Hz. Other voltages may be available, call for details.
E Series Models: Optional Relay Output available (P/N QA-1077737); PWA Circuit Board and Key Pad Assembly available (P/N QA-1078458)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1204
EFFECTIVE
JULY 2019

INDUSTRIAL VALVE CONTROLS

DIAPHRAGM VALVES & FLOW METERS
FOR SOFTENERS & FILTERS

Aquamatic Diaphragm Series Valves



K52 SERIES VALVE (COMPOSITE)



K53 SERIES VALVE (COMPOSITE)



V42 SERIES VALVE (CAST IRON)



V46 SERIES VALVE (STAINLESS STEEL)

Model	Pipe Size		Flow Coefficient	
	Inches	Millimeters	Cv	Kv
K520	0.5	15	4.0	3.5
K521	1.0	25	15.0	13.0
K524	1.5 to 2.0	40 to 50	38.0 to 41.0	32.8 to 35.5
K526	2.5 to 3.0	65 to 80	100.0	86.5
K531	0.75 to 1.0	20 to 25	18.0	15.6
K534	1.5	40	46.0	39.8
K535	2.0	50	84.0	72.6
K537	3.0	80	200.0	173.0
V42B	0.75	20	11.4	9.8
V42C	1.0	25	12.8	11.1
V42D	1.25	32	26.5	22.9
V42E	1.5	40	32.5	28.1
V42F	2.0	50	56.0	48.4
V42G	2.0	50	68.0	58.8
V42H	2.5	65	84.0	72.7
V42J	3.0	80	134.0	116.0
V42K	4.0	100	275.0	238.0
V42L	6.0	150	680.0	588.0
V46C	1.0	25	14.0	12.1
V46E	1.5	40	33.0	28.5
V46F	2.0	50	54.0	47.0

Cv is the flow rate in gallons per minute of water at 60ºF at 1 psi pressure drop.
Kv is the flow rate in cubic meters per hour of water at 15.5ºC at 1 bar pressure drop.

Maximum Working Pressure: K52, K53 & V42 valves is 125 psi (8.6 bar). Threaded V46 valves is 250 psi (17 bar). Flanged V46 valves is 150 psi (10.3 bar).

Maximum Temperature: K52, K53 & V42 valves is 140°F (60°C). V46 valves is 250°F (120°C).

Autotrol Flow Meters

Part Number	Description	Flow Rate		
		Minimum	Maximum	Peak
UA-3023532	1 inch Turbine Meter with Stainless Steel NPT Adapters	0.25 gpm	35 gpm	40 gpm
UA-3023536	2 inch Turbine Meter with Stainless Steel NPT Adapters	2 gpm	170 gpm	250 gpm

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1204
EFFECTIVE
JULY 2019

AQUAMATIC K52 SERIES
COMPOSITE DIAPHRAGM VALVES



AquaMatic K52 Series Composite Diaphragm Valves with glass-filled thermoplastic body and cap are designed for water treatment applications including those requiring acids, and harsh caustic chemicals that would rapidly corrode metal valves. Their unique Y-pattern design with a large seat opening and high lift disc permits higher flow rates at lower pressure loss than competitive valves. This product is manufactured in the USA with foreign and domestic parts.

Features and Benefits

- All components can be serviced while the valve is inline
- Separate flow and control chambers permit positive closing without springs
- Reinforced diaphragms are pre-formed and stress relieved to maximize responsiveness and product life
- Diaphragm acts as an actuator, eliminating the need for electric or pneumatic actuators
- All internal parts in contact with media are made of composite materials *
- Seals are ethylene propylene for better chemical resistance **
- Available in sizes from 1/2 to 2-1/2 inch
- A variety of end connectors are available to make the valve compatible in pipe sizes from 3/8 to 3 inch
- Adaptable to a wide variety of control devices

* Normally closed valve configurations are NOT recommended when used with corrosive fluids.

** Valves are NOT recommended for use with any aromatic, hydrocarbon-based media.

Typical Applications

- Chemical Injection
- Deionizers
- Desalinization
- Detergent and Bleach Handling
- Electronic Industry
- Evaporation
- Fertilizer Spray Equipment
- Level Control Systems
- Metal Recovery Systems
- Mining Wastes
- Process Water Systems
- Water Treatment Systems

Certified by
IAPMO R&T to NSF/ANSI 61 and NSF/ANSI 372 for lead free compliance.

Operating Specifications

Max Pressure . . . . . 125 psi (8.6 bar)

Max Temperature . . . . . 140°F (60°C)

NOTE: IAPMO R&T NSF/ANSI 61 and NSF/ANSI 372 certifications are limited to restrictions below. Other options were not tested for certification.

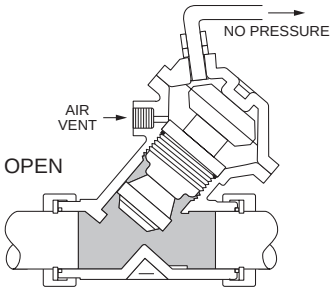
Cold water applications below 73°F (23°C).

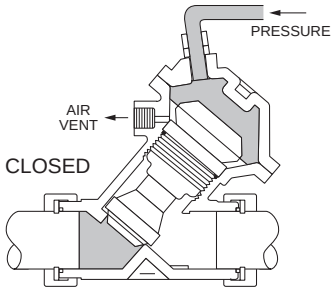
Normally Open valves.

EPDM seal material (seal option #1).

Options

- Normally open (standard)
- Normally closed
- Spring-assist closed
- Spring-assist open
- Limit stop for flow control
- Position indicator
- Seal and diaphragm materials for special applications



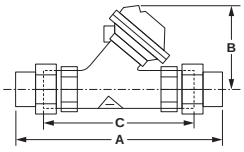


SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

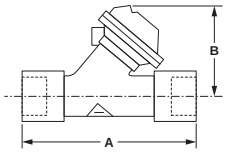
FORM 1480
EFFECTIVE
AUGUST 2019

AQUAMATIC K52 SERIES

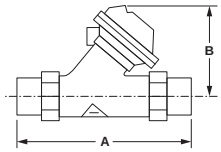
COMPOSITE DIAPHRAGM VALVES



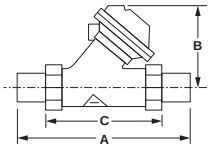
Union End Connectors



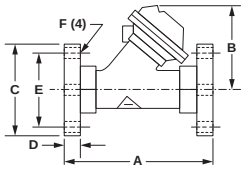
Female Socket Weld End Connectors



Male Socket Weld End Connectors



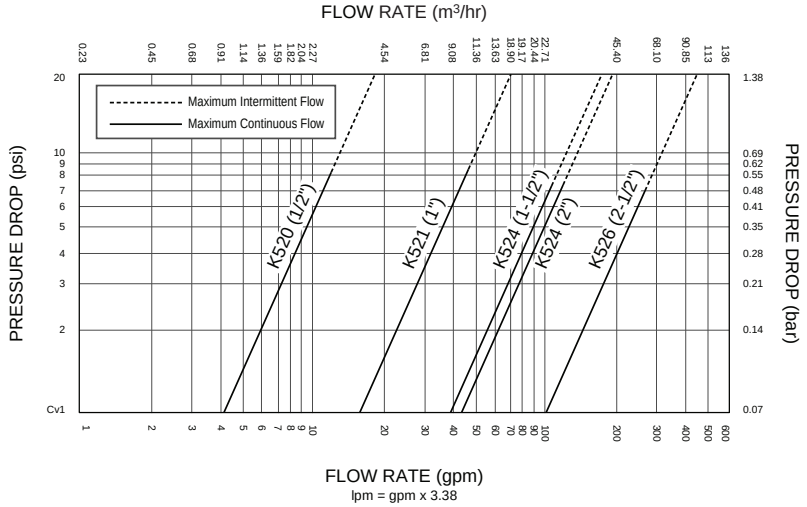
Grooved Adapter End Connectors



Flanged End Connectors

Dimensions and Weights

Model Number	Pipe Size	Cv	End Connector Style	Approximate Dimensions						Approx. Weight
				A	B	C	D	E	F	
K520	1/2" (15 mm)	4.0 (3.5 Kv)	Union	7.00" (178 mm)	2.62" (66.5 mm)	4.87" (124 mm)	—	—	—	1 lb (0.5 kg)
K521	1" (25 mm)	15.0 (13.0 Kv)	Union	9.00" (229 mm)	4.06" (103 mm)	6.31" (160 mm)	—	—	—	1 lb (0.5 kg)
K524	1-1/2" (40 mm)	38.0 (32.8 Kv)	Union	12.50" (318 mm)	5.06" (129 mm)	9.31" (236 mm)	—	—	—	2 lb (0.9 kg)
K524	2" (50 mm)	41.0 (35.5 Kv)	Socket Weld	10.50" (267 mm)	5.06" (129 mm)	—	—	—	—	2 lb (0.9 kg)
K526	2-1/2" (65 mm)	100.0 (86.5 Kv)	Socket Weld	15.00" (381 mm)	7.31" (186 mm)	—	—	—	—	6 lb (2.7 kg)
K520	1/2" (15 mm)	4.0 (3.5 Kv)	Grooved Adapter	7.00" (178 mm)	2.62" (66.5 mm)	3.93" (100 mm)	—	—	—	1 lb (0.5 kg)
K521	1" (25 mm)	15.0 (13.0 Kv)	Grooved Adapter	9.00" (229 mm)	4.06" (103 mm)	4.50" (114 mm)	—	—	—	1 lb (0.5 kg)
K524	1-1/2" (40 mm)	38.0 (32.8 Kv)	Grooved Adapter	13.25" (337 mm)	5.06" (129 mm)	7.75" (197 mm)	—	—	—	2 lb (0.9 kg)
K524	2" (50 mm)	41.0 (35.5 Kv)	Flanged	9.00" (229 mm)	5.06" (129 mm)	6.00" (152 mm)	0.75" (19.1 mm)	4.75" (121 mm)	0.69" (17.5 mm)	2 lb (0.9 kg)
K526	2-1/2" (65 mm)	100.0 (86.5 Kv)	Flanged	11.37" (289 mm)	7.31" (186 mm)	6.94" (176 mm)	0.94" (23.9 mm)	5.50" (140 mm)	0.69" (17.5 mm)	6 lb (2.7 kg)
K526	3" (80 mm)	100.0 (86.5 Kv)	Flanged	12.37" (314 mm)	7.31" (186 mm)	7.38" (187 mm)	1.81" (46.0 mm)	6.00" (152 mm)	0.75" (19.1 mm)	6 lb (2.7 kg)



SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1480
EFFECTIVE
AUGUST 2019

AQUAMATIC K53 SERIES
COMPOSITE DIAPHRAGM VALVES



AquaMatic K53 Series Composite Diaphragm Valves with glass-filled thermoplastic body and cap are intended for corrosive applications including deionized water, acids, and harsh caustic chemicals that would rapidly corrode metal valves. Their unique Y-pattern design with a large seat opening and high lift disc permits higher flow rates at lower pressure loss than other comparable valves. This product is manufactured in the USA with foreign and domestic parts.

Typical Applications

- Chemical Injection
- Deionizers
- Desalinization
- Detergent and Bleach Handling
- Electronic Industry
- Evaporation
- Fertilizer Spray Equipment
- Level Control Systems
- Metal Recovery Systems
- Mining Wastes
- Process Water Systems
- Water Treatment Systems

Certified by
IAPMO R&T to NSF/ANSI 61 and NSF/ANSI 372 for lead free compliance.

Features and Benefits

- All components can be serviced while the valve is inline
- Separate flow and control chambers permit positive closing without springs; and only nominal cost for spring assist opening for low-pressure and self-draining applications
- Reinforced diaphragms are pre-formed and stress relieved to maximize responsiveness and product life
- Diaphragm acts as an actuator, eliminating the need for electric or pneumatic actuators
- All internal parts in contact with media are made of composite materials *
- Seals are ethylene propylene for better chemical resistance **
- Two dynamic o-rings on the shaft, with a vent in between the o-rings, to prevent damage to the diaphragm
- Female socket weld connectors for easy installation and the ability to remove the valve without disrupting the service piping
- Valve bodies provided with molded pads that can be used to support the piping manifold
- Cap held by a retaining ring, eliminating screws and nuts
- No external metal parts to corrode in aggressive atmosphere
- Available in sizes from 1 to 3 inch
- A variety of end connectors are available to make the valve compatible in pipe sizes from 3/4 to 3 inch
- Adaptable to a wide variety of control devices
- Can be actuated with either air or water as control fluid

* Normally closed valve configurations are NOT recommended when used with corrosive fluids.

** Valves are NOT recommended for use with any aromatic, hydrocarbon-based media.

Operating Specifications

Max Pressure . . . . . 125 psi (8.6 bar)

Max Temperature . . . . . 140°F (60°C)

NOTE: IAPMO R&T NSF/ANSI 61 and NSF/ANSI 372 certifications are limited to restrictions below. Other options were not tested for certification.

Cold water applications below 73°F (23°C).

Normally Open valves.

EPDM seal material (seal option #1).

Options

- Normally open (standard)
- Externally normally closed
- Spring-assist closed
- Spring-assist open
- Fully adjustable limit stop from full-open to full-closed, with a position indicator to show the valve position
- Seal and diaphragm materials for special applications

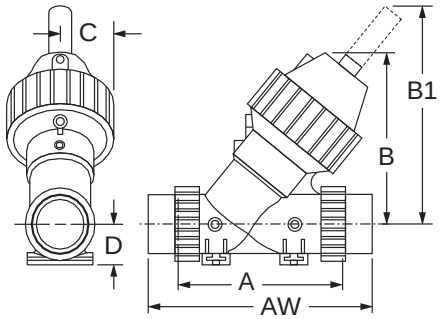
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1481
EFFECTIVE
AUGUST 2019

AQUAMATIC K53 SERIES

COMPOSITE DIAPHRAGM VALVES

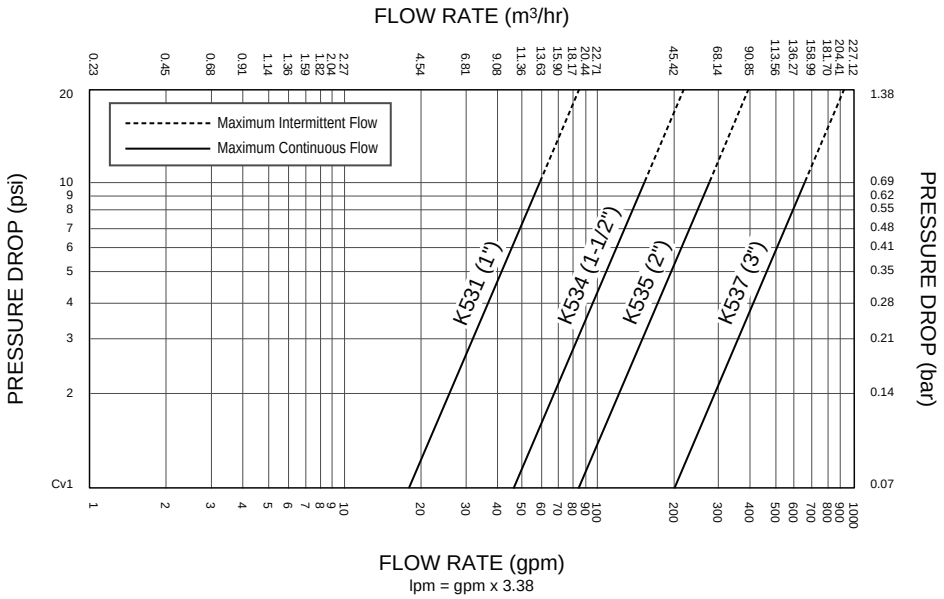


Dimensions and Weights

Model Number	Pipe Size	Cv*	Approximate Dimensions						Approximate Weight	
			A**	AW	B	B1	C	D	Standard Valve	Fail Safe Valve
K531	3/4", 1" (20, 25 mm)	18.0 (15.6 Kv)	5.75" (146 mm)	8.12" (206 mm)	6.00" (152 mm)	8.62" (219 mm)	2.04" (52 mm)	1.38" (35 mm)	1.7 lb (0.8 kg)	3.0 lb (1.4 kg)
K534	1-1/2" (40 mm)	46.0 (39.8 Kv)	8.38" (213 mm)	11.00" (279 mm)	8.07" (205 mm)	13.46" (342 mm)	2.62" (67 mm)	1.96" (50 mm)	4.0 lb (1.8 kg)	7.5 lb (3.4 kg)
K535	2" (50 mm)	84.0 (72.6 Kv)	9.88" (251 mm)	12.88" (327 mm)	9.12" (232 mm)	14.28" (363 mm)	3.18" (81 mm)	2.18" (55 mm)	8.0 lb (3.6 kg)	15.0 lb (6.8 kg)
K537	3" (80 mm)	200.0 (173.0 Kv)	11.13" (283 mm)	15.25" (387 mm)	11.41" (290 mm)	17.06" (433 mm)	3.79" (96 mm)	2.68" (68 mm)	11.5 lb (5.2 kg)	27.0 lb (12.2 kg)

* Cv is the flowrate in gallons per minute of water at 60°F at 1 psi pressure drop. (Kv is the flowrate in cubic meters per hour of water at 15.5°C at 1 bar pressure drop.)

** The "A" dimension is the distance between face to face seal surfaces.



SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1481
EFFECTIVE
AUGUST 2019

AQUAMATIC K55 SERIES
COMPOSITE DIAPHRAGM VALVES



AquaMatic K55 Series Composite Diaphragm Valves with glass-filled thermoplastic body and cap are designed for water treatment applications including those requiring acids, and harsh caustic chemicals that would rapidly corrode metal valves. Their unique Y-pattern design with a large seat opening and high lift disc permits higher flow rates at lower pressure loss than competitive valves. This product is manufactured in the USA with foreign and domestic parts.

Typical Applications

- Chemical Injection
- Deionizers
- Fertilizer Spray Equipment
- Metal Recovery Systems
- Mining Wastes
- Process Water Systems
- Water Treatment Systems

Features and Benefits

- All components can be serviced while the valve is inline
- Separate flow and control chambers permit positive closing without springs
- Isolated bonnet assures no cross connection between line and control fluid
- Reinforced diaphragms are pre-formed and stress relieved to maximize responsiveness and product life
- Diaphragm acts as an actuator, eliminating the need for electric or pneumatic actuators
- All internal parts in contact with media are made of composite materials
- Seals are ethylene propylene for better chemical resistance *
- Available in sizes from 1/2 to 2 inch
- A variety of end connectors are available to make the valve compatible in pipe sizes from 3/8 to 3 inch
- Adaptable to a wide variety of control devices

* Valves are NOT recommended for use with any aromatic, hydrocarbon-based media.

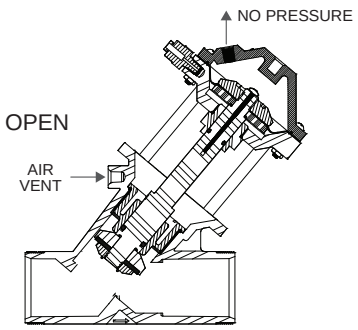
Operating Specifications

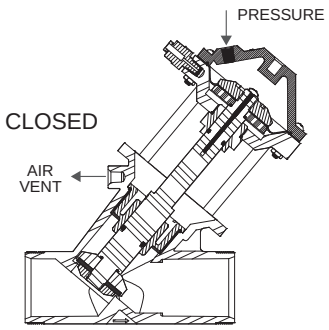
Max Pressure . . . . . 125 psi (8.6 bar)

Max Temperature . . . . . 140°F (60°C)

Options

- Normally open (standard)
- Failsafe spring closed 30, 60, and 100 psi
- Limit stop for flow control
- Seal and diaphragm materials for special applications



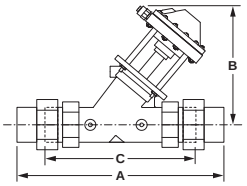


SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

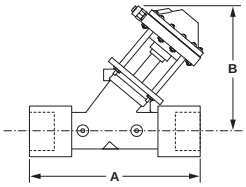
MEMBER Water Quality ASSOCIATION

FORM 1482
EFFECTIVE
AUGUST 2019

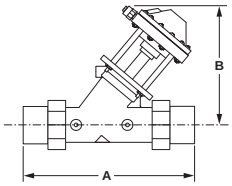
AQUAMATIC K55 SERIES
COMPOSITE DIAPHRAGM VALVES



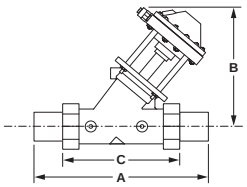
Union End Connectors



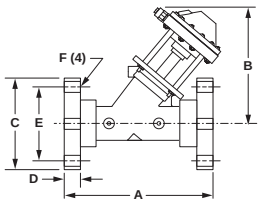
Female Socket Weld End Connectors



Male Socket Weld End Connectors



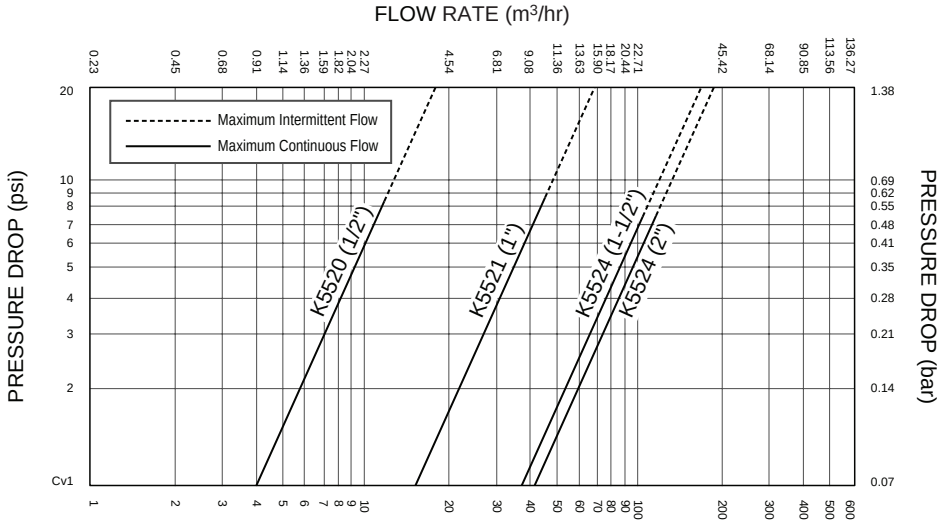
Grooved Adapter End Connectors



Flanged End Connectors

Dimensions and Weights

Model Number	Pipe Size	Cv	End Connector Style	Approximate Dimensions					
				A	B	C	D	E	F
K5520	1/2" (15 mm)	4.0 (3.5 Kv)	Union	7.00" (178 mm)	3.94" (100 mm)	4.87" (124 mm)	—	—	—
K5521	1" (25 mm)	15.0 (13.0 Kv)	Union	9.00" (229 mm)	5.58" (142 mm)	6.31" (160 mm)	—	—	—
K5524	1-1/2" (40 mm)	38.0 (32.8 Kv)	Union	12.50" (318 mm)	7.94" (202 mm)	9.31" (236 mm)	—	—	—
K5524	2" (50 mm)	41.0 (35.5 Kv)	Socket Weld	10.50" (267 mm)	7.94" (202 mm)	—	—	—	—
K5520	1/2" (15 mm)	4.0 (3.5 Kv)	Grooved Adapter	7.00" (178 mm)	3.94" (100 mm)	3.93" (100 mm)	—	—	—
K5521	1" (25 mm)	15.0 (13.0 Kv)	Grooved Adapter	9.00" (229 mm)	5.58" (142 mm)	4.50" (114 mm)	—	—	—
K5524	1-1/2" (40 mm)	38.0 (32.8 Kv)	Grooved Adapter	12.50" (318 mm)	7.94" (202 mm)	7.75" (197 mm)	—	—	—
K5524	2" (50 mm)	41.0 (35.5 Kv)	Flanged	9.00" (229 mm)	7.94" (202 mm)	6.00" (152 mm)	0.75" (19.1 mm)	4.75" (121 mm)	0.69" (17.5 mm)



SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1482
EFFECTIVE
AUGUST 2019

AQUAMATIC V42 SERIES
CAST IRON DIAPHRAGM VALVES





AquaMatic V42 Series Diaphragm Valves *are constructed of cast iron or brass and designed for water applications. Their unique Y-pattern design with a large seat opening and high lift disc permits higher flow rates at lower pressure loss than competitive valves. This product is manufactured in the USA with foreign and domestic parts.*

Features and Benefits

- Larger diaphragm area than seat area permits drip-tight closing without any springs
- All components can be serviced while the valve is inline
- Separate flow and control chambers permit positive closing without springs
- Reinforced diaphragms are pre-formed and stress relieved to maximize responsiveness and product life
- Adaptable to a wide variety of control devices
- Diaphragm acts as an actuator, eliminating the need for electric or pneumatic actuators
- Cast iron, brass, stainless steel, and nitrile elastomer components for unparalleled service
- Available in 3/4 to 3 inch threaded (NPT or BSP) and 3 to 6 inch flange drilled in accordance with ASA16 .1 class 125, or BSP4504

Typical Applications

- Agricultural Irrigation
- Car Wash Systems
- Centrifugal Separators
- Cooling Towers
- Laundry Equipment
- Level Control Systems
- Hydraulic Machinery
- Nitrogen Handling
- Plastic Molding
- Process Water Systems
- Pump Controls
- Street Cleaning Vehicles

Certified by
IAPMO R&T to NSF/ANSI 61 and NSF/ANSI 372 for lead free compliance .

Operating Specifications

Max Pressure . . . . . 125.psi (8 6 bar)

Max Temperature . . . 140°F (60°C)

NOTE: IAPMO R&T NSF/ANSI 61 and NSF/ANSI 372 certifications are limited to restrictions below .Other options were not tested for certification .

Cold water applications below 73°F (23°C) .

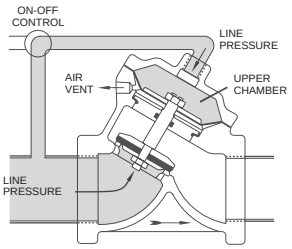
Normally Open valves .

Buna-N seal material (seal option #1) .

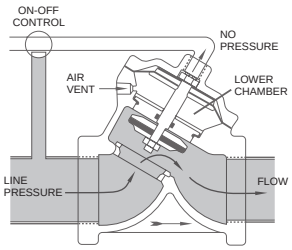
Options

- Spring-assist closed
- Spring-assist open
- Limit stop for flow control
- Position indicator
- Seal and diaphragm materials for special applications
- High temperature service

Principles of Operation



DRIP-TIGHT CLOSING: Closure is obtained by directing line pressure or equivalent independent pressure into the upper chamber .This pressure on the large diaphragm area causes the valve disc to seal against the seat .



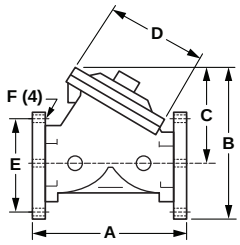
FULL OPEN OPERATION: When the closing pressure in the upper chamber is relieved by venting the pilot line, the valve opens positively, by line pressure on the disc .

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

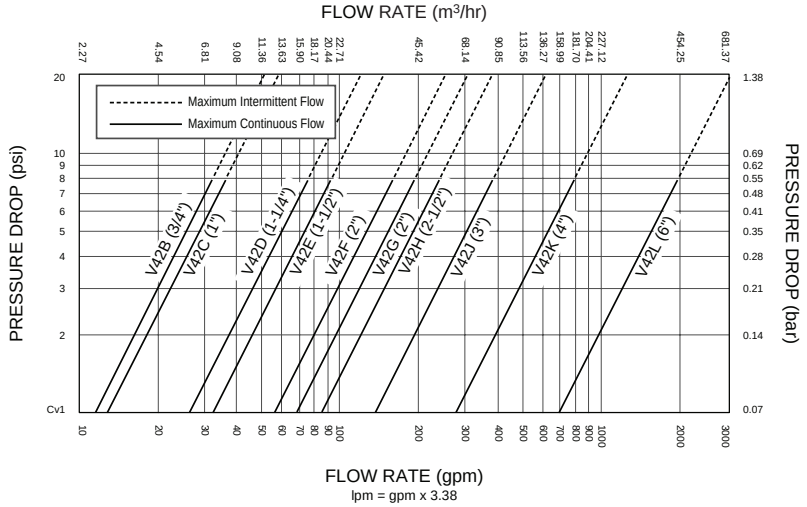
FORM 1483
EFFECTIVE
AUGUST 2019

AQUAMATIC V42 SERIES
CAST IRON DIAPHRAGM VALVES



Dimensions and Weights

Model Number	Pipe Size	Cv	End Connector Style	Approximate Dimensions					
				A	B	C	D	E	F
V42B	3/4" (20 mm)	11 4 (9 8 Kv)	Threaded	3 69" (94 mm)	4 25" (108 mm)	3 75" (95 mm)	2 75" (70 mm)	—	—
V42C	1" (25 mm)	12 8 (11 1 Kv)	Threaded	3 69" (94 mm)	4 25" (108 mm)	3 75" (95 mm)	2 75" (70 mm)	—	—
V42D	1-1/4" (32 mm)	26 5 (22 9 Kv)	Threaded	4 75" (121 mm)	5 37" (137 mm)	4 00" (102 mm)	3 50" (89 mm)	—	—
V42E	1-1/2" (40 mm)	32 5 (28 1 Kv)	Threaded	4 75" (121 mm)	5 37" (137 mm)	4 00" (102 mm)	3 50" (89 mm)	—	—
V42F	2" (50 mm)	56 0 (48 4 Kv)	Threaded	6 62" (168 mm)	7 25" (184 mm)	5 37" (137 mm)	4 87" (124 mm)	—	—
V42G	2" (50 mm)	68 0 (58 8 Kv)	Threaded	7 37" (187 mm)	8 00" (203 mm)	5 75" (146 mm)	5 50" (140 mm)	—	—
V42H	2-1/2" (65 mm)	84 0 (72 7 Kv)	Threaded	7 37" (187 mm)	8 00" (203 mm)	5 75" (146 mm)	5 50" (140 mm)	—	—
V42J	3" (80 mm)	134 0 (116 0 Kv)	Threaded	9 00" (229 mm)	9 75" (248 mm)	6 75" (171 mm)	7 25" (184 mm)	—	—
V42J	3" (80 mm)	134 0 (116 0 Kv)	Flanged	10 62" (270 mm)	10 75" (273 mm)	7 00" (178 mm)	7 25" (184 mm)	6 00" (152 mm)	0 75" (19 mm)
V42K	4" (100 mm)	275 0 (238 0 Kv)	Flanged	11 75" (298 mm)	14 75" (375 mm)	10 00" (254 mm)	8 75" (222 mm)	7 50" (191 mm)	0 75" (19 mm)
V42L	6" (150 mm)	680 0 (588 0 Kv)	Flanged	17 00" (432 mm)	19 00" (483 mm)	13 50" (343 mm)	15 75" (402 mm)	9 50" (241 mm)	0 87" (22 mm)



SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1483
EFFECTIVE
AUGUST 2019

AQUAMATIC V46 SERIES

STAINLESS STEEL DIAPHRAGM VALVES



AquaMatic V46 Series Diaphragm Valves *are constructed of stainless steel and designed for water applications. Their unique Y-pattern design with a large seat opening and high lift disc permits higher flow rates at lower pressure loss than competitive valves. This product is manufactured in the USA with foreign and domestic parts.*

Features and Benefits

- Larger diaphragm area than seat area permits drip-tight closing without any springs
- All components can be serviced while the valve is inline
- Separate flow and control chambers permit positive closing without springs
- Reinforced diaphragms are pre-formed and stress relieved to maximize responsiveness and product life
- Adaptable to a wide variety of control devices
- Diaphragm acts as actuator, eliminating need for electric or pneumatic actuators
- Durable stainless steel (CF8M) corrosion-resistant alloy, all metal internal parts machined from 316 stainless steel alloy
- Available in 1 to 2 inch sizes with either threaded (NPT) or flanged (ASTM) ends

Options

- Spring-assist closed
- Spring-assist open
- Limit stop for flow control
- Position indicator
- Normally closed
- Seal and diaphragm materials for special applications

Typical Applications

- Bottling Plants
- Chemical Injection
- Condensate Polishers
- Corrosive Liquid Handling
- Deionizers
- Laundry Equipment
- Ozone Generators
- Paper and Pulp Process
- Water Systems
- Reverse Osmosis Equipment
- Steam Sterilization

Certified by
IAPMO R&T to NSF/ANSI 61 and NSF/ANSI 372 for lead free compliance .

Operating Specifications

THREADED VALVE

Max Pressure . . . . . 250.psi (17 bar)
Std Temperature . . . 150°F (65°C)
Max Temperature . . . 250°F (120°C)

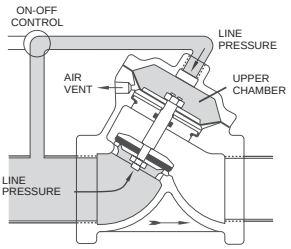
FLANGED VALVE

Max Pressure . . . . . 150.psi (10 3 bar)
Std Temperature . . . 150°F (65°C)
Max Temperature . . . 250°F (120°C)

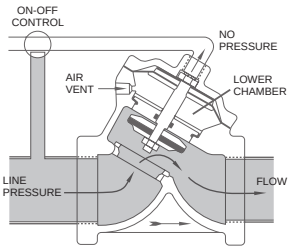
NOTE: IAPMO R&T NSF/ANSI 61 and NSF/ANSI 372 certifications are limited to restrictions below .Other options were not tested for certification .

Cold water applications below 73°F (23°C) .
Normally Open valves .
Buna-N seal material (seal option #1) .

Principles of Operation



DRIP-TIGHT CLOSING: Closure is obtained by directing line pressure or equivalent independent pressure into the upper chamber .This pressure on the large diaphragm area causes the valve disc to seal against the seat .



FULL OPEN OPERATION: When the closing pressure in the upper chamber is relieved by venting the pilot line, the valve opens positively, by line pressure on the disc .

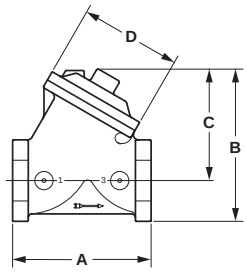
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

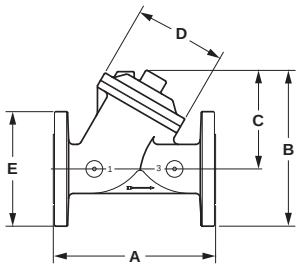
FORM 1484
EFFECTIVE
AUGUST 2019

AQUAMATIC V46 SERIES

STAINLESS STEEL DIAPHRAGM VALVES



Threaded Connectors

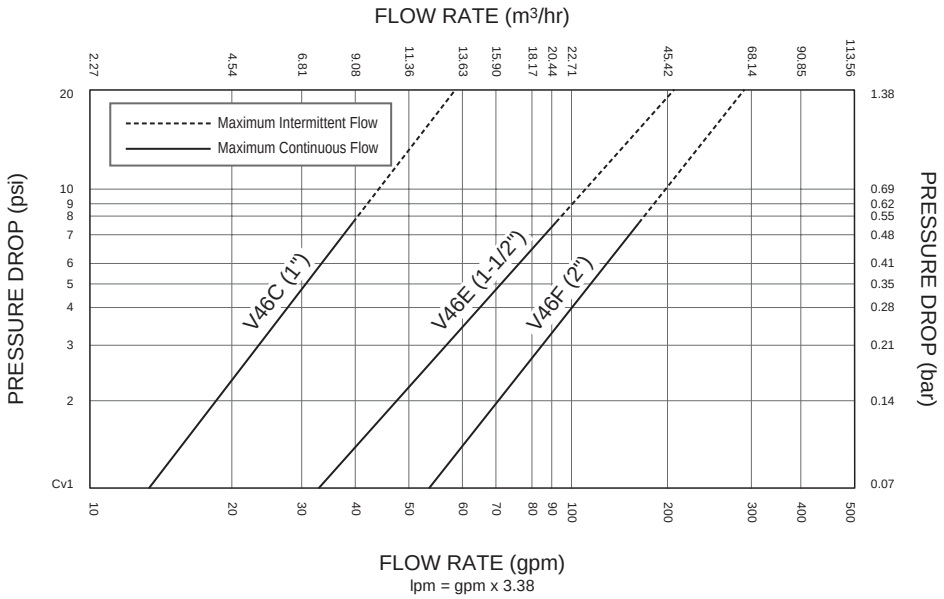


Flanged Connectors

Dimensions and Weights

Model Number	Pipe Size	Cv*	End Connector Style	Approximate Dimensions					Approximate Weight
				A	B	C	D	E	
V46C	1" (25 mm)	14 0 (12 1 Kv)	Threaded	3 75" (95 mm)	4 45" (113 mm)	3 21" (82 mm)	2 75" (70 mm)	—	4 lb (1 8 kg)
V46E	1-1/2" (40 mm)	33 0 (28 5 Kv)	Threaded	4 75" (121 mm)	5 00" (127 mm)	3 50" (89 mm)	3 50" (89 mm)	—	7 lb (3 1 kg)
V46F	2" (50 mm)	54 0 (47 0 Kv)	Threaded	6 62" (168 mm)	7 28" (185 mm)	5 34" (136 mm)	4 84" (123 mm)	—	15 lb (6 8 kg)
V46C	1" (25 mm)	14 0 (12 1 Kv)	Flanged	5 50" (140 mm)	5 49" (139 mm)	3 36" (85 mm)	2 75" (70 mm)	4 25" (108 mm)	6 lb (2 7 kg)
V46E	1-1/2" (40 mm)	33 0 (28 5 Kv)	Flanged	6 50" (165 mm)	6 45" (164 mm)	3 95" (100 mm)	3 50" (89 mm)	5 00" (127 mm)	10 lb (4 5 kg)
V46F	2" (50 mm)	54 0 (47 0 Kv)	Flanged	8 50" (216 mm)	8 16" (207 mm)	5 16" (131 mm)	4 84" (123 mm)	6 00" (152 mm)	18 lb (8 2 kg)

* Cv is the flowrate in gallons per minute of water at 60°F at 1 psi pressure drop .(Kv is the flowrate in cubic meters per hour of water at 15 5°C at 1 bar pressure drop)



SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1484
EFFECTIVE
AUGUST 2019

Schedule 40 Fittings, Unions & Tank Adapters



ENGINEERING GUIDE

Contact Spears® for any Information not found.

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Performance Engineered & Tested



SPEARS® Schedule 40 PVC fitting designs combine years of proven experience with computer generated stress analysis to yield the optimum physical structure and performance for each fitting. Material reinforcement is uniformly placed in stress concentration areas for substantially improved pressure handling capability. Resulting products are subjected to numerous verification tests to assure the very best PVC fittings available.

Full 1/4" Through 14" Availability

Spears® comprehensive line of PVC fittings offers a variety of injection molded configurations in Schedule 40 sizes 1/4" through 14" conforming to ASTM D 2466.

Exceptional Chemical & Corrosion Resistance

Unlike metal, PVC fittings never rust, scale, or pit, and will provide many years of maintenance-free service and extended system life.

High Temperature Ratings

PVC thermoplastic can handle fluids at service temperatures up to 140°F (60°C), allowing a wide range of process applications, including corrosive fluids.

Lower Installation Costs

Substantially lower material costs than steel alloys or lined steel, combined with lighter weight and ease of installation, can reduce installation costs by as much as 60% over conventional metal systems.

Higher Flow Capacity

Smooth interior walls result in lower pressure loss and higher volume than conventional metal fittings.

Additional Fabricated Configurations through 36"

Extra large, hard-to-find, and custom configurations are fabricated from NSF® Certified pipe. Fittings are engineered and tested to provide full pressure handling capabilities according to Spears® specifications.

PVC Valves

SPEARS® PVC Valve products are available for total system compatibility and uniformity.

Advanced Design Specialty Fittings

Spears® wide range of innovative, improved products include numerous metal-to-plastic transition fittings and unions with Spears® patented special reinforced (SR) plastic threads.

1/2" Through 16" Industrial Pipe Availability

Spears® premium quality Industrial PVC pipe is offered in Schedule 40 White sizes 1/2" through 16".

Sample Engineering Specifications

All PVC Schedule 40 fittings shall be produced by Spears® Manufacturing Company from PVC Type I cell classification 12454, conforming to ASTM D 1784. All injection molded PVC Schedule 40 fittings shall be Certified for potable water service by NSF International and manufactured in strict compliance to ASTM D 2466. All fabricated fittings shall be produced in accordance with Spears® General Specifications for Fabricated Fittings.

The information contained in this publication is based on current information and Product design at the time of publication and is subject to change without notification. Our ongoing commitment to product improvement may result in some variation. No representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or results to be obtained therefrom. For verification of technical data or additional information not contained herein, please contact Spears® Technical Services Department [West Coast: (818) 364-1611 - East Coast: (678) 985-1263].

General Information

Recommendations For Installers And Users

Plastic piping systems should be **ENGINEERED, INSTALLED** and **OPERATED** in accordance with **ESTABLISHED DESIGN AND ENGINEERING STANDARDS AND PROCEDURES** for plastic piping systems. Suitability for the intended service application should be determined by the installer and/or user prior to installation of a plastic piping system. **PRIOR TO ASSEMBLY, all piping system components should be inspected for damage or irregularities. Mating components should be checked to assure that tolerances and engagements are compatible. Do not use any components that appear irregular or do not fit properly. Contact the appropriate manufacturer of the component product in question to determine usability. Consult all applicable codes and regulations for compliance prior to installation.**

Solvent Weld Connections - Use Spears® quality solvent cements and primers formulated for the intended service application, pipe size and type of joint. While the pipe and fitting materials may be compatible with the intended medium, the solvent cement may not be. Consult the manufacturers for suitability of use. Read and follow the cement and primer manufacturers' applications and cure time instructions thoroughly. Be sure to use the correct size applicator.

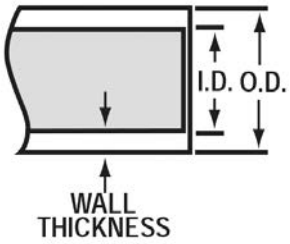
Threaded Connections - Use a quality grade thread sealant. **WARNING: SOME PIPE JOINT COMPOUNDS OR PTFE PASTES MAY CONTAIN SUBSTANCES THAT COULD CAUSE STRESS CRACKING TO PLASTIC.** Spears® Manufacturing Company recommends the use of Spears® **BLUE 75™** Thread Sealant which has been tested for compatibility with Spears® products. Please follow the sealant manufacturers' application / installation instructions. Choice of an appropriate thread sealant other than those listed above is at the discretion of the installer. 1 to 2 turns beyond **FINGER TIGHT** is generally all that is required to make a sound plastic threaded connection. Unnecessary **OVERTIGHTENING** will cause **DAMAGE TO BOTH PIPE AND FITTING.**

"Lead Free" low lead certification - unless otherwise specified, all Spears® Schedule 40 fittings specified here-in are certified by NSF International to NSF/ANSI 372 and conforms with the lead content requirements for “lead free” plumbing as defined by California, Vermont, Maryland, and Louisiana state laws and the U.S. Safe Drinking Water Act. Weighted average lead content <=0.25%.



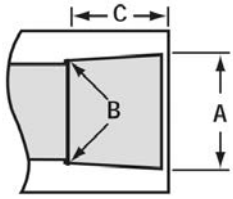
ASTM STANDARD DIMENSIONS

SCHEDULE 40 PIPE DIMENSIONS ASTM D 1785



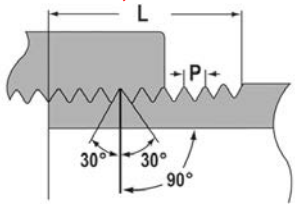
Nominal Pipe Size In.	Mean Outside Diameter In.	O. D. Tolerance In.	Minimum Wall Thickness In.
1/8	.405	± .004	.068
1/4	.540	± .004	.088
3/8	.675	± .004	.091
1/2	.840	± .004	.109
3/4	1.050	± .004	.113
1	1.315	± .005	.133
1-1/4	1.660	± .005	.140
1-1/2	1.900	± .006	.145
2	2.375	± .006	.154
2-1/2	2.875	± .007	.203
3	3.500	± .008	.216
4	4.500	± .009	.237
5	5.563	± .010	.258
6	6.625	± .011	.280
8	8.625	± .015	.322
10	10.750	± .015	.365
12	12.750	± .015	.408

SCHEDULE 40 SOCKET DIMENSIONS ASTM D 2466



Nominal Size In.	Diameter			Socket Length Minimum C
	Entrance A	Bottom B	Tolerance A	
1/8	.417	.401	± .004	.500
1/4	.552	.536	± .004	.500
3/8	.687	.671	± .004	.594
1/2	.848	.836	± .004	.688
3/4	1.058	1.046	± .004	.719
1	1.325	1.310	± .005	.875
1-1/4	1.670	1.655	± .005	.938
1-1/2	1.912	1.894	± .006	1.094
2	2.387	2.369	± .006	1.156
2-1/2	2.889	2.868	± .007	1.750
3	3.516	3.492	± .008	1.875
4	4.518	4.491	± .009	2.000
5	5.583	5.553	± .010	3.000
6	6.647	6.614	± .011	3.000
8	8.655	8.610	± .015	4.000
10	10.780	10.735	± .015	5.000
12	12.780	12.735	± .015	6.000

AMERICAN NATIONAL STANDARD TAPER PIPE THREADS (NPT) ANSI B1.20.1,ASTM F 1498



Nominal Size In.	Threads Per Inch.	Effective Thread Length L	Pitch Of Thread P
1/8	27	.2639	.03704
1/4	18	.4018	.05556
3/8	18	.4078	.05556
1/2	14	.5337	.07143
3/4	14	.5457	.07143
1	11-1/2	.6828	.08696
1-1/4	11-1/2	.7068	.08696
1-1/2	11-1/2	.7235	.08696
2	11-1/2	.7565	.08696
2-1/2	8	1.1375	.12500
3	8	1.2000	.12500
4	8	1.3000	.12500
5	8	1.4063	.12500
6	8	1.5125	.12500
8	8	1.7125	.12500

Molded Schedule 40 products are manufactured to ASTM D 2466 for use with pipe manufactured to ASTM D 1785. Certain products carry reduced pressure handling capability and have maximum internal pressure ratings at 73°F noted.

Fabricated Schedule 40 pressure fittings (part numbers ending with **"F"**) are manufactured to Spears® specifications for use with pipe manufactured to ASTM D 1785. See publication FAB-7, General Specifications for Standard Fabricated Fittings' for additional information.

All specified Schedule 40 products are manufactured from materials certified by NSF® for use in potable water service.

Performance Engineered & Tested



SPEARS® Schedule 40 PVC fitting designs combine years of proven experience with computer generated stress analysis to yield the optimum physical structure and performance for each fitting. Material reinforcement is uniformly placed in stress concentration areas for substantially improved pressure handling capability. Resulting products are subjected to numerous verification tests to assure the very best PVC fittings available.

Full 1/4" Through 14" Availability

Spears® comprehensive line of PVC fittings offers a variety of injection molded configurations in Schedule 40 sizes 1/4" through 14" conforming to ASTM D 2466.

Exceptional Chemical & Corrosion Resistance

Unlike metal, PVC fittings never rust, scale, or pit, and will provide many years of maintenance-free service and extended system life.

High Temperature Ratings

PVC thermoplastic can handle fluids at service temperatures up to 140°F (60°C), allowing a wide range of process applications, including corrosive fluids.

Lower Installation Costs

Substantially lower material costs than steel alloys or lined steel, combined with lighter weight and ease of installation, can reduce installation costs by as much as 60% over conventional metal systems.

Higher Flow Capacity

Smooth interior walls result in lower pressure loss and higher volume than conventional metal fittings.

Additional Fabricated Configurations through 36"

Extra large, hard-to-find, and custom configurations are fabricated from NSF® Certified pipe. Fittings are engineered and tested to provide full pressure handling capabilities according to Spears® specifications.

PVC Valves

SPEARS® PVC Valve products are available for total system compatibility and uniformity.

Advanced Design Specialty Fittings

Spears® wide range of innovative, improved products include numerous metal-to-plastic transition fittings and unions with Spears® patented special reinforced (SR) plastic threads.

1/2" Through 16" Industrial Pipe Availability

Spears® premium quality Industrial PVC pipe is offered in Schedule 40 White sizes 1/2" through 16".

Sample Engineering Specifications

All PVC Schedule 40 fittings shall be produced by Spears® Manufacturing Company from PVC Type I cell classification 12454, conforming to ASTM D 1784. All injection molded PVC Schedule 40 fittings shall be Certified for potable water service by NSF International and manufactured in strict compliance to ASTM D 2466. All fabricated fittings shall be produced in accordance with Spears® General Specifications for Fabricated Fittings.

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

The information contained in this publication is based on current information and Product design at the time of publication and is subject to change without notification. Our ongoing commitment to product improvement may result in some variation. No representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or results to be obtained therefrom. For verification of technical data or additional information not contained herein, please contact Spears® Technical Services Department [West Coast: (818) 364-1611 - East Coast: (678) 985-1263].

General Information

Recommendations For Installers And Users

Plastic piping systems should be **ENGINEERED, INSTALLED** and **OPERATED** in accordance with **ESTABLISHED DESIGN AND ENGINEERING STANDARDS AND PROCEDURES** for plastic piping systems. Suitability for the intended service application should be determined by the installer and/or user prior to installation of a plastic piping system. **PRIOR TO ASSEMBLY, all piping system components should be inspected for damage or irregularities. Mating components should be checked to assure that tolerances and engagements are compatible. Do not use any components that appear irregular or do not fit properly. Contact the appropriate manufacturer of the component product in question to determine usability. Consult all applicable codes and regulations for compliance prior to installation.**

Solvent Weld Connections - Use Spears® quality solvent cements and primers formulated for the intended service application, pipe size and type of joint. While the pipe and fitting materials may be compatible with the intended medium, the solvent cement may not be. Consult the manufacturers for suitability of use. Read and follow the cement and primer manufacturers' applications and cure time instructions thoroughly. Be sure to use the correct size applicator.

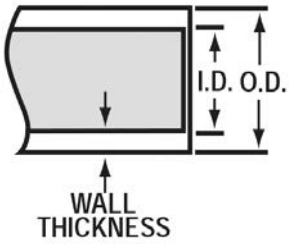
Threaded Connections - Use a quality grade thread sealant. **WARNING: SOME PIPE JOINT COMPOUNDS OR PTFE PASTES MAY CONTAIN SUBSTANCES THAT COULD CAUSE STRESS CRACKING TO PLASTIC.** Spears® Manufacturing Company recommends the use of Spears® **BLUE 75™** Thread Sealant which has been tested for compatibility with Spears® products. Please follow the sealant manufacturers' application / installation instructions. Choice of an appropriate thread sealant other than those listed above is at the discretion of the installer. 1 to 2 turns beyond **FINGER TIGHT** is generally all that is required to make a sound plastic threaded connection. Unnecessary **OVERTIGHTENING** will cause **DAMAGE TO BOTH PIPE AND FITTING.**

"Lead Free" low lead certification - unless otherwise specified, all Spears® Schedule 40 fittings specified here-in are certified by NSF International to NSF/ANSI 372 and conforms with the lead content requirements for “lead free” plumbing as defined by California, Vermont, Maryland, and Louisiana state laws and the U.S. Safe Drinking Water Act. Weighted average lead content <=0.25%.



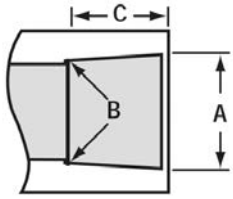
ASTM STANDARD DIMENSIONS

SCHEDULE 40 PIPE DIMENSIONS ASTM D 1785



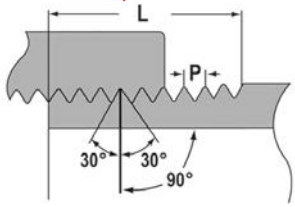
Nominal Pipe Size In.	Mean Outside Diameter In.	O. D. Tolerance In.	Minimum Wall Thickness In.
1/8	.405	± .004	.068
1/4	.540	± .004	.088
3/8	.675	± .004	.091
1/2	.840	± .004	.109
3/4	1.050	± .004	.113
1	1.315	± .005	.133
1-1/4	1.660	± .005	.140
1-1/2	1.900	± .006	.145
2	2.375	± .006	.154
2-1/2	2.875	± .007	.203
3	3.500	± .008	.216
4	4.500	± .009	.237
5	5.563	± .010	.258
6	6.625	± .011	.280
8	8.625	± .015	.322
10	10.750	± .015	.365
12	12.750	± .015	.408

SCHEDULE 40 SOCKET DIMENSIONS ASTM D 2466



Nominal Size In.	Diameter			Socket Length Minimum C
	Entrance A	Bottom B	Tolerance A	
1/8	.417	.401	± .004	.500
1/4	.552	.536	± .004	.500
3/8	.687	.671	± .004	.594
1/2	.848	.836	± .004	.688
3/4	1.058	1.046	± .004	.719
1	1.325	1.310	± .005	.875
1-1/4	1.670	1.655	± .005	.938
1-1/2	1.912	1.894	± .006	1.094
2	2.387	2.369	± .006	1.156
2-1/2	2.889	2.868	± .007	1.750
3	3.516	3.492	± .008	1.875
4	4.518	4.491	± .009	2.000
5	5.583	5.553	± .010	3.000
6	6.647	6.614	± .011	3.000
8	8.655	8.610	± .015	4.000
10	10.780	10.735	± .015	5.000
12	12.780	12.735	± .015	6.000

AMERICAN NATIONAL STANDARD TAPER PIPE THREADS (NPT) ANSI B1.20.1,ASTM F 1498



Nominal Size In.	Threads Per Inch.	Effective Thread Length L	Pitch Of Thread P
1/8	27	.2639	.03704
1/4	18	.4018	.05556
3/8	18	.4078	.05556
1/2	14	.5337	.07143
3/4	14	.5457	.07143
1	11-1/2	.6828	.08696
1-1/4	11-1/2	.7068	.08696
1-1/2	11-1/2	.7235	.08696
2	11-1/2	.7565	.08696
2-1/2	8	1.1375	.12500
3	8	1.2000	.12500
4	8	1.3000	.12500
5	8	1.4063	.12500
6	8	1.5125	.12500
8	8	1.7125	.12500

Molded Schedule 40 products are manufactured to ASTM D 2466 for use with pipe manufactured to ASTM D 1785. Certain products carry reduced pressure handling capability and have maximum internal pressure ratings at 73°F noted.

Fabricated Schedule 40 pressure fittings (part numbers ending with **"F"**) are manufactured to Spears® specifications for use with pipe manufactured to ASTM D 1785. See publication FAB-7, General Specifications for Standard Fabricated Fittings' for additional information.

All specified Schedule 40 products are manufactured from materials certified by NSF® for use in potable water service.

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Schedule 40 Fittings Dimensions & Information

Injection Molded Dimension References:

G = (LAYING LENGTH) Intersection of center lines to bottom of socket/thread; 90° elbows, tees, crosses; ± 1/32 inch.
H = Intersection of center lines to face of fitting; 90° elbows tees, crosses; ± 1/32 inch.
J = Intersection of center lines to bottom of socket/thread; 45° elbows; ± 1/32 inch

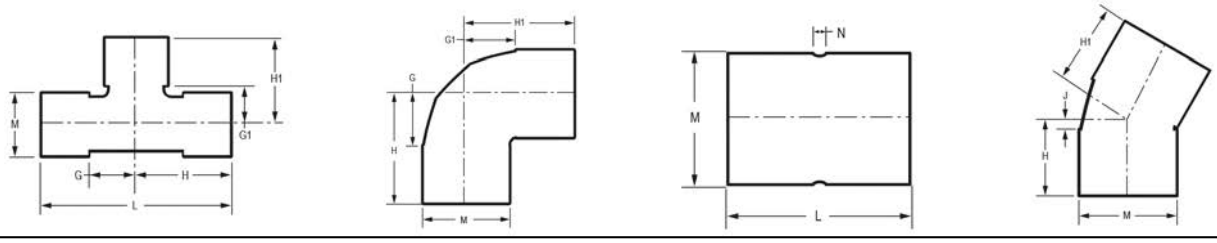
L = Overall length of fittings; ± 1/16 inch.
M = Outside diameter of socket/thread hub; ± 1/16 inch.
N = Socket bottom to socket bottom; couplings; ± 1/16 inch.
W = Height of cap; ± 1/16 inch.

Fabricated Dimension References:

G = (LAYING LENGTH) Intersection of center lines to bottomof socket/thread; 90° elbows, tees, crosses; ± 1/4 inch; 14" & larger ± 1/2 inch.
H = Intersection of center lines to face of fitting; 90° elbows ± 1/4 inch, 14" & larger ± 3/4 inch; wyes ± 1/2 inch; tees, crosses ± 1/4 inch; 14" larger ± 1/2 inch.
J = Intersection of center lines to bottom of socket/thread;45° elbows; ± 1/4 inch; 14" & larger ± 1/2 inch.

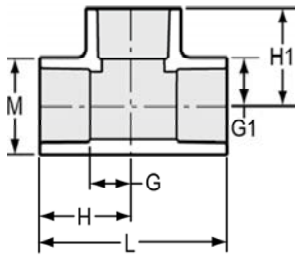
L = Overall length of fittings; ± 1/2 inch.; wyes ± 1 inch; 14" & larger ± 1 inch.
M = Outside diameter of socket/thread hub; ± 1/4 inch.
N = Socket bottom to socket bottom; couplings; ± 1/2 inch.
W = Height of cap; ± 1/4 inch.

Typical Fabricated Dimension References



Tee

Socket x Socket x Socket

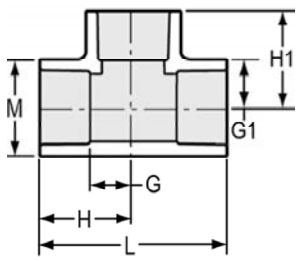


Part Number	Size	G	G1	H	H1	L	M	Approx. Wt. (Lbs.)
401-003	3/8	3/8	3/8	1- 1/8	1- 1/8	2- 1/4	31/32	.03
401-005	1/2	1/2	1/2	1- 1/4	1- 1/4	2- 1/2	1- 3/32	.06
401-007	3/4	9/16	9/16	1- 9/16	1- 9/16	3- 1/8	1- 5/16	.09
401-010	1	11/16	11/16	1- 3/4	1- 3/4	3- 1/2	1- 5/8	.15
401-012	1-1/4	7/8	7/8	2- 1/8	2- 1/8	4- 1/4	2	.25
401-015	1-1/2	1-1/8	1-1/8	2-3/8	2-3/8	4-3/4	2- 1/4	.33
401-020	2	1- 3/8	1- 3/8	2- 3/4	2- 3/4	5- 1/2	2- 3/4	.50
401-025	2-1/2	1-21/32	1-21/32	3-13/32	3-13/32	6-13/16	3-11/32	.96
401-030	3	1-15/16	1-15/16	3-27/32	3-27/32	7-11/16	4	1.40
401-040	4	2-13/32	2-13/32	4- 7/16	4- 7/16	8- 7/8	5- 1/32	2.34
401-050	5	3	3	6	6	12	6- 5/32	4.58
401-060	6	3- 5/8	3- 5/8	6-21/32	6-21/32	13- 5/16	7- 9/32	5.89
401-080	8	4- 1/2	4- 1/2	8-17/32	8-17/32	17- 1/16	9- 3/8	11.57
401-100	10	5-13/16	5-13/16	10-27/32	10-27/32	21-11/16	11-21/32	24.96
401-100F*	10	9- 7/8	9- 3/8	15- 1/8	14- 5/8	30- 1/4	11- 1/2	37.51
401-120	12	6-27/32	6-27/32	12-27/32	12-27/32	25-11/16	13- 3/4	37.29

Tee

(Continued)

Socket x Socket x Socket

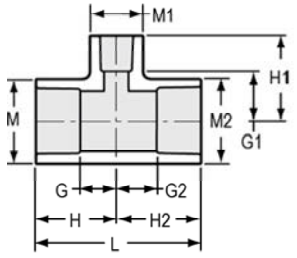


Part Number	Size	G	G1	H	H1	L	M	Approx. Wt. (Lbs.)
401-120F*	12	10- 3/4	10- 3/16	17	16- 7/16	34	13- 9/16	56.31
401-140	14	7- 1/32	7- 1/32	14- 7/32	14- 1/32	28- 7/16	15-21/32	61.75
401-140F*	14	11- 3/8	11	18- 3/8	18	36- 3/4	14- 7/8	73.73
401-160F*	16	15	12- 7/8	23	20- 7/8	46	17	106.38
401-180F*	18	15- 7/8	13- 3/8	24- 7/8	22- 3/8	49- 3/4	19- 1/8	151.25
401-200F*	20	18- 1/4	15- 1/2	28- 1/4	25- 1/2	56- 1/2	21- 3/16	206.74
401-240F*	24	21- 1/8	17- 1/2	33- 1/8	29- 1/2	66- 1/4	25- 3/8	337.03

* Fabricated

Tee - Reducing

Socket x Socket x Socket



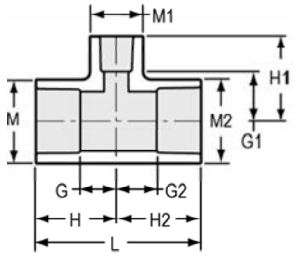
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	M2	Approx. Wt. (Lbs.)
401-053	3/8X1/2	17/32	21/32	17/32	2- 1/32	1- 3/4	2- 1/32	4- 1/16	7/8	1- 3/32	7/8	.08
401-074	1/2X3/4	9/16	9/16	9/16	1- 5/16	1- 9/16	1- 5/16	2- 5/8	1-3/32	1-5/16	1-3/32	.07
401-075	1/2X1	25/32	9/16	25/32	1-17/32	1-11/16	1-17/32	3- 1/16	1- 1/16	1- 5/8	1- 1/16	.10
401-094	3/4X1/2X1/2	17/32	21/32	17/32	1-17/32	1-13/32	1- 9/32	2-13/16	1- 5/16	1- 3/32	1- 3/32	.08
401-095	3/4X1/2X3/4	13/16	11/16	5/8	1-13/16	1-15/32	1- 3/8	3- 3/16	1- 5/16	1- 5/16	1- 1/16	.10
401-101	3/4X1/2	17/32	5/8	17/32	1- 7/16	1- 3/8	1- 7/16	2-29/32	1- 5/16	1- 1/8	1- 5/16	.08
D401-101	3/4X1/2	9/16	19/32	17/32	1-17/32	1-27/32	1-17/32	3- 1/16	1- 5/16	1- 3/32	1- 5/16	.10
401-102	3/4X1	23/32	5/8	23/32	1-21/32	1-21/32	1-21/32	3- 5/16	1- 5/16	1- 5/8	1- 5/16	.11
401-122	1X1/2X1	23/32	23/32	27/32	1-25/32	1-25/32	1-19/32	3- 7/16	1- 5/8	1- 5/8	1- 3/32	.15
401-124	1X3/4X1/2	5/8	23/32	19/32	1-21/32	1-15/32	1- 1/2	3- 5/32	1- 5/8	1- 3/32	1- 5/16	.11
401-125	1X3/4X3/4	21/32	25/32	5/8	1-25/32	1-25/32	1- 5/8	3- 7/16	1-19/32	1- 5/16	1- 5/16	.15
401-126	1X3/4X1	3/4	13/16	13/16	1-29/32	1-15/16	1-13/16	3- 3/4	1- 5/8	1- 5/8	1- 5/16	.16
401-130	1X1/2	9/16	13/16	9/16	1- 5/8	1- 9/16	1- 5/8	3- 3/16	1- 5/8	1- 1/16	1- 5/8	.12
D401-130	1X1/2	11/16	25/32	11/16	1-23/32	2- 1/32	1-23/32	3-15/32	1- 5/8	1- 1/8	1- 5/8	.15
401-131	1X3/4	19/32	3/4	19/32	1- 5/8	1-21/32	1- 5/8	3- 9/32	1- 5/8	1- 5/16	1- 5/8	.13
401-132	1X1-1/4	31/32	27/32	31/32	2- 3/32	2- 3/32	2- 3/32	4- 3/16	1- 5/8	1-31/32	1- 5/8	.21
401-133	1X1-1/2	1- 1/8	13/16	1- 1/8	2- 1/4	2-3/32	2- 1/4	4- 15/32	1- 5/8	2- 1/4	1- 5/8	.25
401-134	1X2	1- 7/16	27/32	1- 7/16	2- 1/2	2- 1/4	2- 1/2	5	1- 5/8	2- 3/4	1- 5/8	.28
401-156	1-1/4X1X1/2	11/16	1	11/16	1-15/16	1- 3/4	1-23/32	3-21/32	2	1- 1/8	1- 5/8	.17
401-157	1-1/4X1X3/4	25/32	1- 1/16	25/32	2- 1/32	2	1-27/32	3- 7/8	2	1-11/32	1- 5/8	.20
401-158	1-1/4X1X1	31/32	1- 1/16	7/8	2- 5/32	2- 3/32	1-29/32	4- 1/16	2	1-11/16	1- 5/8	.22
401-166	1-1/4X1/2	17/32	29/32	17/32	1-25/32	1-21/32	1-25/32	3- 9/16	1-31/32	1- 3/32	1-31/32	.18

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Tee - Reducing

Socket x Socket x Socket

(Continued)

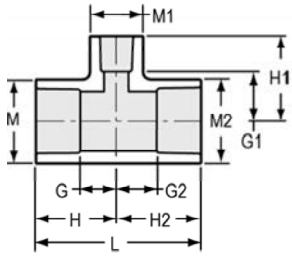


Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	M2	Approx. Wt. (Lbs.)
D401-166	1-1/4X1/2	23/32	31/32	23/32	1-31/32	2- 3/16	1-31/32	3-29/32	2	1- 1/8	2	.21
401-167	1-1/4X3/4	21/32	31/32	21/32	1-29/32	1-31/32	1-29/32	3-13/16	2	1-11/32	2	.19
401-168	1-1/4X1	13/16	1	13/16	1-15/16	2	1-15/16	3-27/32	2	1- 5/8	2	.21
401-169	1-1/4X1-1/2	1- 3/32	1	1- 3/32	2-11/32	2- 5/16	2-11/32	4-11/16	1-31/32	2- 7/32	1-31/32	.30
401-170	1-1/4X2	1-11/32	1	1-11/32	2-19/32	2- 3/8	2-19/32	5- 3/16	2	2- 3/4	2	.38
401-199	1-1/2X1-1/4X1/2	11/16	1- 1/8	11/16	2	1- 7/8	1-15/16	3-15/16	2- 1/4	1- 1/8	2	.21
401-201	1-1/2X1-1/4X3/4	21/32	1- 5/32	21/32	1-15/16	2- 3/16	1-15/16	3- 7/8	2- 1/4	1-11/32	2	.25
401-202	1-1/2X1-1/4X1	13/16	1- 3/16	13/16	2- 1/8	2- 9/32	2- 1/16	4- 3/16	2- 1/4	1- 5/8	2	.28
401-209	1-1/2X1/2	17/32	1- 3/32	17/32	1-27/32	1-27/32	1-27/32	3-11/16	2- 7/32	1- 1/8	2- 7/32	.22
D401-209	1-1/2X1/2	17/32	1- 1/16	17/32	1-27/32	2- 5/16	1-27/32	3-11/16	2- 7/32	1- 1/16	2- 7/32	.22
401-210	1-1/2X3/4	21/32	1- 3/32	21/32	1-31/32	2- 3/32	1-31/32	3-29/32	2- 7/32	1- 5/16	2- 7/32	.24
401-211	1-1/2X1	25/32	27/32	25/32	2- 3/32	1-31/32	2- 3/32	4- 3/16	2- 7/32	1- 5/8	2- 7/32	.27
401-212	1-1/2X1-1/4	1	1- 3/16	1	2- 9/32	2- 7/16	2- 9/32	4-19/32	2- 1/4	2	2- 1/4	.31
401-213	1-1/2X2	1- 5/16	1- 3/16	1- 5/16	2- 5/8	2- 9/16	2- 5/8	5- 7/32	2- 1/4	2- 3/4	2- 1/4	.39
401-214	1-1/2X2-1/2	1-21/32	1- 3/16	1-21/32	2-31/32	2-15/16	2-31/32	5-15/16	2- 1/4	3-11/32	2- 1/4	.58
401-233	2X1X2	1- 1/4	1- 1/4	1- 7/32	2-19/32	2-19/32	2-11/32	5	2- 3/4	2- 3/4	1- 5/8	.40
401-238	2X1-1/2X3/4	21/32	1-13/32	21/32	2- 1/32	2-13/32	1-31/32	4	2-23/32	1- 5/16	2- 1/4	.31
401-239	2X1-1/2X1	13/16	1- 1/2	13/16	2- 1/8	2- 5/8	2- 1/8	4- 9/32	2- 3/4	1- 5/8	2- 1/4	.36
401-241	2X1-1/2X1-1/2	1	1- 9/32	1- 1/32	2- 3/8	2- 9/16	2- 5/16	4-11/16	2-23/32	2- 7/32	2- 7/32	.37
401-247	2X1/2	35/64	1-11/32	35/64	1-59/64	2- 3/32	1-59/64	3-27/32	2-23/32	1- 3/32	2-23/32	.32
D401-247	2X1/2	9/16	1- 7/32	9/16	1-15/16	2- 1/2	1-15/16	3- 7/8	2-23/32	1- 1/16	2-23/32	.30
401-248	2X3/4	21/32	1- 1/2	21/32	2- 1/32	2- 1/16	2- 1/32	4- 1/16	2- 3/4	1-11/32	2- 3/4	.32
401-249	2X1	13/16	1- 3/8	13/16	2- 3/16	2- 1/2	2- 3/16	4- 3/8	2-23/32	1- 5/8	2-23/32	.36
401-250	2X1-1/4	1	1- 3/8	1	2- 3/8	2- 5/8	2- 3/8	4-23/32	2-23/32	1-31/32	2-23/32	.39
401-251	2X1-1/2	1- 1/16	1- 5/16	1- 1/16	2- 3/8	2- 9/16	2- 3/8	4- 3/4	2-23/32	2- 1/4	2-23/32	.42
401-253[1]	2X3	2- 7/8	1-13/16	2- 7/8	4- 1/4	3-13/16	4- 1/4	8- 1/2	4	4	3-15/16	2.34
401-254[1]	2X4	3-13/32	2- 3/8	3-13/32	4-25/32	4- 3/8	4-25/32	9- 9/16	5- 1/16	5- 1/16	5- 1/16	4.06
401-287	2-1/2X1/2	25/32	1-15/32	25/32	2-17/32	2- 7/32	2-17/32	5- 1/16	3- 5/16	1- 1/16	3- 5/16	.56
401-288	2-1/2X3/4	7/8	1- 9/16	7/8	2- 5/8	2- 1/2	2- 5/8	5- 9/32	3- 5/16	1- 5/16	3- 5/16	.59
401-289	2-1/2X1	13/16	1-17/32	13/16	2-13/16	2-21/32	2-13/16	5- 5/8	3- 5/16	1- 5/8	3- 5/16	.64
401-290	2-1/2X1-1/4	1- 7/32	1-21/32	1- 7/32	2-31/32	2-29/32	2-31/32	5-31/32	3-11/32	2- 1/32	3-11/32	.74
401-291	2-1/2X1-1/2	1- 3/16	1- 5/8	1- 3/16	2-31/32	2-15/16	2-31/32	5-15/16	3-11/32	2- 1/4	3-11/32	.69
401-292	2-1/2X2	1-13/32	1-21/32	1-13/32	3- 3/16	3- 1/32	3- 3/16	6- 3/8	3- 5/16	2- 3/4	3- 5/16	.76
401-293[1]	2-1/2X3	2- 1/4	1-31/32	2- 1/4	4- 1/4	3-13/16	4- 1/4	8-15/32	4	4	4	2.15
401-294[1]	2-1/2X4	2- 3/4	2- 3/8	2- 3/4	4- 3/4	4- 3/8	4- 3/4	9- 1/2	5- 1/16	5	5- 1/16	3.85
401-333	3X1/2	11/16	1-13/16	11/16	2- 9/16	2-17/32	2- 9/16	5- 1/32	3-31/32	1- 3/32	3-31/32	.70
401-334	3X3/4	3/4	2	3/4	2-21/32	3	2-21/32	5- 9/32	4	1-11/32	4	.84
401-335	3X1	29/32	1-25/32	29/32	2-51/64	2-29/32	2-51/64	5-19/32	3-31/32	1-19/32	3-31/32	.83
401-336	3X1-1/4	1- 7/32	1-31/32	1- 7/32	2-31/32	3- 7/32	2-31/32	5-15/16	4	2	4	.92
401-337	3X1-1/2	1- 7/32	1-13/16	1- 7/32	3- 3/32	3- 1/8	3- 3/32	6- 3/16	4- 1/16	2- 7/32	4- 1/16	.98
401-338	3X2	1- 7/16	1-13/16	1- 7/16	3-11/32	3- 3/16	3-11/32	6-11/16	3-31/32	2-23/32	3-31/32	1.04
401-339	3X2-1/2	1- 3/4	1-31/32	1- 3/4	3- 5/8	3-11/16	3- 5/8	7- 1/4	4- 3/16	3-17/32	4- 3/16	1.91
401-342	3X4	2-19/32	2	2-19/32	4- 1/2	4- 1/32	4- 1/2	8-31/32	3-31/32	5- 1/32	3-31/32	1.78
401-344[1]	3X6	5- 1/2	4	5- 1/2	7- 1/2	7	7- 1/2	15	7- 1/4	7- 1/4	7- 1/4	10.33

Tee - Reducing

Socket x Socket x Socket

(Continued)



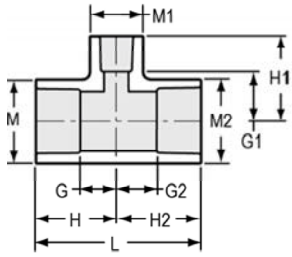
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	M2	Approx. Wt. (Lbs.)
401-416	4X3/4	25/32	2- 9/32	25/32	2-13/16	3- 9/32	2-13/16	5- 5/8	5- 3/32	1- 5/16	5- 3/32	1.01
401-417	4X1	13/16	2- 9/16	13/16	2-13/16	3- 5/8	2-13/16	5-19/32	5- 1/32	1-19/32	5- 1/32	1.20
401-418	4X1-1/4	1- 1/16	2- 9/32	1- 1/16	3- 3/32	3-17/32	3- 3/32	6- 3/16	5	1-31/32	5	1.31
401-419	4X1-1/2	1- 3/16	2-17/32	1- 3/16	3- 3/16	3-27/32	3- 3/16	6-13/32	5- 1/16	2- 1/4	5- 1/16	1.34
401-420	4X2	1-13/32	2- 3/4	1-13/32	3- 7/16	4- 5/32	3- 7/16	6- 7/8	5- 1/32	2- 3/4	5- 1/32	1.55
401-421[1]	4X2-1/2	1-31/32	3- 3/32	1-31/32	4- 3/32	4-27/32	4- 3/32	8- 5/32	5- 5/32	4- 1/16	5- 5/32	2.69
401-422	4X3	2- 1/32	2- 5/8	2- 1/32	4- 3/32	4- 1/2	4- 3/32	8- 5/32	5- 5/32	4- 1/16	5- 5/32	2.31
401-426[1]	4X6	5- 1/2	3- 1/2	5- 1/2	7- 1/2	7	7- 1/2	14-15/16	6- 7/8	7- 1/2	6- 7/8	10.08
401-428[1]	4X8	6- 3/4	4- 1/2	6- 3/4	8- 3/4	8- 1/2	8- 3/4	17- 1/2	9- 1/4	9- 5/8	9- 5/8	19.48
401-486[1]	5X2	1-11/32	3- 1/32	1-11/32	4-11/32	4-13/32	4-11/32	8-23/32	6- 1/8	2-23/32	6- 1/8	2.43
401-487[1]	5X2-1/2	2	3- 5/8	2	5- 1/32	5- 3/8	5- 1/32	10- 1/16	6- 5/32	4- 1/32	6- 5/32	3.48
401-488	5X3	2	3- 3/16	2	5- 1/32	5- 1/16	5- 1/32	10- 1/16	6- 5/32	4- 1/32	6- 5/32	3.10
401-490	5X4	2- 1/2	3- 5/32	2- 1/2	5- 9/16	5- 3/16	5- 9/16	11- 1/8	6- 5/32	5- 1/32	6- 5/32	3.59
401-526[1]	6X1-1/4	1- 3/8	4- 1/16	1- 3/8	4-27/32	5- 5/16	4-27/32	9-11/16	7- 1/4	2- 3/4	7- 1/4	3.45
401-527[1]	6X1-1/2	1- 3/8	3- 7/8	1- 3/8	4-27/32	5- 3/16	4-27/32	9-11/16	7- 1/4	2-11/16	7- 1/4	3.52
401-528	6X2	1-13/32	3- 5/8	1-13/32	4-13/32	4-31/32	4-13/32	8-27/32	7- 1/4	2- 3/4	7- 1/4	3.39
401-529[1]	6X2-1/2	1-31/32	4- 1/8	1-31/32	4-31/32	5- 7/8	4-31/32	9-15/16	7- 1/4	4- 1/32	7- 1/4	4.25
401-530	6X3	1-31/32	3- 5/8	1-31/32	4-31/32	5- 1/2	4-31/32	10	7- 1/4	4	7- 1/4	3.88
401-532	6X4	2-17/32	3- 5/8	2-17/32	5- 9/16	5- 5/8	5- 9/16	11- 1/8	7-1/4	5	7-1/4	4.37
401-533[1]	6X5	3- 1/2	4- 1/2	3- 1/2	7	7- 1/2	7	14	7- 3/16	7- 3/16	7- 3/8	7.79
401-535[1]	6X8	5-29/32	4-15/32	5-29/32	8-15/16	8-1/2	8-15/16	17-7/8	9-5/8	9-13/32	9-5/8	19.55
401-537[1]	6X10	8	5-13/16	8	11- 3/8	10-13/16	11- 3/8	22- 3/4	11- 1/2	11- 9/16	11- 1/2	38.48
401-578[1]	8X2	2	5- 7/8	2	6	7	6	12	9- 1/4	4	9- 1/4	6.74
401-579[1]	8X2-1/2	2	5- 5/16	2	6	7- 5/16	6	12	9- 5/16	4	9- 5/16	6.65
401-580	8X3	1-31/32	4- 3/4	1-31/32	6- 1/32	6- 3/4	6- 1/32	12- 1/16	9-11/32	4	9-11/32	6.27
401-582	8X4	2-17/32	4-11/16	2-17/32	6-17/32	6-11/16	6-17/32	13- 1/16	9- 9/32	4-31/32	9- 9/32	7.01
401-583[1]	8X5	3-21/32	5- 1/4	3-21/32	7-21/32	8- 1/4	7-21/32	15- 5/16	9- 5/16	7- 1/4	9- 5/16	10.56
401-585	8X6	3- 5/8	4- 3/4	3- 5/8	7-21/32	7-25/32	7-21/32	15-11/32	9-11/32	7- 1/4	9-11/32	8.66
401-589[1]	8X10	6-23/32	5-11/16	6-23/32	11- 7/32	10- 1/2	11- 7/32	22- 7/16	11- 9/16	11- 9/16	11- 9/16	42.11
401-621F*	10X2	4- 7/8	7- 1/4	4- 7/8	10- 1/8	9	10- 1/8	20- 1/4	11- 1/2	2-11/16	11- 1/2	19.60
401-622F*	10X2-1/2	5- 5/8	7- 3/4	5- 5/8	10- 7/8	9- 3/4	10- 7/8	21- 3/4	11- 1/2	3- 1/4	11- 1/2	20.26
401-623[1]	10X3	3-13/16	7	3-13/16	9- 3/8	9	9- 3/8	18- 3/4	12	7- 1/2	12	26.42
401-624[1]	10X4	3-27/32	7- 3/8	3-27/32	9-11/32	9- 3/8	9-11/32	18-11/16	12	7- 1/2	12	26.29
401-626F*	10X6	6- 7/8	8- 3/8	6- 7/8	12- 1/8	11- 5/8	12- 1/8	24- 1/4	11- 1/2	7- 3/16	11- 1/2	26.47
401-628[1]	10X8	5- 3/4	7- 3/16	5- 3/4	10- 7/8	11- 1/4	10- 7/8	21-11/16	11-11/16	11-11/16	11- 1/2	31.98
401-661F*	12X2	5- 1/4	8- 1/4	5- 1/4	11- 1/2	10	11- 1/2	23	13- 9/16	2-11/16	13- 9/16	25.00
401-662F*	12X2-1/2	5- 3/4	8- 3/4	5- 3/4	12	10- 3/4	12	24	13- 9/16	3- 1/4	13- 9/16	28.61
401-663F*	12X3	5- 3/4	9	5- 3/4	12	11- 1/4	12	24	13- 9/16	3-15/16	13- 9/16	31.40
401-664F*	12X4	7	9- 5/16	7	13- 1/4	11- 9/16	13- 1/4	26- 1/2	13- 9/16	5	13- 9/16	32.40
401-666[1]	12X6	4- 7/8	8- 5/16	4- 7/8	11- 7/16	11- 3/4	11- 7/16	22-13/16	14- 1/4	9- 3/4	14- 1/4	43.99
401-668	12X8	4-7/8	7-1/2	4-7/8	11-15/32	11-7/16	11-15/32	22-29/32	14- 1/4	9- 3/4	14- 1/4	40.00

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Tee - Reducing

Socket x Socket x Socket

(Continued)

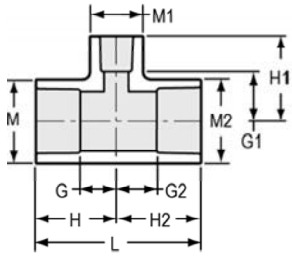


Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	M2	Approx. Wt. (Lbs.)
401-670[1]	12X10	6-13/16	8-1/2	6-13/16	12-7/8	13- 1/2	12-7/8	25- 5/8	13- 3/4	13- 3/4	13- 3/4	47.62
401-670F*	12X10	10- 1/4	10- 3/8	10- 1/4	16- 1/2	15- 5/8	16- 1/2	33	13- 9/16	11- 1/2	13- 9/16	50.00
401-676F*	12X16	18- 1/2	12- 3/4	18- 1/2	30- 1/4	20- 3/4	30- 1/4	60- 1/2	14- 1/8	17	14- 1/8	162.09
401-678F*	12X18	14- 1/4	13	17- 7/8	23- 1/4	22	23- 7/8	47- 3/4	19- 1/8	19- 1/8	19- 1/8	233.81
401-691F*	14X2	5- 7/8	8-13/16	5- 7/8	12- 7/8	10- 9/16	12- 7/8	25- 3/4	14- 7/8	2-11/16	14- 7/8	35.50
401-693F*	14X3	6- 1/2	9- 9/16	6- 1/2	13- 1/2	11-13/16	13- 1/2	27	14- 7/8	3-15/16	14- 7/8	38.34
401-694F*	14X4	7- 3/8	9- 7/8	7- 3/8	14- 3/8	12- 1/8	14- 3/8	28- 3/4	14- 7/8	5	14- 7/8	41.89
401-696F*	14X6	7- 7/8	9-15/16	7- 7/8	14- 7/8	13- 3/16	14- 7/8	29- 3/4	14- 7/8	7- 3/16	14- 7/8	47.56
401-698F*	14X8	8- 7/8	9- 7/8	8- 7/8	15- 7/8	14- 1/8	15- 7/8	31- 3/4	14- 7/8	9- 1/4	14- 7/8	54.85
401-700F*	14X10	10- 3/8	10-15/16	10- 3/8	17- 3/8	16- 3/16	17- 3/8	34- 3/4	14- 7/8	11- 1/2	14- 7/8	62.72
401-702	14X12	7-1/32	7-13/32	7-1/32	14-1/32	13-13/32	14-1/32	28-1/16	15-21/32	14-11/32	15-21/32	62.64
401-702F*	14X12	11- 3/8	10- 3/4	11- 3/8	18- 3/8	17	18- 3/8	36- 3/4	14- 7/8	13- 9/16	14- 7/8	70.46
401-751F*	16X2	6- 3/8	9- 3/4	6- 3/8	14- 3/8	11- 1/2	14- 3/8	28- 3/4	17	2-11/16	17	51.76
401-753F*	16X3	6- 1/2	10- 1/2	6- 1/2	14- 1/2	12- 3/4	14- 1/2	29	17	3-15/16	17	55.03
401-754F*	16X4	8	10-13/16	8	16	13- 1/16	16	32	17	5	17	58.89
401-756F*	16X6	9	10- 7/8	9	17	14- 1/8	17	34	17	7- 3/16	17	66.51
401-758F*	16X8	10	10-13/16	10	18	15- 1/16	18	36	17	9- 1/4	17	71.93
401-760F*	16X10	11	11- 7/8	11	19	17- 1/8	19	38	17	11- 1/2	17	80.26
401-762F*	16X12	12	11-11/16	12	20	17-15/16	20	40	17	13- 9/16	17	85.48
401-764F*	16X14	13	11-15/16	13	21	18-15/16	21	42	17	14- 7/8	17	95.94
401-781F*	18X2	6- 1/4	10-11/16	6- 1/4	15- 1/4	12- 7/16	15- 1/4	30- 1/2	19- 1/8	2-11/16	19- 1/8	65.62
401-783F*	18X3	7- 1/4	11- 7/16	7- 1/4	16- 1/4	13-11/16	16- 1/4	32- 1/2	19- 1/8	3-15/16	19- 1/8	77.85
401-784F*	18X4	7- 3/4	11- 3/4	7- 3/4	16- 3/4	14	16- 3/4	33- 1/2	19- 1/8	5	19- 1/8	82.00
401-786F*	18X6	8- 3/4	11-13/16	8- 3/4	17- 3/4	15- 1/16	17- 3/4	35- 1/2	19- 1/8	7- 3/16	19- 1/8	88.03
401-788F*	18X8	9- 3/4	11- 3/4	9- 3/4	18- 3/4	16	18- 3/4	37- 1/2	19- 1/8	9- 1/4	19- 1/8	107.00
401-790F*	18X10	10- 3/4	12-13/16	10- 3/4	19- 3/4	18- 1/16	19- 3/4	39- 1/2	19- 1/8	11- 1/2	19- 1/8	105.43
401-792F*	18X12	11- 3/4	12- 5/8	11- 3/4	20- 3/4	18- 7/8	20- 3/4	41- 1/2	19- 1/8	13- 9/16	19- 1/8	114.98
401-794F*	18X14	12- 7/8	12- 7/8	12- 7/8	21- 7/8	19- 7/8	21- 7/8	43- 3/4	19- 1/8	14- 7/8	19- 1/8	91.37
401-796F*	18X16	13- 7/8	13-13/16	13- 7/8	22- 7/8	21-13/16	22- 7/8	45- 3/4	19- 1/8	17	19- 1/8	134.40
401-811F*	20X2	6- 3/4	12- 7/16	6- 3/4	16- 3/4	14- 3/16	16- 3/4	33- 1/2	21- 3/16	21-11/16	21- 3/16	90.98
401-813F*	20X3	7- 1/4	12- 7/16	7- 1/4	17- 1/4	14-11/16	17- 1/4	34- 1/2	21- 3/16	3-15/16	21- 3/16	95.46
401-814F*	20X4	8- 1/4	12- 3/4	8- 1/4	18- 1/4	15	18- 1/4	36- 1/2	21- 3/16	5	21- 3/16	98.01
401-816F*	20X6	9- 1/4	12-13/16	9- 1/4	19- 1/4	16- 1/16	19- 1/4	38- 1/2	21- 3/16	7- 3/16	21- 3/16	106.18
401-818F*	20X8	10- 1/4	12- 3/4	10- 1/4	20- 1/4	17	20- 1/4	40- 1/2	21- 3/16	9- 1/4	21- 3/16	115.35
401-820F*	20X10	11- 1/4	13-13/16	11- 1/4	21- 1/4	19- 1/16	21- 1/4	42- 1/2	21- 3/16	11- 1/2	21- 3/16	125.44
401-822F*	20X12	12- 1/4	13- 5/8	12- 1/4	22- 1/4	19- 7/8	22- 1/4	44- 1/2	21- 3/16	13- 9/16	21- 3/16	142.75
401-824F*	20X14	13- 1/4	13- 7/8	13- 1/4	23- 1/4	20- 7/8	23- 1/4	46- 1/2	21- 3/16	14- 7/8	21- 3/16	148.52
401-826F*	20X16	14- 1/4	14-13/16	14- 1/4	24- 1/4	22-13/16	24- 1/4	48- 1/2	21- 3/16	17	21- 3/16	160.59
401-828F*	20X18	15- 1/4	14- 3/8	15- 1/4	25- 1/4	23- 3/8	25- 1/4	50- 1/2	21- 3/16	19- 1/8	21- 3/16	176.98

Tee - Reducing

(Continued)

Socket x Socket x Socket

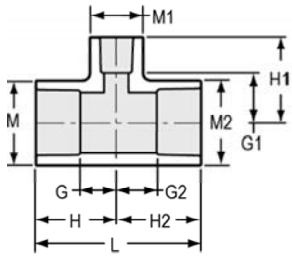


Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	M2	Approx. Wt. (Lbs.)
401-901F*	24X2	8- 1/8	14- 5/16	8- 1/8	20- 1/8	16- 1/16	20- 1/8	40- 1/4	25- 3/8	2-11/16	25-3/8	165.75
401-903F*	24X3	8- 5/8	14- 5/16	8- 5/8	20- 5/8	16- 9/16	20- 5/8	41- 1/4	25- 3/8	3-15/16	25-3/8	161.00
401-904F*	24X4	9- 1/8	14- 5/8	9- 1/8	21- 1/8	16- 7/8	21- 1/8	42- 1/4	25- 3/8	5	25- 3/8	158.05
401-906F*	24X6	10- 1/8	14-11/16	10- 1/8	22- 1/8	17-15/16	22- 1/8	44- 1/4	25- 3/8	7- 3/16	25- 3/8	159.56
401-908F*	24X8	11- 1/8	14- 5/8	11- 1/8	23- 1/8	18- 7/8	23- 1/8	46- 1/4	25- 3/8	9- 1/4	25- 3/8	183.22
401-910F*	24X10	12- 1/8	15-11/16	12- 1/8	24- 1/8	20-15/16	24- 1/8	48- 1/4	25- 3/8	11- 1/2	25- 3/8	214.07
401-912F*	24X12	13- 1/8	15- 1/2	13- 1/8	25- 1/8	21- 3/4	25- 1/8	50- 1/4	25- 3/8	13- 9/16	25- 3/8	220.59
401-914F*	24X14	13- 3/4	15- 3/4	13- 3/4	25- 3/4	22- 3/4	25- 3/4	51- 1/2	25- 3/8	14- 7/8	25- 3/8	232.53
401-916F*	24X16	14- 3/4	16-11/16	14- 3/4	26- 3/4	24-11/16	26- 3/4	53- 1/2	25- 3/8	17	25- 3/8	224.31
401-918F*	24X18	15- 3/4	16- 1/4	15- 3/4	27- 3/4	25- 1/4	27- 3/4	55- 1/2	25- 3/8	19- 1/8	25- 3/8	258.49
401-920F*	24X20	16- 3/4	17- 3/8	16- 3/4	28- 3/4	27- 3/8	28- 3/4	57- 1/2	25- 3/8	21- 3/16	25- 3/8	280.00

[1] Outlet sized with Bushing
* Fabricated

Short Socket Tees

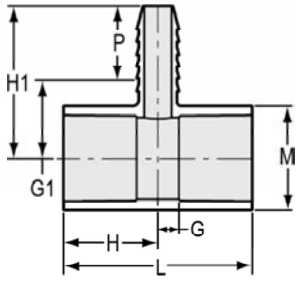
Socket Style Sch 40



Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	M2	Approx. Wt. (Lbs.)
S401-249	2X2X1	11/16	2- 7/32	11/16	2- 3/32	1- 1/4	1-11/32	3- 7/16	2-23/32	1- 5/8	2-23/32	.27
S401-251	2x2x1-1/2	1	1- 1/4	31/32	2- 3/8	2- 3/8	1- 5/8	4	2-23/32	2- 7/32	2-23/32	.33

Transition Tee for P.E. Hose Laterals

Socket x Insert (.580 I.D.)



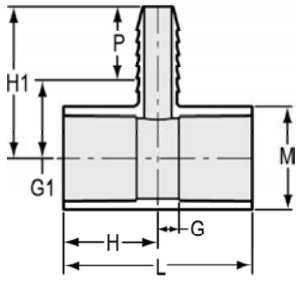
Part Number	Size	G	G1	H	H1	L	M	P	Approx. Wt. (Lbs.)
1102-007	3/4	13/32	3/4	1-13/32	2- 1/4	2-13/16	1- 5/16	1- 1/2	.08
1102-130	1X1/2	3/16	13/16	1- 7/16	2- 5/16	2- 7/8	1-19/32	1- 1/2	.11

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Transition Tee for P.E. Hose Laterals

(Continued)

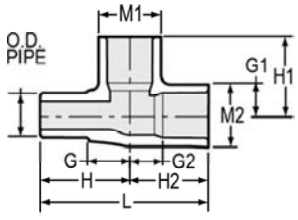
Socket x Insert (.580 I.D.)



Part Number	Size	G	G1	H	H1	L	M	P	Approx. Wt. (Lbs.)
1102-248	2X2X3/4	1/2	1- 7/160	1-27/32	2-15/16	3-11/160	2-23/32	1- 1/2	.28
1102-250	2X1-1/4	11/16	1-15/32	2- 1/16	2-31/32	4- 1/8	2- 3/4	1- 1/2	.33

Tee - Street

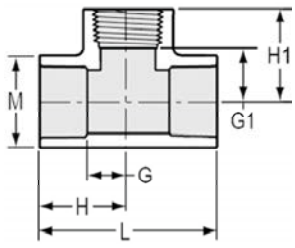
Spigot x Socket x Socket



Part Number	Size	G	G1	G2	H	H1	H2	L	M1	M2	Approx. Wt. (Lbs.)
444-005	1/2	23/32	23/32	1/2	1-19/32	1-21/32	1-19/32	3- 5/32	1- 3/16	1- 3/16	.10
444-007	3/4	13/16	27/32	7/8	1-13/16	1- 7/8	1-13/16	3- 5/8	1-13/32	1-13/32	.15
444-010	1	1	1-31/32	1-31/32	2- 1/8	2	2- 1/8	4- 7/32	1- 3/4	1- 3/4	.25
444-012	1-1/4	1- 1/4	1- 5/32	1- 1/8	2- 7/16	2- 5/16	2- 7/16	4-27/32	2- 3/32	2- 3/32	.38
444-015	1-1/2	1-13/16	1- 1/8	1- 1/8	2- 7/8	2- 9/16	2- 9/16	5- 3/8	2-11/32	2-11/32	.51
444-020	2	1-19/32	1-11/16	1-19/32	3- 3/32	3- 3/16	3- 3/32	6- 5/32	2- 7/8	2- 7/8	.78

Tee

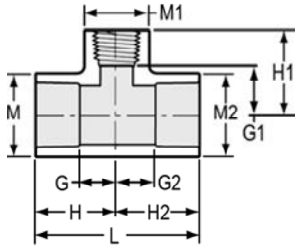
Socket x Socket x Fipt



Part Number	Size	G	G1	H	H1	L	M	Approx. Wt. (Lbs.)
402-003	3/8	7/16	1/2	1-11/16	1- 1/16	3- 3/8	29/32	.06
402-005	1/2	1/2	1/2	1- 1/4	1- 7/32	2- 1/2	1- 3/32	.06
402-007	3/4	21/32	23/32	1-21/32	1- 7/16	3- 9/32	1- 5/16	.10
402-010	1	13/16	7/8	1-15/16	1- 7/8	3- 7/8	1- 5/8	.16
402-012	1-1/4	29/32	1- 1/8	2- 5/32	2- 1/16	4- 5/16	2	.29
402-015	1-1/2	1- 1/32	1- 1/8	2-11/32	2- 1/16	4-11/16	2- 1/4	.36
402-020	2	1- 5/16	1-15/32	2- 5/8	2-13/32	5- 7/32	2- 3/4	.49
402-025	2-1/2	1- 1/2	1-11/16	3- 1/4	2-31/32	6- 1/2	3- 3/8	.95
402-030	3	1-13/16	2- 1/32	3-11/16	3- 3/8	7-11/32	4	1.38
402-040	4	2- 5/16	2-15/32	4-11/32	3-15/16	8-21/32	5- 1/16	2.23

Tee - Reducing

Socket x Socket x Fipt



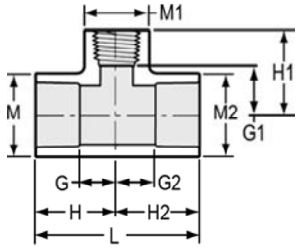
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	M2	Approx. Wt. (Lbs.)
402-071	1/2X1/8	9/32	17/32	9/32	1- 1/32	1	1- 1/32	2- 1/16	1- 3/32	9/16	1- 3/32	.04
402-072	1/2X1/4	3/8	9/16	3/8	1- 1/8	1- 1/8	1- 1/8	2- 1/4	1- 1/16	13/16	1- 1/16	.05
402-074	1/2X3/4	21/32	1/2	21/32	1-13/32	1- 5/16	1-13/32	2-13/16	1- 1/16	1-11/32	1-1/16	.08
402-094	3/4X1/2X1/2	1/2	11/16	9/16	1- 1/2	1- 7/16	1- 5/16	2-13/16	1- 9/32	1- 1/16	1- 3/32	.09
402-095	3/4X1/2X3/4	13/16	21/32	5/8	1-13/16	1- 7/16	1- 3/8	3- 3/16	1- 5/16	1- 5/16	1- 3/32	.11
402-097	3/4X1/8	9/32	5/8	9/32	1- 7/32	1- 3/32	1- 7/32	2- 7/16	1- 5/16	9/16	1- 5/16	.06
402-101	3/4X1/2	17/32	11/16	17/32	1-17/32	1- 13/32	1-17/32	3-3/32	1- 5/16	1-3/32	1- 5/16	.09
402-124	1X3/4X1/2	17/32	13/16	17/32	1-21/32	1- 9/16	1-17/32	3- 3/16	1- 5/8	1- 1/16	1- 5/16	.11
402-125	1X3/4X3/4	9/16	23/32	11/16	1-11/16	1-17/32	1-11/16	3- 3/8	1-19/32	1- 9/32	1- 9/32	.13
402-130	1X1/2	1/2	7/8	1/2	1- 5/8	1- 1/2	1- 5/8	3- 1/4	1- 5/8	1- 1/8	1- 5/8	.13
402-131	1X3/4	21/32	13/16	21/32	1-25/32	1-17/32	1-25/32	3- 9/16	1- 5/8	1- 5/16	1- 5/8	.15
402-156	1-1/4X1X1/2	19/32	1- 9/32	19/32	1-25/32	1-25/32	1- 3/4	3-17/32	2	1- 1/8	1- 5/8	.18
402-157	1-1/4X1X3/4	13/16	1- 1/32	3/4	1-13/16	1-23/32	1- 3/4	3- 9/16	2	1- 5/16	1- 5/8	.18
402-158	1-1/4X1X1	13/16	1- 5/32	13/16	2- 1/16	2- 1/8	1-15/16	4	1-31/32	1-21/32	1- 5/8	.25
402-166	1-1/4X1/2	23/32	15/16	23/32	1-31/32	1-21/32	1-31/32	3-15/16	1-31/32	1- 3/32	1-31/32	.21
402-167	1-1/4X3/4	13/16	1- 1/16	13/16	2- 1/16	1- 3/4	2- 1/16	4- 1/8	2	1- 5/16	2	.18
402-168	1-1/4X1	21/32	1- 1/32	21/32	1- 7/8	1-27/32	1- 7/8	3-25/32	1-31/32	1- 5/8	1-31/32	.21
402-199	1-1/2X1-1/4X1/2	19/32	1- 9/32	19/32	1-27/32	1-29/32	27/32	3-23/32	2- 1/4	1- 1/8	2	.22
402-201	1-1/2X1-1/4X3/4	11/16	1- 5/32	5/8	1-31/32	2- 5/32	1-29/32	3- 7/8	2- 1/4	1- 5/16	2	.25
402-202	1-1/2X1-1/4X1	13/16	1- 1/8	3/4	2- 1/8	2- 1/4	2- 1/16	4- 3/16	2- 1/4	1- 5/8	2	.29
402-209	1-1/2X1/2	7/16	1- 3/32	7/16	1- 3/4	1- 13/16	1- 3/4	3- 1/2	2- 7/32	1- 3/32	2- 7/32	.20
402-210	1-1/2X3/4	21/32	1- 3/32	21/32	1-31/32	1-27/32	1-31/32	3-29/32	2- 1/4	1- 5/16	2- 1/4	.24
402-211	1-1/2X1	25/32	1- 1/16	25/32	2- 3/32	1-15/16	2- 3/32	4- 3/16	2- 1/4	1- 5/8	2- 1/4	.26
402-212	1-1/2X1-1/4	1	1- 3/32	1	2- 9/32	2- 1/32	2- 9/32	4-19/32	2- 1/4	2	2- 1/4	.32
402-238	2X1-1/2X3/4	11/16	1-13/32	5/8	2- 1/32	2-13/32	1-31/32	4	2- 3/4	1- 5/16	2- 1/4	.31
402-239	2X1-1/2X1	13/16	1-13/32	3/4	2- 3/16	2-17/32	2- 1/8	4- 5/16	2- 3/4	1- 5/8	2- 1/4	.37
402-247	2X1/2	21/32	1- 3/8	21/32	2- 1/32	2- 1/8	2- 1/32	4- 1/16	2- 3/4	1- 1/8	2- 3/4	.31
402-248	2X3/4	41/64	1-11/32	41/64	2- 1/64	2- 3/32	2- 1/64	4- 1/32	2- 3/4	1-11/32	2- 3/4	.32
402-249	2X1	13/16	1-13/32	13/16	2- 3/16	2- 1/4	2- 3/16	4- 3/8	2-23/32	1- 5/8	2-23/32	.33
402-250	2X1-1/4	1	1- 3/8	1	2- 3/8	2- 5/16	2- 3/8	4- 3/4	2-23/32	1-31/32	2-23/32	.39
402-251	2X1-1/2	1- 1/16	1- 1/4	1- 1/16	2- 5/16	2- 3/16	2- 5/16	4-19/32	2- 3/4	2- 1/4	2- 3/4	.39
402-287	2-1/2X1/2	1/2	1-11/16	1/2	2- 1/4	2- 3/8	2- 1/4	4- 1/2	3- 3/8	1- 3/16	3- 3/8	.54
402-288	2-1/2X3/4	13/16	1-11/16	13/16	2- 9/16	2- 7/16	2- 9/16	5- 1/8	3- 3/8	1- 3/8	3- 3/8	.64
402-289	2-1/2X1	1	1-23/32	1	2- 3/4	2- 5/8	2- 3/4	5- 1/2	3-11/32	1-11/16	3-11/32	.72
402-290	2-1/2X1-1/4	1- 1/32	1-25/32	1- 1/32	2-25/32	2-21/32	2-25/32	5- 9/16	3-11/32	2- 1/32	3-11/32	.75
402-291	2-1/2X1-1/2	1- 1/16	1-25/32	1- 1/16	2-13/16	2- 3/4	2-13/16	5- 5/8	3- 3/8	2-13/32	3- 3/8	.77
402-292	2-1/2X2	1- 1/2	1-27/32	1- 1/2	3- 1/4	2-27/32	3- 1/4	6-17/32	3-11/32	3	3-11/32	.97
402-333	3X1/2	19/32	2- 1/16	19/32	2-15/32	2-25/32	2-15/32	4-15/16	3-31/32	1- 3/16	3-31/32	.77
402-334	3X3/4	13/16	2- 1/32	13/16	2-23/32	2-25/32	2-23/32	5-13/32	4	1- 3/8	4	.82
402-335	3X1	31/32	2- 1/8	31/32	2- 7/8	3	2- 7/8	5-23/32	4- 1/32	1-11/16	4-1/32	.91
402-336	3X1-1/4	1	2- 1/32	1	2-63/64	3- 1/32	2-63/64	5-31/32	4	2	4	.97
402-337	3X1-1/2	1- 7/32	2- 1/8	1- 7/32	3- 3/32	3- 1/16	3- 3/32	6- 3/16	4	2-13/32	4	1.00
402-338	3X2	1- 1/2	2- 1/8	1- 1/2	3- 13/32	3- 1/8	3- 13/32	6-25/32	4	3	4	1.21
402-417	4X1	27/32	2- 5/8	27/32	2- 7/8	3- 1/2	2- 7/8	5- 3/4	5- 1/32	1-11/16	5- 1/32	1.25
402-419	4X1-1/2	1- 1/8	2- 1/2	1- 1/8	3- 1/8	3- 1/2	3- 1/8	6- 1/4	5	2- 1/4	5	1.48

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Tee - Reducing

(Continued)

Socket x Socket x Fipt

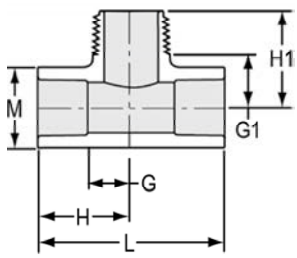


Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	M2	Approx. Wt. (Lbs.)
402-420	4X2	1- 3/8	2- 3/4	1- 3/8	3-13/32	3- 3/4	3-13/32	6-25/32	5- 1/32	3	5- 1/32	1.66
402-422	4X3	2	2- 1/2	2	4- 1/32	3-29/32	4- 1/32	8- 1/16	5- 1/16	4- 9/32	5- 1/16	2.18
402-490	5X4	2- 1/2	3- 1/8	2- 1/2	5-17/32	4-29/32	5-17/32	11- 1/16	6- 3/32	5- 1/32	6- 3/32	3.68
402-525[1]	6X1	1- 3/8	4-11/32	1- 3/8	4-27/32	5-11/32	4-27/32	9-11/16	7- 7/32	2-23/32	7- 7/32	3.64
402-528	6X2	1- 3/8	3-19/32	1- 3/8	4-27/32	4-23/32	4-27/32	9-23/32	7- 1/4	2-25/32	7- 1/4	3.53
402-530	6X3	2	3-19/32	2	5-15/32	5- 7/32	5-15/32	10-15/16	7- 1/4	4- 1/32	7- 1/4	4.12
402-532	6X4	2- 1/2	3- 5/8	2- 1/2	6	5-11/32	6	12	7- 7/32	5- 1/16	7- 7/32	4.96
402-578[1]	8X2	2	6- 1/8	2	6	7- 1/8	6	12	9- 5/16	3-15/16	9- 5/16	6.84
402-580[1]	8X3	2- 9/16	5-23/32	1-31/32	6- 9/16	7- 5/16	6- 9/16	13- 1/8	9- 5/16	5	9- 5/16	7.79
402-582[1]	8X4	2- 1/2	4-15/16	2- 1/2	6-31/32	6-21/32	6-31/32	13-15/16	9- 5/16	5	9- 5/16	11.20
402-621F*	10X2	5- 1/4	6-11/16	5- 1/4	10- 1/2	7- 3/4	10- 1/2	21	11- 9/16	2-13/16	11- 9/16	19.38
402-622F*	10X2-1/2	5- 1/2	8- 1/2	5- 1/2	10- 3/4	10- 1/4	10- 3/4	21- 1/2	11- 9/16	3- 5/16	11- 9/16	22.13
402-623F*	10X3	5- 3/4	6- 7/8	5- 3/4	11	8- 1/2	11	22	11- 9/16	4	11- 9/16	20.79
402-624F*	10X4	6- 3/8	7	6- 3/8	11- 5/8	8- 3/4	11- 5/8	23- 1/4	11- 1/2	5- 1/16	11- 1/2	22.95
402-661F*	12X2	5- 3/4	7-13/16	5- 3/4	12	8- 7/8	12	24	13- 5/8	2-13/16	13- 5/8	26.91
402-663F*	12X3	6- 1/4	9	6- 1/4	12- 1/2	10- 5/8	12- 1/2	25	13- 5/8	4	13- 5/8	29.29
402-664F*	12X4	6- 7/8	8- 1/4	6- 7/8	13- 1/8	10	13- 1/8	26- 1/4	13- 9/16	5- 1/16	13- 9/16	31.47

[1] Outlet-sized with Bushing
* Fabricated

Tee

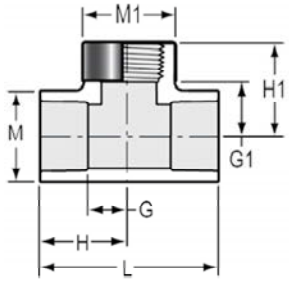
Socket x Mipt



Part Number	Size	G	G1	H	H1	L	M	Approx. Wt. (Lbs.)
402B-010	1	5/8	1- 1/16	1- 3/4	2	3- 7/16	1- 5/8	.15

Tee - Special Reinforced

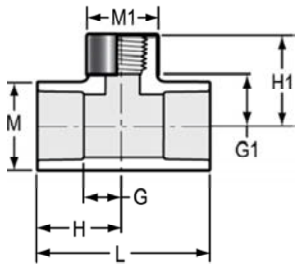
Socket x SR Fipt - Stainless Steel Collar



Part Number	Size	G	G1	H	H1	L	M	M1	Approx. Wt. (Lbs.)
402-005SR	1/2	19/32	15/32	1-15/32	1-11/32	2-15/16	1- 5/32	13/16	.12
402-012SR	1-1/4	1	1-5/16	2-7/32	2-1/4	4-15/32	1-31/32	2- 1/16	.31

Tee - Special Reinforced Reducing

Socket x SR Fipt - Stainless Steel Collar

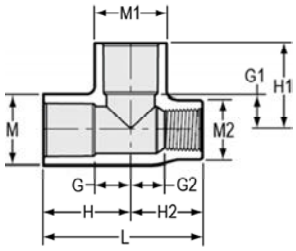


Part Number	Size	G	G1	H	H1	L	M	M1	Approx. Wt. (Lbs.)
402-072SR	1/2X1/4	15/32	11/16	1- 5/16	1- 7/32	2- 5/8	1- 5/32	13/16	.08
402-098SR	3/4X1/4	7/16	13/16	1- 7/16	1-11/32	2- 7/8	1- 3/8	13/16	.11
402-101SR	3/4X1/2	25/32	1/2	1- 5/8	1- 7/16	3- 1/4	1- 3/8	1- 3/16	.14
402-166SR	1-1/4X1/2	7/16	1- 1/8	1-11/16	1- 7/8	3- 3/8	2- 3/32	1- 3/16	.26
402-168SR	1-1/4X1	27/32	1- 1/32	2- 3/32	1-29/32	4- 7/32	2- 3/32	1-23/32	.34
402-212SR	1-1/2X1-1/4	1- 1/32	1- 5/32	2- 7/16	2- 3/32	4-27/32	2- 3/8	2- 1/16	.49
402-287SR	2-1/2X1/2	1/2	1-11/16	2- 1/4	2- 3/8	4- 1/2	3- 3/8	1- 3/16	.55
402-288SR	2-1/2X3/4	13/16	1-23/32	2- 9/16	2- 7/16	5- 1/8	3- 3/8	1- 3/8	.65
402-289SR	2-1/2X1	1	1-23/32	2- 3/4	2- 5/8	5- 1/2	3-11/32	1-11/16	.74
402-290SR	2-1/2X1-1/4	1- 1/32	1-25/32	2-25/32	2-21/32	5- 9/16	3-11/32	2- 1/32	.77
402-291SR	2-1/2X1-1/2	1- 1/16	1-25/32	2-13/16	2- 3/4	5- 5/8	3- 3/8	2- 7/16	.79
402-292SR	2-1/2X2	1- 1/2	1-27/32	3- 1/4	2-27/32	6-17/32	3-11/32	3	1.01
402-333SR	3X1/2	19/32	2- 1/16	2-15/32	2-25/32	4-15/16	3-31/32	1- 3/16	.77
402-334SR	3X3/4	13/16	2- 1/32	2-23/32	2-25/32	5-13/32	4	1- 3/8	.83
402-335SR	3X1	31/32	2-1/8	2- 7/8	3	5-23/32	4- 1/32	1-23/32	.94
402-336SR	3X1-1/4	1- 1/32	2- 3/32	2-29/32	3- 3/32	5-13/16	4	2- 1/16	1.00
402-337SR	3X1-1/2	1- 7/32	2- 1/8	3- 3/32	3- 3/32	6- 9/32	3-31/32	2- 7/16	1.06
402-338SR	3X2	1- 1/2	2- 1/16	3-13/32	3- 1/16	6- 7/8	4	3	1.24
402-417SR	4X1	27/32	2- 5/8	27/32	3-17/32	5- 3/4	5- 1/32	1-23/32	1.27
402-419SR	4X1-1/2	1- 1/8	2-25/32	3- 1/8	3- 3/4	6- 9/32	5- 1/32	2- 7/16	1.51
402-420SR	4X2	1- 3/8	2-25/32	3-13/32	3-25/32	6-25/32	5- 1/32	3- 1/32	1.71
402-422SR	4X3	2	2- 1/2	4- 1/32	3-15/16	8- 1/16	5- 1/16	4- 9/32	2.25

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Tee - Reducing

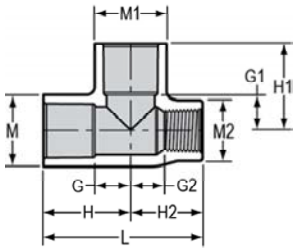
Socket x Fipt x Socket



Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	M2	Approx. Wt. (Lbs.)
403-095	3/4X1/2X3/4	11/16	11/16	11/16	1-11/16	1-11/16	1- 3/8	3- 3/32	1-13/32	1-13/32	1- 3/16	.14

Tee - Special Reinforced Reducing

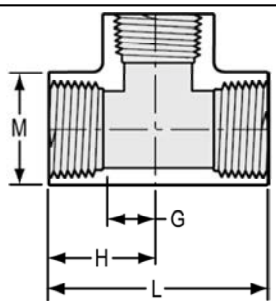
Socket x SR Fipt-Stainless Steel Collar x Socket



Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	M2	Approx. Wt. (Lbs.)
403-095SR	3/4X1/2X3/4	11/16	11/16	11/16	1-11/16	1-11/16	1-13/32	3- 1/8	1-13/32	1-13/32	1- 7/32	.15

Tee

Fipt x Fipt x Fipt

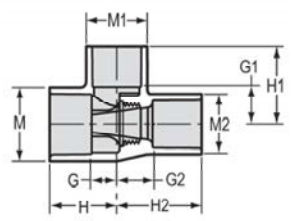


Part Number	Size	G	H	L	M	Approx. Wt. (Lbs.)
405-005	1/2	17/32	1- 1/4	2- 1/2	1- 3/32	.07
405-007	3/4	19/32	1- 3/8	2- 3/4	1- 9/32	.10
405-010	1	5/8	1-19/32	3- 3/16	1-23/32	.18
405-012	1-1/4	15/16	1-15/16	3- 7/8	2- 7/32	.47
405-015	1-1/2	1	2	4- 1/32	2- 7/32	.36
405-020	2	1- 1/4	2- 5/16	4-19/32	2-23/32	.51
405-025[1]	2-1/2	2-13/16	4-11/32	8-11/16	4- 1/32	2.78

[1] Outlet sized with Bushing

Venturied Tee, Multi Configuration - Socket Style Sch 40

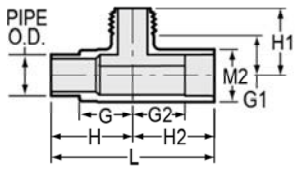
1" Socket x 3/4" Socket (1" Spigot) x 3/4" Socket (1" Spigot)



Part Number	Size	G	G1	G2	H	H1	H2	M	M1	M2	Approx. Wt. (Lbs.)
473-825	with 7/16" Nozzle	19/32	27/32	3/4	1-1/2	1-11/16	1-25/32	1-5/8	1-5/16	1-5/16	.15

Manifold Tee

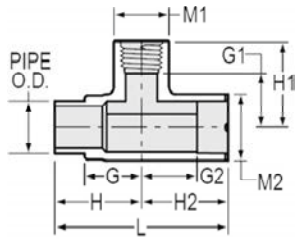
Spigot x Socket x Mipt



Part Number	Size	G	G1	G2	H	H1	H2	L	M2	Approx. Wt. (Lbs.)
476-010	1	1-23/32	1-1/4	1-11/16	2- 5/8	2- 5/32	2- 5/8	5- 1/4	1-21/32	.23

Manifold Tee

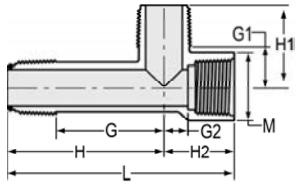
Spigot x Socket x Fipt



Part Number	Size	G	G1	G2	H	H1	H2	L	M1	M2	Approx. Wt. (Lbs.)
477-010	1	1-23/32	1- 1/4	1-11/16	2- 5/8	2- 5/32	2- 5/8	5- 1/4	1-21/32	1-21/32	.27

Manifold Tee - O-ring Sealed

O-ring Sealed Mipt x Fipt x Mipt
EPDM O-ring Seal on Tee run

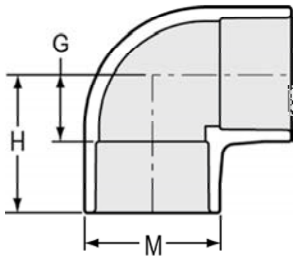


Part Number	Size	G	G1	G2	H	H1	H2	L	M	Approx. Wt. (Lbs.)
451A-010	1	2-19/32	31/32	3/4	3-13/16	1-31/32	1-11/16	5- 1/2	1-21/32	.19

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

90° Ell

Socket x Socket

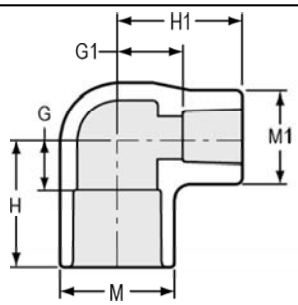


Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
406-003	3/8	3/8	1- 1/8	7/8	.02
406-005	1/2	1/2	1- 1/4	1- 1/8	.04
406-007	3/4	9/16	1- 1/2	1-11/32	.07
406-010	1	11/16	1-13/16	1- 5/8	.11
406-012	1-1/4	31/32	2- 5/32	2	.20
406-015	1-1/2	1- 1/16	2-11/32	2- 1/4	.24
406-020	2	1-5/16	2-11/16	2- 3/4	.37
406-025	2-1/2	1- 1/2	3- 1/4	3-11/32	.71
406-030	3	1-27/32	3-23/32	4	1.05
406-040	4	2-13/32	4-13/32	5- 1/32	1.83
406-045F*	4-1/2	8- 5/8	6- 1/8	5- 7/16	3.54
406-050	5	3- 1/16	6- 1/8	6- 5/32	3.57
406-060	6	3-17/32	6- 9/16	7- 9/32	4.79
406-080	8	4-13/32	8- 7/16	9- 3/8	8.87
406-100	10	5-13/16	10-27/32	11-19/32	15.55
406-100F*	10	9-13/16	15-1/16	11- 1/2	17.51
406-120	12	7- 1/16	13- 9/16	14- 1/4	27.98
406-120F*	12	11-3/16	17-7/16	13- 9/16	29.81
406-140	14	7- 1/2	14- 1/2	15-11/16	54.20
406-140F*	14	13-3/16	20-3/16	14- 7/8	41.54
406-160F*	16	15-1/4	23-1/4	17	59.37
406-180F*	18	17-5/16	26-5/16	19- 1/8	82.00
406-200F*	20	19-13/16	29-13/16	22-1/16	131.93
406-240F*	24	23-7/16	35-7/16	25- 3/8	172.90

* Fabricated

90° Ell - Reducing

Socket x Socket

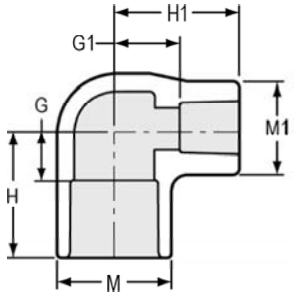


Part Number	Size	G	G1	H	H1	M	M1	Approx. Wt. (Lbs.)
406-053	3/8X1/2	7/16	15/32	1-11/16	1-15/16	1- 1/8	29/32	.05
406-101	3/4X1/2	1/2	19/32	1- 1/2	1-11/32	1- 5/16	1- 3/32	.06
D406-101	3/4X1/2	1/2	11/16	1- 1/2	1-15/16	1- 5/16	1- 1/8	.07
406-130	1X1/2	9/16	1- 1/16	1-11/16	1-13/16	1- 5/8	1- 1/8	.08
D406-130	1X1/2	9/16	19/32	1-11/16	1-27/32	1- 5/8	1- 3/32	.12

90° Ell - Reducing

(Continued)

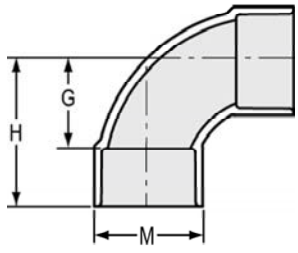
Socket x Socket



Part Number	Size	G	G1	H	H1	M	M1	Approx. Wt. (Lbs.)
406-131	1X3/4	21/32	23/32	1-25/32	1-23/32	1-19/32	1- 5/16	.11
406-166	1-1/4X1/2	9/16	1	1-13/16	1- 3/4	2	1- 3/32	.11
D406-166	1-1/4X1/2	9/16	1	1-25/32	2- 1/4	2	1- 3/32	.13
406-167	1-1/4X3/4	23/32	1	1-31/32	1-15/16	2	1- 5/16	.12
406-168	1-1/4X1	11/16	7/8	1-15/16	2	2	1-21/32	.16
406-209	1-1/2X1/2	17/32	1- 1/8	1-27/32	1- 7/8	2- 7/32	1- 3/32	.15
406-211	1-1/2X1	13/16	1- 3/32	2- 1/8	2- 5/32	2- 1/4	1- 5/8	.20
406-212	1-1/2X1-1/4	31/32	1- 3/32	2- 9/32	2-11/32	2- 7/32	1-31/32	.23
406-249	2X1	27/32	1-11/32	2- 7/32	2-15/32	2-23/32	1-19/32	.29
406-250	2X1-1/4	1	1- 3/8	2-3/8	2-19/32	2-3/4	2	.30
406-251	2X1-1/2	1- 1/8	1- 5/16	2-15/32	2- 9/16	2- 3/4	2- 1/4	.32
406-251N	2X1-1/2	1- 1/16	1-21/32	2- 7/16	2-15/16	2- 3/4	2- 3/8	.42
406-292	2-1/2X2	1- 1/4	1- 1/2	3	2- 7/8	3-11/32	2-23/32	.55
406-292N	2-1/2X2 (2-1/2 Spigot)	1- 1/4	2- 9/32	3	3- 3/16	3- 5/16	2- 7/8	.70

90° Ell - Sweep

Socket x Socket

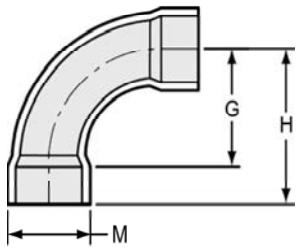


Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
406-005S	1/2	27/32	1-23/32	1- 3/16	.07
406-007S	3/4	1- 1/32	2- 1/32	1-13/32	.11
406-010S	1	1- 5/16	2- 7/16	1-23/32	.19
406-012S	1-1/4	1- 9/16	2-13/16	2- 3/32	.29
406-015S	1-1/2	1- 3/4	3- 1/8	2-11/32	.35
406-020S	2	2-9/32	3-11/16	2-3/4	.46
406-025S	2-1/2	3- 3/16	4-31/32	3-11/32	.87
406-030S	3	3-1/32	4-15/16	4	1.24

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

90° Ell - Long Sweep

Socket x Socket

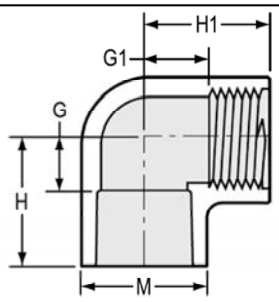


Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
406-025LSF*	2-1/2	5- 7/16	7- 7/16	3- 1/4	1.11
406-030LSF*	3	6- 3/8	8- 5/8	3-15/16	1.59
406-040LSF*	4	8- 3/8	10- 5/8	5	2.77
406-060LSF*	6	13	16- 1/4	7- 3/16	6.96
406-080LSF*	8	22- 7/16	26-11/16	9- 1/4	18.94
406-100LSF*	10	27	32-1/4	11-1/2	31.27

* Fabricated

90° Ell

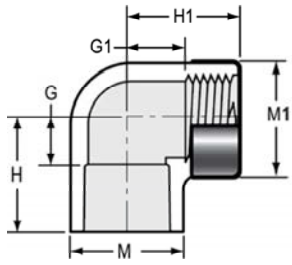
Socket x Fipt



Part Number	Size	G	G1	H	H1	M	Approx. Wt. (Lbs.)
407-005	1/2	1/2	1/2	1- 1/4	1- 1/4	1- 3/32	.05
407-007	3/4	9/16	9/16	1- 9/16	1- 9/32	1- 5/16	.08
407-010	1	11/16	21/32	1-13/16	1- 9/16	1- 5/8	.14
407-012	1-1/4	7/8	1- 5/32	2- 1/8	2- 1/32	2- 1/16	.25
407-015	1-1/2	1	1- 1/16	2- 5/16	2	2- 1/4	.25
407-020	2	1- 3/16	1- 9/32	2-11/32	2-11/32	2-11/32	.44
407-025	2-1/2	1- 1/2	1- 1/2	3- 1/2	3- 1/16	3- 5/16	.93
407-030	3	1-13/16	1-31/32	3-11/16	3-21/32	4	1.15
407-040	4	2- 5/16	2-15/32	4- 5/16	3-15/16	5- 1/16	1.85

90° Ell - Special Reinforced & Reducing 90° Ell

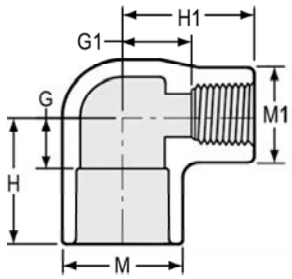
Socket x SR Fipt - Stainless Steel Collar



Part Number	Size	G	G1	H	H1	M	M1	Approx. Wt. (Lbs.)
407-005SR	1/2	1/2	9/16	1- 1/4	1- 9/32	1- 3/32	1- 7/32	.07
407-007SR	3/4	9/16	21/32	1-13/32	1-13/32	1- 3/8	1-13/32	.09
407-010SR	1	19/32	13/16	1-23/32	1-23/32	1-11/16	1-23/32	.20
407-012SR	1-1/4	7/8	1- 5/32	2- 1/8	2- 1/32	2- 1/16	2- 1/16	.28
407-211SR	1-1/2X1	13/16	1-1/8	2-3/32	2	2-1/4	1-11/16	.26
407-249SR	2X1	1- 3/16	1- 9/16	2- 5/16	2- 3/8	2- 3/4	1-11/16	.34
407-251SR	2X1-1/2	1- 1/8	1-19/32	2- 1/2	2-17/32	2-23/32	2- 7/16	.44

90° Ell - Reducing

Socket x Fipt

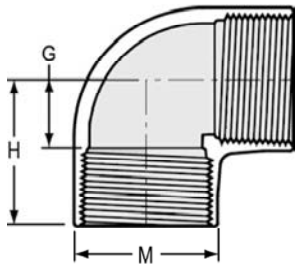


Part Number	Size	G	G1	H	H1	M	M1	Approx. Wt. (Lbs.)
407-053	3/8X1/2	17/32	17/32	1- 9/32	1- 9/32	7/8	1- 3/32	.04
407-074	1/2X3/4	21/32	9/16	1-13/32	1-11/32	1- 5/16	1- 3/32	.08
407-101	3/4X1/2	9/16	5/8	1- 1/2	1- 3/8	1- 5/16	1- 3/32	.07
407-130	1X1/2	7/16	11/16	1- 9/16	1- 7/16	1- 5/8	1- 3/32	.09
407-131	1X3/4	11/16	7/8	1-13/16	1- 5/8	1- 5/8	1- 5/16	.11
407-168	1-1/4X1	1	1- 1/32	2- 1/4	2	2	1- 5/8	.18
407-211	1-1/2X1	13/16	1-1/8	2-3/32	2	2- 1/4	1-11/16	.24
407-212	1-1/2X1-1/4	15/16	1- 1/4	2- 1/4	2- 7/32	2- 3/16	1-15/16	.24
407-249	2X1	13/16	1- 9/16	2- 5/16	2- 3/8	2- 3/4	1-11/16	.30
407-250	2X1-1/4	1	1- 1/4	2- 3/8	2- 7/32	2- 3/4	2	.31
407-251	2X1-1/2	1- 1/8	1- 9/16	2- 1/2	2- 1/2	2-23/32	2-13/32	.41

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

90° Ell

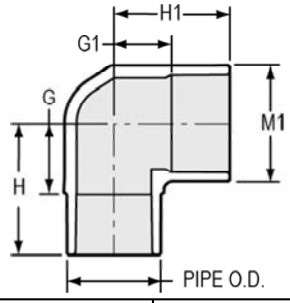
Fipt x Fipt



Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
408-005	1/2	1/2	1- 7/32	1- 3/32	.06
408-007	3/4	1/2	1- 1/4	1- 5/16	.08
408-010	1	5/8	1-17/32	1- 5/8	.15
408-012	1-1/4	1	2	1-31/32	.25
408-015	1-1/2	1-1/8	2-5/32	2-1/4	.34
408-020	2	1- 5/16	2-11/32	2- 3/4	.48

90° Street Ell

Spigot x Socket

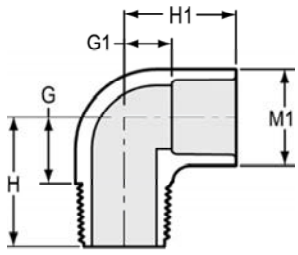


Part Number	Size	G	G1	H	H1	M1	Approx. Wt. (Lbs.)
409-005	1/2	3/4	15/32	1- 15/32	1- 1/4	1- 3/32	.04
409-007	3/4	27/32	17/32	1-27/32	1-17/32	1-11/32	.07
409-010	1	31/32	11/16	2- 3/32	1-13/16	1- 5/8	.12
409-012	1-1/4	1- 3/16	13/16	2-15/32	2- 1/16	1-31/32	.18
409-015	1-1/2	1-11/32	1- 1/16	2- 5/8	2- 3/8	2- 1/4	.24
409-020	2	1-19/32	1-1/16	3	2- 5/8	2-23/32	.34
409-025	2-1/2	1-15/16	1-15/32	3-11/16	3-1/4	3-11/32	.76
409-030	3	2- 9/32	1-13/16	4- 5/32	3-11/16	4	1.08
409-040	4	2-29/32	2- 5/16	4-15/16	4-11/32	5- 1/16	1.85
409-050	5	4- 1/2	3	7- 3/4	6	6- 1/8	4.27
409-060	6	5- 1/4	3- 1/2	8- 7/8	6-15/16	7- 1/2	5.99
409-080	8	6- 3/8	4-15/32	10- 9/16	8- 1/2	9- 5/16	10.70
409-100F*	10	9-9/16	9-9/16	14-13/16	14-13/16	11-1/2	18.20
409-140F*	14	12-15/16	12-15/16	19-15/16	19-15/16	14- 7/8	41.54
409-160F*	16	19-1/4	15-1/4	28-1/4	23-1/4	17	75.48
409-180F*	18	21-13/16	17-5/16	31-13/16	26-5/16	19- 1/8	115.96
409-200F*	20	24-3/8	19-3/8	35-3/8	29-3/8	21- 3/16	151.62
409-240F*	24	29-7/16	23-7/16	42-7/16	35-7/16	25-3/8	227.42

* Fabricated

90° Street Ell

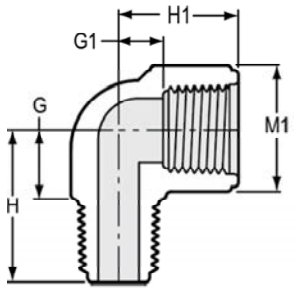
Mipt x Socket



Part Number	Size	G	G1	H	H1	M1	Approx. Wt. (Lbs.)
410-005	1/2	21/32	3/8	1-11/32	1- 5/32	1- 3/32	.04
410-007	3/4	13/16	1/2	1-17/32	1-1/2	1- 5/16	.07
410-010	1	1- 1/32	11/16	1-29/32	1-13/16	1- 5/8	.12
410-012	1-1/4	1-3/16	3/4	2- 3/32	2	2	.18
410-015	1-1/2	1-13/32	1	2-13/32	2- 5/16	2- 7/32	.25
410-020	2	1- 5/8	1-11/32	2- 9/16	2-23/32	2-23/32	.40
410-030	3	2-11/16	1-27/32	3-31/32	3-23/32	4	1.03
410-101	3/4X1/2	23/32	13/32	1- 7/16	1- 1/4	1- 3/32	.05
410-102	3/4X1	3/4	1/2	1- 3/4	1-11/32	1- 5/8	.09

90° Street Ell

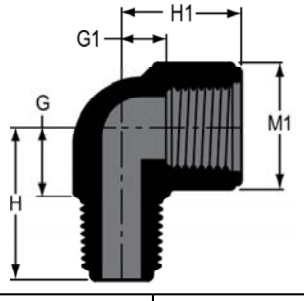
Mipt x Fipt



Part Number	Size	G	G1	H	H1	M1	Approx. Wt. (Lbs.)
412-005	1/2	23/32	11/32	1-13/32	1- 1/16	1- 1/8	.04
412-007	3/4	13/16	7/16	1-17/32	1- 3/16	1-11/32	.06
412-010	1	15/16	9/16	1-25/32	1- 7/16	1- 5/8	.12
412-012	1-1/4	1- 7/32	7/8	2- 7/32	1- 7/8	1-31/32	.19
412-015	1-1/2	1-5/16	1	2-11/32	2- 1/32	2- 7/32	.24
412-020	2	1- 9/16	1- 1/4	2- 3/4	2- 5/16	2-23/32	.38
412-030	3	2-25/32	1- 7/8	4-15/32	3	4- 3/4	1.35

HDPE 90° Street Ell

Mipt x Fipt



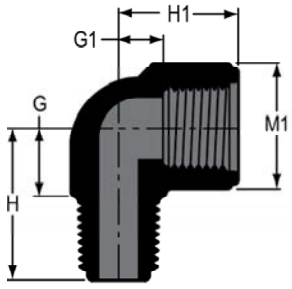
Part Number	Size	G	G1	H	H1	M1	Approx. Wt. (Lbs.)
M412-005	1/2	23/32	11/32	1-13/32	1- 1/16	1- 1/8	.02
M412-007	3/4	13/16	7/16	1-17/32	1- 3/16	1-11/32	.04

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

HDPE 90° Street Ell

(Continued)

Mipt x Fipt

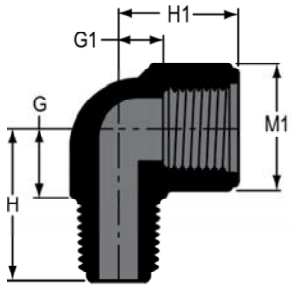


Part Number	Size	G	G1	H	H1	M1	Approx. Wt. (Lbs.)
M412-010	1	15/16	9/16	1-25/32	1- 7/16	1- 5/8	.07
M412-012	1-1/4	1- 7/32	7/8	2- 7/32	1- 7/8	1-31/32	.15
M412-015	1-1/2	1-11/32	1- 1/16	2-11/32	2- 1/8	2- 13/32	.19

High Density Polyethylene - Not NSF-listed - Not pressure rated.

HDPE 90° Street Ell

Mipt x Fipt (Short Pattern)

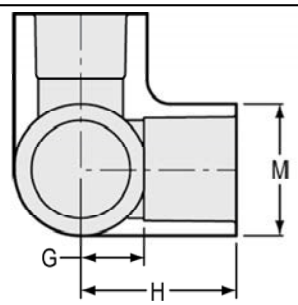


Part Number	Size	G	G1	H	H1	M1	Approx. Wt. (Lbs.)
MS412-005	1/2	21/32	5/16	1- 3/16	31/32	1- 1/16	.02
MS412-007	3/4	13/16	7/16	1- 5/16	1-1/8	1-1/4	.03
MS412-010	1	7/8	9/16	1- 9/16	1- 3/8	1- 9/16	.05
MS412-101	3/4X1/2	21/32	1/2	1- 7/32	1- 1/8	1	.02

High Density Polyethylene - Not NSF-listed - Not pressure rated.

Side Outlet Ell

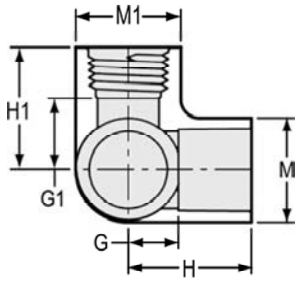
Socket x Socket x Socket



Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
413-005	1/2	1/2	1- 1/4	1- 3/32	.06
413-007	3/4	9/16	1- 9/16	1- 5/16	.09
413-010	1	13/16	1- 7/8	1- 5/8	.17
413-015	1-1/2	1-1/32	2-11/32	2-1/4	.32
413-020	2	1- 5/16	2- 5/8	2- 3/4	.48

Side Outlet Ell

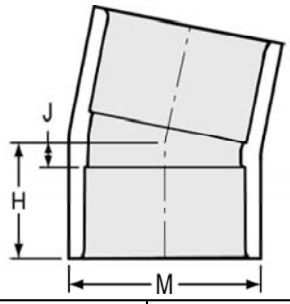
Socket x Socket x Fipt



Part Number	Size	G	G1	H	H1	M	M1	Approx. Wt. (Lbs.)
414-005	1/2	1/2	1/2	1- 1/4	1- 1/4	1- 3/32	1- 3/32	.07
414-007	3/4	9/16	5/8	1- 9/16	1- 7/16	1- 9/32	1- 9/32	.09
414-101	3/4X1/2	9/16	21/32	1- 9/16	1-13/32	1- 5/16	1- 1/16	.09
414-130	1X1/2	11/16	13/16	1-13/16	1- 9/16	1- 5/8	1- 1/16	.14

11-1/4° Ell

Socket x Socket



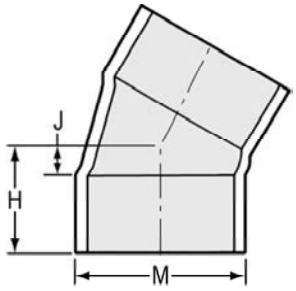
Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
411-005F*	1/2	1- 5/16	5/16	1- 1/16	.05
411-007F*	3/4	1- 5/16	5/16	1- 1/4	.06
411-010F*	1	1- 9/16	5/16	1- 9/16	.12
411-012F*	1-1/4	2	1/2	1- 5/16	.20
411-015	1-1/2	1-19/32	7/32	2- 3/8	.24
411-015F*	1-1/2	2	1/2	2- 3/16	.20
411-020	2	1- 3/4	1/4	2-13/16	.33
411-025F*	2-1/2	2-11/16	11/16	3- 1/4	.54
411-030	3	1- 7/8	5/16	4- 1/8	.87
411-040	4	2-21/32	13/32	5- 1/4	1.51
411-045F*	4-1/2	3- 1/4	3/4	5- 7/16	1.31
411-050F*	5	3-13/16	13/16	6- 1/16	1.87
411-060F*	6	4- 1/4	1	7- 3/16	2.95
411-080F*	8	5- 5/16	1- 1/16	9- 1/4	4.84
411-100F*	10	6-11/16	1-7/16	11- 1/2	9.41
411-120F*	12	7-13/16	1-9/16	13-9/16	14.07
411-140F*	14	9	2	14- 7/8	19.73
411-160F*	16	10-3/8	2-3/8	16-3/4	28.39
411-180F*	18	11-11/16	2-11/16	19- 1/8	42.01
411-200F*	20	13-1/16	3-1/16	21- 3/16	57.10
411-240F*	24	15-3/4	3-3/4	25-3/8	87.68

* Fabricated

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

30° Ell

Socket x Socket

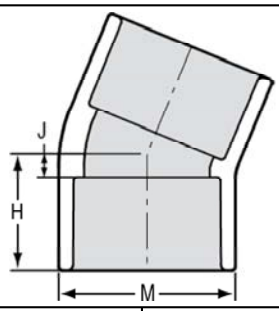


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
415-005F*	1/2	1- 3/8	3/8	1- 1/16	.04
415-007F*	3/4	1- 7/16	7/16	1- 1/4	.06
415-010F*	1	1- 3/4	1/2	1- 9/16	.11
415-012F*	1-1/4	2- 1/8	5/8	1-15/16	.18
415-015F*	1-1/2	2- 3/16	11/16	2- 3/16	.22
415-020F*	2	2- 1/2	3/4	2-11/16	.34
415-025F*	2-1/2	2-15/16	15/16	3- 1/4	.61
415-030F*	3	3- 5/16	1- 1/16	3-15/16	.99
415-040F*	4	3- 7/16	1- 3/16	5	1.39
415-045F*	4-1/2	3- 3/4	1- 1/4	5- 7/16	1.48
415-050F*	5	4- 5/16	1- 5/16	6- 1/16	2.39
415-060F*	6	4- 7/8	1- 5/8	7- 3/16	2.88
415-080F*	8	6- 1/8	1- 7/8	9- 1/4	5.39
415-100F*	10	7-11/16	2-7/16	11- 1/2	10.66
415-120F*	12	9	2-3/4	13-9/16	16.56
415-140F*	14	10-5/16	3-5/16	14- 7/8	21.81
415-160F*	16	11-13/16	3-13/16	17	32.26
415-180F*	18	13-3/8	4-3/8	19- 1/8	48.73
415-200F*	20	14-15/16	4-15/16	21-3/16	63.01
415-240F*	24	18	6	25-3/8	104.12

* Fabricated

22-1/2° Ell

Socket x Socket

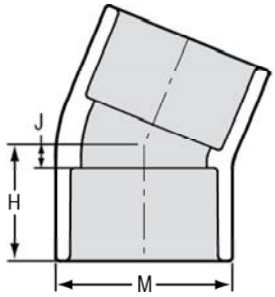


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
416-005	1/2	1- 1/16	3/16	1- 5/32	.05
416-007	3/4	1- 3/16	3/16	1- 7/16	.08
416-010	1	1- 3/8	9/32	1-23/32	.13
416-012	1-1/4	1- 1/2	11/32	2- 3/32	.21
416-015	1-1/2	1-11/32	11/32	2-11/32	.25
416-015F*	1-1/2	2-1/4	3/4	2-3/16	.22
416-020	2	1-23/32	3/8	2-25/32	.24

22-1/2° EII

Socket x Socket

(Continued)

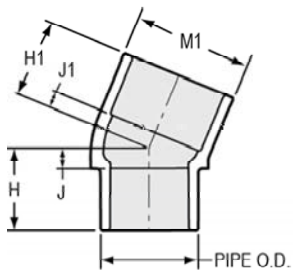


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
416-025	2-1/2	2- 1/4	1/2	3- 1/2	.69
416-025F*	2-1/2	2-13/16	13/16	3- 1/4	.63
416-030	3	2-13/32	9/16	4- 5/32	.83
416-040	4	2-27/32	19/32	5- 3/16	1.68
416-045F*	4-1/2	3- 9/16	1- 1/16	5- 7/16	1.58
416-050F*	5	4- 1/8	1- 1/8	6- 1/16	2.11
416-060	6	4- 9/16	1- 9/32	7- 3/16	4.39
416-060F*	6	4- 5/8	1- 3/8	7- 3/16	3.24
416-080	8	5- 7/8	1- 3/4	9- 3/4	8.38
416-080F*	8	5-13/16	1- 9/16	9- 1/4	5.72
416-100F*	10	7-5/16	2-1/16	11- 1/2	10.62
416-120F*	12	8- 1/2	2- 1/4	13- 9/16	15.73
416-140F*	14	9-3/4	2-3/4	14-7/8	20.77
416-160F*	16	11- 1/4	3- 1/4	17	30.96
416-180F*	18	13- 1/2	4- 1/2	19- 3/16	45.37
416-200F*	20	14-1/8	4-1/8	21- 3/16	59.07
416-240F*	24	17-1/16	5-1/16	25-3/8	98.64

* Fabricated

22-1/2° Street EII

Spigot x Socket



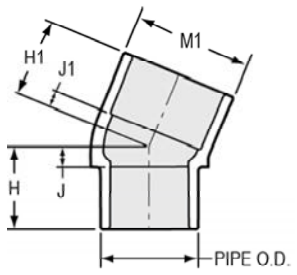
Part Number	Size	H	H1	J	J1	M1	Approx. Wt. (Lbs.)
442-005	1/2	1- 1/16	1	1/4	1/4	1- 5/32	.04
442-007	3/4	1-3/8	1-1/8	11/32	5/32	1-7/16	.07
442-010	1	1-15/32	1- 3/8	11/32	9/32	1-11/16	.13
442-012	1-1/4	1- 1/2	1- 3/8	3/16	1-11/16	2- 1/16	.19
442-015	1-1/2	1-21/32	1- 7/8	9/32	1/2	2- 3/8	.26
442-020	2	2	1-29/32	15/32	13/32	2- 7/8	.39
442-025	2-1/2	2- 7/32	2- 7/32	15/32	15/32	3- 1/2	.66
442-025F*	2-1/2	4- 9/16	1-13/16	13/16	3/16	3- 1/4	.61
442-030	3	2- 1/2	2- 5/16	21/32	7/16	4- 5/32	.95
442-040	4	4- 3/8	2- 7/8	1- 7/8	5/8	5- 1/4	1.64
442-060	6	5-11/16	3-15/16	2- 3/8	7/8	7- 5/8	5.86
442-080	8	7- 3/8	5- 1/8	3- 1/8	1- 1/8	9- 3/4	9.82

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

22-1/2° Street Ell

(Continued)

Spigot x Socket

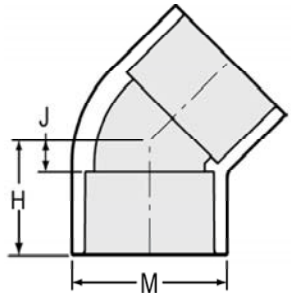


Part Number	Size	H	H1	J	J1	M1	Approx. Wt. (Lbs.)
442-100F*	10	9-9/16	4-7/16	3-9/16	13/16	11-1/2	10.04
442-120F*	12	10-3/8	5-15/16	3-5/8	15/16	13-9/16	15.73

* Fabricated

45° Ell

Socket x Socket

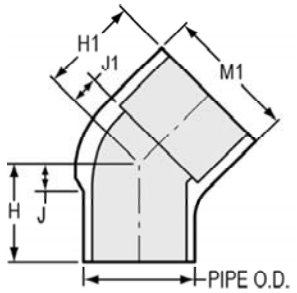


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
417-005	1/2	1	1/4	1- 3/32	.03
417-007	3/4	1- 3/8	7/16	1- 5/16	.07
417-010	1	1- 1/2	15/32	1-21/32	.11
417-012	1-1/4	1-25/32	17/32	2	.16
417-015	1-1/2	1-29/32	19/32	2- 1/4	.21
417-020	2	2- 1/16	11/16	2- 3/4	.31
417-025	2-1/2	2- 7/16	11/16	3- 3/8	.56
417-030	3	2-27/32	27/32	4	.83
417-040	4	3- 3/32	1- 3/32	5- 1/32	1.26
417-045F*	4-1/2	4- 3/16	1-11/16	5- 7/16	1.67
417-050	5	4- 3/8	1- 3/8	6- 5/32	2.44
417-050F*	5	4-13/16	1-13/16	6-1/16	2.29
417-060	6	4- 3/4	1-23/32	7- 9/32	3.58
417-080	8	6	2	9- 3/8	6.56
417-080F*	8	6-7/8	2-5/8	9-1/4	6.60
417-100	10	7-5/8	2-19/32	12-1/8	18.98
417-100F*	10	8-9/16	3-5/16	11-1/2	10.33
417-120	12	9-19/32	3- 3/32	14- 5/16	32.01
417-120F*	12	9-1/16	3-3/16	15-3/8	15.96
417-140	14	10- 5/16	3- 5/16	15- 5/8	79.13
417-140F*	14	11-7/16	4-7/16	14- 7/8	24.92
417-160F*	16	13-1/8	5-1/8	17	34.85
417-180F*	18	14- 7/8	5- 7/8	19- 1/8	52.09
417-200F*	20	16-9/16	6-9/16	21- 3/16	68.92
417-240F*	24	19-15/16	7-15/16	25-3/8	112.34

* Fabricated

45° Street Ell

Spigot x Socket

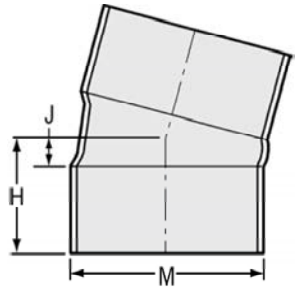


Part Number	Size	H	H1	J	J1	M1	Approx. Wt. (Lbs.)
427-005	1/2	1- 9/32	1- 9/32	11/32	13/32	1- 3/16	.06
427-007	3/4	1- 1/2	1-17/32	7/16	17/32	1-13/32	.09
427-010	1	1-9/16	1-3/8	5/8	5/16	1-5/8	.09
427-012	1-1/4	1-25/32	1-29/32	1/2	21/32	2- 3/32	.22
427-015	1-1/2	2- 1/32	1-3/4	11/16	7/16	2-1/4	.19
427-020	2	2	2	5/8	5/8	2-23/32	.29
427-025	2-1/2	2- 5/8	2- 5/8	3/4	7/8	3-11/32	.59
427-030	3	2-31/32	3- 1/32	1	1- 7/32	4- 5/32	1.18
427-040	4	3-29/32	3-5/16	1-1/32	1-1/16	5-1/4	2.14
427-050	5	6- 1/8	4- 3/8	2- 7/8	1- 3/8	6- 1/16	3.64
427-060	6	5- 1/4	6- 1/4	1- 3/4	3	7- 5/8	5.72
427-080	8	6- 5/8	5-31/32	2-19/32	1- 3/4	9- 3/4	10.59
427-140F*	14	10-7/8	10-7/8	3-7/8	3-7/8	14-7/8	22.00
427-160F*	16	18-1/8	13-1/8	9-1/8	5-1/8	17	44.00
427-180F*	18	20-3/8	14-7/8	10-3/8	5-7/8	19-1/8	66.00
427-200F*	20	16-9/16	22-9/16	6-9/16	11-9/16	20	84.00
427-240F*	24	26-15/16	19-15/16	13-15/16	7-15/16	25-3/8	147.96

* Fabricated

15° Ell

Socket x Socket



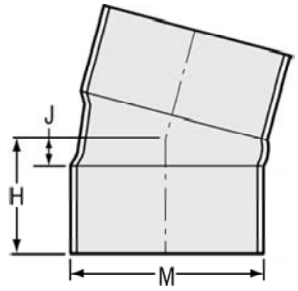
Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
418-005F*	1/2	1- 5/16	5/16	1- 1/16	.04
418-007F*	3/4	1- 5/16	5/16	1- 1/4	.06
418-010F*	1	1- 5/8	3/8	1- 9/16	.09
418-012F*	1-1/4	2	1/2	1-15/16	.17
418-015F*	1-1/2	2	1/2	2- 3/16	.19
418-020F*	2	2- 5/16	9/16	2-11/16	.35
418-025F*	2-1/2	2- 3/4	3/4	3- 1/4	.57
418-030F*	3	3	3/4	3-15/16	.77
418-040F*	4	3	13/16	5	1.12
418-045F*	4-1/2	3- 3/8	7/8	5- 7/16	1.35
418-050F*	5	3- 7/8	7/8	6- 1/16	1.88

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

15° Ell

Socket x Socket

(Continued)

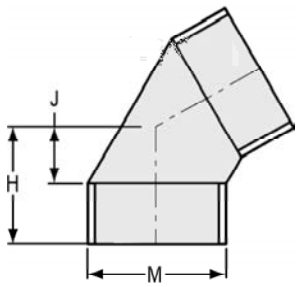


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
418-060F*	6	4- 3/8	1- 1/8	7- 3/16	2.95
418-080F*	8	5- 1/2	1- 1/4	9- 1/4	5.28
418-100F*	10	6-7/8	1-5/8	11- 1/2	9.41
418-120F*	12	8	1-3/4	13- 9/16	14.90
418-140F*	14	9-1/4	2-1/4	14-7/8	20.77
418-160F*	16	10- 5/8	2- 5/8	17	29.68
418-180F*	18	12	3	19- 1/8	43.69
418-200F*	20	13-7/16	3-7/16	21-3/16	57.10
418-240F*	24	16-3/16	4-3/16	25-3/8	95.90

* Fabricated

60° Ell

Socket x Socket

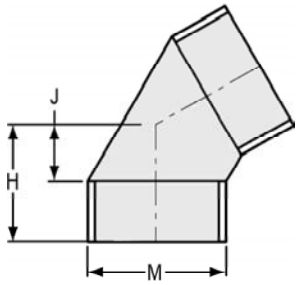


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
424-005F*	1/2	1- 5/8	5/8	1- 1/16	.12
424-007F*	3/4	1-11/16	11/16	1- 1/4	.06
424-010F*	1	2	3/4	1- 9/16	.11
424-012F*	1-1/4	2- 1/2	1	1-15/16	.38
424-015F*	1-1/2	2- 9/16	1- 1/16	2- 3/16	.24
424-020F*	2	2-15/16	1- 3/16	2-11/16	.34
424-025F*	2-1/2	3- 1/2	1- 1/2	3- 1/4	1.37
424-030F*	3	3- 5/8	1- 3/8	3-15/16	1.11
424-040F*	4	4- 1/4	2	5	2.95
424-045F*	4-1/2	4- 5/8	2- 1/8	5- 7/16	2.96
424-050F*	5	5- 5/16	2- 5/16	6- 1/16	2.42
424-060F*	6	6- 1/16	2-13/16	7- 3/16	3.54
424-080F*	8	7- 5/8	3- 3/8	9- 1/4	6.60
424-100F*	10	9-9/16	4-5/16	11- 1/2	11.60
424-120F*	12	11-3/16	4- 15/16	13- 9/16	17.46
424-140F*	14	12-3/4	5-3/4	14-7/8	25.96
424-160F*	16	14-5/8	6-5/8	17	36.38
424-180F*	18	16-9/16	7-9/16	19-1/8	94.11

60° Ell

Socket x Socket

(Continued)

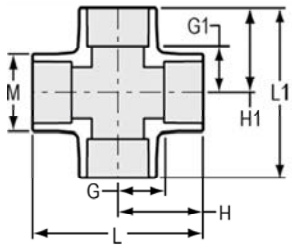


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
424-240F*	24	22-3/16	10-3/16	25-3/8	122.08

* Fabricated

Cross

Socket x Socket x Socket x Socket



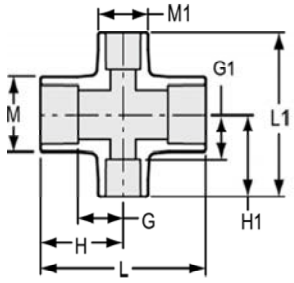
Part Number	Size	G	G1	H	H1	L	L1	M	Approx. Wt. (Lbs.)
420-005	1/2	17/32	17/32	1-9/32	1-9/32	2-17/32	2-17/32	1- 3/32	.07
420-007	3/4	9/16	9/16	1- 9/16	1- 9/16	3- 1/8	3- 1/8	1- 5/16	.11
420-010	1	13/16	13/16	1-15/16	1-15/16	3- 7/8	3- 7/8	1- 5/8	.23
420-012	1-1/4	1- 3/32	1- 3/32	2-11/32	2-11/32	4-23/32	4-23/32	2- 1/16	.42
420-015	1-1/2	1- 1/4	1- 1/4	2-19/32	2-19/32	5- 5/32	5- 5/32	2- 5/16	.53
420-020	2	1-17/32	1-17/32	2-29/32	2-29/32	5-27/32	5-27/32	2-13/16	.78
420-025	2-1/2	1-21/32	1-21/32	3-21/32	3-21/32	7-11/32	7-11/32	3- 3/8	1.54
420-030	3	2- 1/16	2- 1/16	3-15/16	3-15/16	7-29/32	7-29/32	4- 1/32	1.74
420-040	4	2- 1/2	2- 1/2	4- 1/2	4- 1/2	9- 1/32	9- 1/32	5- 1/32	3.23
420-050F*	5	6	6	9	9	18	18	6- 1/16	9.55
420-060F*	6	6- 3/16	6- 3/16	9- 7/16	9- 7/16	18- 7/8	18- 7/8	7- 3/16	13.68
420-080F*	8	8- 9/16	8- 9/16	12-13/16	12-13/16	25- 5/8	25- 5/8	9- 1/4	26.87
420-100F*	10	9- 7/8	9- 3/8	15- 1/8	14- 5/8	30- 1/4	29- 1/4	11- 1/2	43.94
420-120F*	12	10- 3/4	10- 3/16	17	16- 7/16	34	32- 7/8	13- 9/16	83.64
420-140F*	14	11- 1/4	11	18- 3/8	18	36- 3/4	36	14- 7/8	86.20
420-160F*	16	15	12- 7/8	23	20- 7/8	46	41- 3/4	17	128.98
420-180F*	18	15- 7/8	13- 3/8	24- 7/8	22- 3/8	49- 3/4	44- 3/4	19- 1/8	176.46
420-200F*	20	18- 1/4	15- 1/2	28- 1/4	25- 1/2	56- 1/2	51	21- 3/16	153.70
420-240F*	24	21- 1/8	17- 1/2	33- 1/8	29- 1/2	66- 1/4	59	25- 3/8	253.35

* Fabricated

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Cross - Reducing

Socket x Socket x Socket x Socket

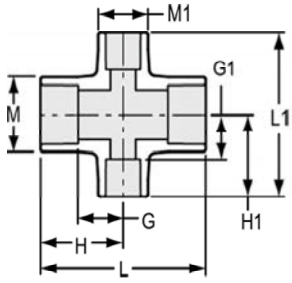


Part Number	Size	G	G1	H	H1	L	L1	M	M1	Approx. Wt. (Lbs.)
420-101[1]	3/4X1/2	1- 7/16	1- 1/16	1- 9/16	1-13/16	3- 1/8	3- 5/8	1- 5/16	1- 5/16	.15
420-131	1X3/4	23/32	5/8	1- 5/8	1- 5/8	3- 1/4	3- 1/4	1- 7/8	1-17/32	.29
420-167[1]	1-1/4X3/4	1- 1/8	1-21/32	2-11/32	2-21/32	4-11/16	5- 5/16	2- 1/32	2- 1/32	.61
420-168[1]	1-1/4X1	1- 3/32	1- 9/16	2-11/32	2- 5/8	4-23/32	5- 7/32	2- 1/16	2- 1/16	.54
420-248[1]	2X3/4	11/16	1- 7/16	2- 7/32	2- 7/16	4-13/32	4- 7/8	2-29/32	1-13/32	.54
420-249	2X1	13/16	1- 3/8	2- 3/16	2- 1/2	4- 3/8	5	2- 3/4	1- 5/8	.39
420-250[1]	2X1-1/4	1- 9/16	2- 1/16	2-15/16	3-15/16	5-27/32	6- 5/8	2-13/16	2-13/16	1.14
420-251[1]	2X1-1/2	1-17/32	1-25/32	2-29/32	3- 1/8	5-13/16	6- 1/4	2-25/32	2-25/32	1.04
420-288[1]	2-1/2X3/4	1-21/32	3- 3/32	3-21/32	4- 3/32	7-11/32	8- 7/32	3- 3/8	3- 3/8	2.21
420-289[1]	2-1/2X1	7/8	1-23/32	2-11/16	2- 7/8	5-11/32	5- 3/4	3- 1/2	1- 3/4	.96
420-335[1]	3X1	1-15/16	3- 1/4	3-15/16	4- 3/8	7- 7/8	8- 3/4	4	4	2.71
420-336[1]	3X1-1/4	2	3- 1/8	3-15/16	4- 3/8	7- 7/8	8- 3/4	4	4	2.71
420-337[1]	3X1-1/2	1-31/32	3- 1/16	3-31/32	4- 3/8	7-15/16	8-23/32	4- 1/32	4- 1/32	2.69
420-338[1]	3X2	2- 1/16	2- 5/8	3-31/32	4- 9/32	7-29/32	8- 9/16	4- 1/32	4- 1/32	2.67
420-339[1]	3X2-1/2	1-15/16	2-11/32	3-15/16	4-11/32	7- 7/8	8-11/16	4	4	2.48
420-420[1]	4X2	2- 1/2	3-17/32	4- 1/2	4-29/32	9- 1/32	9-13/16	5- 1/32	5- 1/4	4.95
420-421[1]	4X2-1/2	2- 1/2	2-15/16	4- 1/2	4-15/16	9	9- 7/8	5	5	4.74
420-422[1]	4X3	2- 1/2	2-15/16	4- 1/2	4-15/16	9	9- 7/8	5	5	4.81
420-528F*	6X2	5- 1/8	5- 5/16	8- 3/8	7- 1/16	16- 3/4	14- 1/8	7- 3/16	2-11/16	8.31
420-529F*	6X2 1/2	5- 3/8	5-13/16	8- 5/8	7-13/16	17- 1/4	15- 5/8	7- 3/16	3- 1/4	8.56
420-530F*	6X3	5- 7/8	6- 1/16	9- 1/8	8- 5/16	18- 1/4	16- 5/8	7- 3/16	3-15/16	8.83
420-532F*	6X4	6- 1/2	6- 3/8	9- 3/4	8- 5/8	19- 1/2	17- 1/4	7- 3/16	5	10.20
420-578F*	8X2	5- 5/16	6- 1/4	9- 9/16	8	19- 1/8	16	9- 1/4	2-11/16	13.59
420-580F*	8X3	5-11/16	7	9-15/16	9- 1/4	19- 7/8	18- 1/2	9- 1/4	3-15/16	15.75
420-582F*	8X4	6- 5/16	7- 5/16	10- 9/16	9- 9/16	21- 1/8	19- 1/8	9- 1/4	5	17.10
420-585F*	8X6	7- 5/16	7- 3/8	11- 9/16	10- 5/8	23- 1/8	21- 1/4	9- 1/4	7- 3/16	20.11
420-621F*	10X2	4- 7/8	7- 1/4	10- 1/8	9	20- 1/4	18	11- 1/2	2-11/16	18.96
420-622F*	10X2-1/2	5- 5/8	7- 3/4	10- 7/8	9- 3/4	21- 3/4	19- 1/2	11- 1/2	3- 1/4	21.50
420-623F*	10X3	5- 3/8	8	10- 5/8	10- 1/4	21- 1/4	20- 1/2	11- 1/2	3-15/16	20.02
420-624F*	10X4	5- 7/8	8- 5/16	11- 1/8	10- 9/16	22- 1/4	21- 1/8	11- 1/2	5	22.73
420-626F*	10X6	6- 7/8	8- 3/8	12- 1/8	11- 5/8	24- 1/4	23- 1/4	11- 1/2	7- 3/16	26.47
420-628F*	10X8	8- 1/2	8- 5/16	13- 3/4	12- 9/16	27- 1/2	25- 1/8	11- 1/2	9- 1/4	33.72
420-661F*	12X2	5- 1/4	8- 1/4	11- 1/2	10	23	20	13- 9/16	2-11/16	29.47
420-662F*	12X2-1/2	5- 3/4	8- 3/4	12	10- 3/4	24	21- 1/2	13- 9/16	3- 1/4	29.06
420-663F*	12X3	5- 3/4	9	12	11- 1/4	24	22- 1/2	13- 9/16	3-15/16	27.42
420-664F*	12X4	7	9- 5/16	13- 1/4	11- 9/16	26- 1/2	23- 1/8	13- 9/16	5	32.73
420-666F*	12X6	8	9- 3/8	14- 1/4	12- 5/8	28- 1/2	25- 1/4	13- 9/16	7- 3/16	38.54
420-668F*	12X8	8- 3/4	9- 5/16	15	13- 9/16	30	27- 1/8	13- 9/16	9- 1/4	45.81
420-670F*	12X10	10- 1/4	10- 3/8	16- 1/2	15- 5/8	33	31- 1/4	13- 9/16	11- 1/2	46.41

Cross - Reducing

Socket x Socket x Socket x Socket

(Continued)



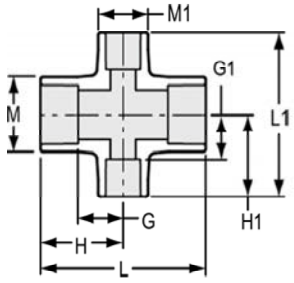
Part Number	Size	G	G1	H	H1	L	L1	M	M1	Approx. Wt. (Lbs.)
420-691F*	14X2	5- 7/8	8-13/16	12- 7/8	10- 9/16	25- 3/4	21- 1/8	14- 7/8	2-11/16	36.88
420-693F*	14X3	6- 1/2	9- 9/16	13- 1/2	11-13/16	27	23- 5/8	14- 7/8	3-15/16	40.83
420-694F*	14X4	7- 3/8	9- 7/8	14- 3/8	12- 1/8	28- 3/4	24- 1/4	14- 7/8	5	44.62
420-696F*	14X6	7- 7/8	9-15/16	14- 7/8	13- 3/16	29- 3/4	26- 3/8	14- 7/8	7- 3/16	49.43
420-698F*	14X8	8- 7/8	9- 7/8	15- 7/8	14- 1/8	31- 3/4	28- 1/4	14- 7/8	9- 1/4	53.85
420-700F*	14X10	10- 3/8	10-15/16	17- 3/8	16- 3/16	34- 3/4	32- 3/8	14- 7/8	11- 1/2	69.35
420-702F*	14X12	11- 3/8	10- 3/4	18- 3/8	17	36- 3/4	34	14- 7/8	13- 9/16	66.56
420-751F*	16X2	6- 3/8	9- 3/4	14- 3/8	11- 1/2	28- 3/4	23	17	2-11/16	66.96
420-753F*	16X3	6- 1/2	10- 1/2	14- 1/2	12- 3/4	29	25- 1/2	17	3-15/16	42.90
420-754F*	16X4	8	10-13/16	16	13- 1/16	32	26- 1/8	17	5	62.48
420-756F*	16X6	9	10- 7/8	17	14- 1/8	34	28- 1/4	17	7- 3/16	66.59
420-758F*	16X8	10	10-13/16	18	15- 1/16	36	30- 1/8	17	9- 1/4	77.97
420-760F*	16X10	11	11- 7/8	19	17- 1/8	38	34- 1/4	17	11- 1/2	80.00
420-762F*	16X12	12	11-11/16	20	17-15/16	40	35- 7/8	17	13- 9/16	91.40
420-764F*	16X14	13	11-15/16	21	18-15/16	42	37- 7/8	17	14- 7/8	108.37
420-781F*	18X2	6- 1/4	10-11/16	15- 1/4	12- 7/16	30- 1/2	24- 7/8	19- 1/8	2-11/16	66.00
420-783F*	18X3	7- 1/4	11- 7/16	16- 1/4	13-11/16	32- 1/2	27- 3/8	19- 1/8	3-15/16	78.56
420-784F*	18X4	7- 3/4	11- 3/4	16- 3/4	14	33- 1/2	28	19- 1/8	5	78.50
420-786F*	18X6	8- 3/4	11-13/16	17- 3/4	15- 1/16	35- 1/2	30- 1/8	19- 1/8	7- 3/16	84.00
420-788F*	18X8	9- 3/4	11- 3/4	18- 3/4	16	37- 1/2	32	19- 1/8	9- 1/4	93.50
420-790F*	18X10	10- 3/4	12-13/16	19- 3/4	18- 1/16	39- 1/2	36- 1/8	19- 1/8	11- 1/2	89.64
420-792F*	18X12	11- 3/4	12- 5/8	20- 3/4	18- 7/8	41- 1/2	37- 3/4	19- 1/8	13- 9/16	111.65
420-794F*	18X14	12- 7/8	12- 7/8	21- 7/8	19- 7/8	43- 3/4	39- 3/4	19- 1/8	14- 7/8	133.94
420-796F*	18X16	13- 7/8	13-13/16	22- 7/8	21-13/16	45- 3/4	43- 5/8	19- 1/8	17	145.79
420-811F*	20X2	6- 3/4	12- 7/16	16- 3/4	14- 3/16	33- 1/2	28- 3/8	21- 3/16	2-11/16	91.28
420-813F*	20X3	7- 1/4	12- 7/16	17- 1/4	14-11/16	34- 1/2	29- 3/8	21- 3/16	3-15/16	96.08
420-814F*	20X4	8- 1/4	12- 3/4	18- 1/4	15	36- 1/2	30	21- 3/16	5	95.81
420-816F*	20X6	9- 1/4	12-13/16	19- 1/4	16- 1/16	38- 1/2	32- 1/8	21- 3/16	7- 3/16	105.00
420-818F*	20X8	10- 1/4	12- 3/4	20- 1/4	17	40- 1/2	34	21- 3/16	9- 1/4	115.00
420-820F*	20X10	11- 1/4	13-13/16	21- 1/4	19- 1/16	42- 1/2	38- 1/8	21- 3/16	11- 1/2	126.29
420-822F*	20X12	12- 1/4	13- 5/8	22- 1/4	19- 7/8	44- 1/2	39- 3/4	21- 3/16	13- 9/16	140.45
420-824F*	20X14	13- 1/4	13- 7/8	23- 1/4	20- 7/8	46- 1/2	41- 3/4	21- 3/16	14- 7/8	165.99
420-826F*	20X16	14- 1/4	14-13/16	24- 1/4	22-13/16	48- 1/2	45- 5/8	21- 3/16	17	165.33
420-828F*	20X18	15- 1/4	14- 3/8	25- 1/4	23- 3/8	50- 1/2	46- 3/4	21- 3/16	19- 1/8	193.91
420-901F*	24X2	8- 1/8	14- 5/16	20- 1/8	16- 1/16	40- 1/4	32- 1/8	25- 3/8	2-11/16	95.94
420-903F*	24X3	8- 5/8	14- 5/16	20- 5/8	16- 9/16	41- 1/4	33- 1/8	25- 3/8	3-15/16	152.79
420-904F*	24X4	9- 1/8	14- 5/8	21- 1/8	16- 7/8	42- 1/4	33- 3/4	25- 3/8	5	167.00
420-906F*	24X6	10- 1/8	14-11/16	22- 1/8	17-15/16	44- 1/4	35- 7/8	25- 3/8	7- 3/16	179.89
420-908F*	24X8	11- 1/8	14- 5/8	23- 1/8	18- 7/8	46- 1/4	37- 3/4	25- 3/8	9- 1/4	193.00

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Cross - Reducing

(Continued)

Socket x Socket x Socket x Socket

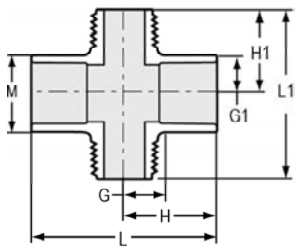


Part Number	Size	G	G1	H	H1	L	L1	M	M1	Approx. Wt. (Lbs.)
420-910F*	24X10	12- 1/8	15-11/16	24- 1/8	20-15/16	48- 1/4	41- 7/8	25- 3/8	11- 1/2	190.13
420-912F*	24X12	13- 1/8	15- 1/2	25- 1/8	21- 3/4	50- 1/4	43- 1/2	25- 3/8	13- 9/16	205.85
420-914F*	24X14	13- 3/4	15- 3/4	25- 3/4	22- 3/4	51- 1/2	45- 1/2	25- 3/8	14- 7/8	235.25
420-916F*	24X16	14- 3/4	16-11/16	26- 3/4	24-11/16	53- 1/2	49- 3/8	25- 3/8	17	243.81
420-918F*	24X18	15- 3/4	16- 1/4	27- 3/4	25- 1/4	55- 1/2	50- 1/2	25- 3/8	19- 1/8	268.13
420-920F*	24X20	16- 3/4	17- 3/8	28- 3/4	27- 3/8	57- 1/2	54- 3/4	25- 3/8	21- 3/16	292.78

[1] Outlet sized with Bushing
* Fabricated

Cross

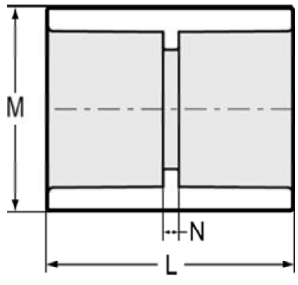
Socket x Mipt x Socket x Mipt



Part Number	Size	G	G1	H	H1	L	L1	M	Approx. Wt. (Lbs.)
421A-010	1	21/32	1-1/32	1-23/32	1- 7/8	3-7/16	3- 3/4	1- 5/8	.18

Coupling

Socket x Socket

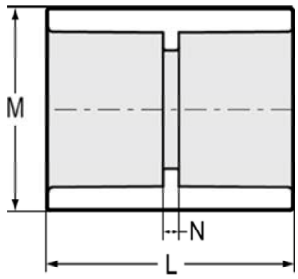


Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
429-003	3/8	2- 5/8	7/8	1/8	.03
429-005	1/2	1-19/32	1- 3/32	3/32	.03
429-005N	1/2	1-5/8	1-1/16	3/32	.02
429-007	3/4	2- 3/32	1- 5/16	3/32	.04
429-007N	3/4	2- 3/32	1- 5/16	3/32	.05
429-010	1	2- 1/8	1-19/32	1/8	.07
429-010N	1	2-11/32	1-21/32	3/32	.09
429-012	1-1/4	2-11/32	1-31/32	3/32	.10
429-015	1-1/2	2- 5/8	2- 7/32	1/16	.12

Coupling

Socket x Socket

(Continued)

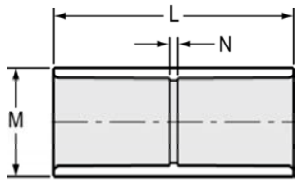


Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
429-020	2	2- 7/8	2- 3/4	3/32	.21
429-025	2-1/2	3- 3/4	3- 5/16	3/16	.40
429-030	3	3-31/32	4	3/16	.56
429-040	4	4- 1/4	5- 1/32	3/16	.85
429-045F*	4-1/2	6- 7/8	5- 7/16	1- 7/8	1.45
429-050	5	6- 3/16	6- 1/8	3/16	1.66
429-060	6	6- 5/16	7- 1/4	1/4	2.11
429-080	8	8-11/32	9-11/32	1/4	4.18
429-100	10	10- 3/8	11- 9/16	15/32	7.29
429-100F*	10	12- 3/8	11- 1/2	1- 7/8	8.39
429-120	12	12- 3/8	13-21/32	3/8	11.71
429-120F*	12	14- 3/4	13- 9/16	2- 1/4	13.25
429-140	14	14-13/32	15- 5/8	7/16	27.26
429-140F*	14	16- 1/4	14- 7/8	2- 1/4	17.65
429-160F*	16	18- 5/8	17	2- 5/8	27.00
429-180F*	18	21- 3/4	19- 1/8	3- 3/4	38.65
429-200F*	20	24	21- 3/16	4	49.22
429-240F*	24	29- 1/4	25- 3/8	5- 1/4	82.20

* Fabricated

Coupling - Deep Socket

Socket x Socket



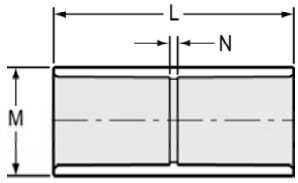
Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
479-005N	1/2	2- 1/2	1- 1/16	3/16	.03
479-007	3/4	2- 7/8	1- 5/16	3/32	.07
479-010	1	3- 5/8	1- 5/8	3/32	.12
479-012	1-1/4	4-3/32	1-31/32	3/32	.18
479-015	1-1/2	4- 5/8	2- 1/4	1/8	.24
479-020	2	5- 3/32	2- 3/4	3/32	.36
479-025	2-1/2	7- 1/2	3- 5/16	1/4	.79
479-030	3	8	4	1/4	1.05
479-040	4	8-5/32	5	3/16	1.53
479-045F*	4-1/2	9-1/2	5-9/16	1-1/2	1.91
479-060F*	6	12	7-3/16	1-1/2	3.72

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Coupling - Deep Socket

(Continued)

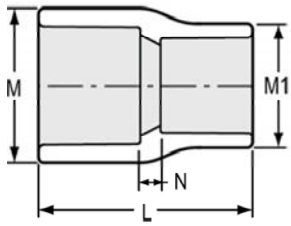
Socket x Socket



* Fabricated

Coupling - Reducer

Socket x Socket

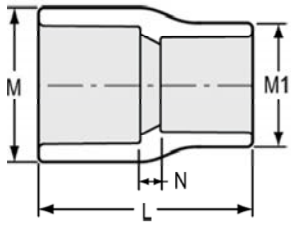


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
429-101	3/4X1/2	1-25/32	1- 5/16	1- 3/32	1/8	.03
429-130[1]	1X1/2	2- 7/32	1- 5/8	1- 3/32	13/32	.07
429-131	1X3/4	2- 1/8	1- 5/8	1- 5/16	1/8	.06
429-166[1]	1-1/4X1/2	2- 9/16	2- 3/32	1- 5/32	7/16	.13
429-167	1-1/4X3/4	2-19/32	1-31/32	1- 5/16	15/32	.10
429-168	1-1/4X1	2-11/16	2- 1/8	1- 3/4	5/16	.16
429-210	1-1/2X3/4	2-27/32	2-13/32	1-13/32	15/32	.21
429-211[1]	1-1/2X1	2-23/32	2- 7/32	1- 5/8	3/8	.13
429-212	1-1/2X1-1/4	2-13/16	2-13/32	2- 1/8	5/32	.21
429-247[1]	2X1/2	3- 3/32	2- 7/8	1- 5/32	11/16	.29
429-248[1]	2X3/4	3- 7/32	2- 7/8	1-13/32	23/32	.30
429-249[1]	2X1	3- 1/2	2-13/16	2- 5/16	3/4	.32
429-250	2X1-1/4	3- 1/16	2-23/32	1-31/32	17/32	.19
429-251	2X1-1/2	2-13/16	2-27/32	2- 1/4	1/8	.18
429-291[1]	2-1/2X1-1/2	3- 3/4	3- 1/2	2- 3/8	19/32	.51
429-292	2-1/2X2	3- 5/8	3-15/32	2- 7/8	7/16	.48
429-335[1]	3X1	4- 3/16	4- 5/32	2- 7/8	1- 1/4	.91
429-337[1]	3X1-1/2	4- 3/16	4- 5/32	2-29/32	1	.69
429-338	3X2	4	4- 5/32	2- 7/8	5/8	.74
429-339	3X2-1/2	4- 5/16	4	4	21/32	.56
429-340F*	3X2-1/2	5- 5/8	3- 7/8	3- 1/4	1- 3/8	.68
429-416[1]	4X3/4	5- 7/32	5- 1/32	2-25/32	2- 3/16	1.03
429-417[1]	4X1	5- 1/4	5- 1/32	2-25/32	2- 5/32	1.03
429-420	4X2	5	5- 1/32	2-3/4	1- 5/8	.87
429-421[1]	4X2-1/2	5	5- 1/4	4- 1/8	3/4	1.27
429-422	4X3	4- 5/8	5- 1/4	4- 5/32	15/32	1.25
429-422F*	4X3	6-3/4	4-15/16	3-15/16	2-1/4	1.11
429-460F*	4-1/2X4	6-11/16	5- 7/16	5	1-15/16	1.27

Coupling - Reducer

(Continued)

Socket x Socket



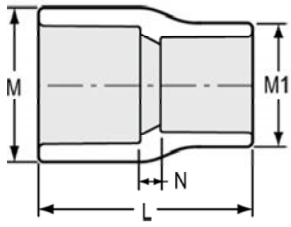
Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
429-582F*	8X4	14-1/2	9-1/4	5	8	5.18
429-583F*	8X5	14- 1/4	9- 3/16	6- 1/16	7	5.16
429-585	8X6	8-13/32	9-11/32	7- 9/32	1-11/32	4.00
429-585F*	8X6	11	9-1/4	7-1/4	3-1/2	4.62
429-621F*	10X2	17-11/16	11- 3/8	5	11-1/8	8.57
429-623F*	10X3	17-11/16	11- 3/8	5	10-9/16	7.73
429-624	10X4	10- 7/16	11-17/32	5- 1/16	3-11/32	7.35
429-624F*	10X4	17-3/8	11- 3/8	5	9-7/8	7.18
429-626	10X6	10- 7/16	11- 9/16	7- 9/32	2- 1/4	7.11
429-626F*	10X6	13- 7/8	11- 3/8	7- 1/4	5- 3/8	6.61
429-628	10X8	10- 7/16	11- 5/8	9- 3/8	1- 3/8	7.07
429-628F*	10X8	13- 1/4	11- 9/16	9- 7/16	3- 3/4	8.95
429-661F*	12X2	24-3/8	13-9/16	5	16-3/4	19.15
429-663F*	12X3	24-5/16	13-9/16	5	16-31/6	15.85
429-664F*	12X4	24	13- 9/16	5	15- 1/2	15.20
429-665F*	12X5	23-3/4	13-9/16	6-1/16	14-1/2	16.51
429-666	12X6	12-13/32	13-21/32	7- 9/32	3- 9/32	10.46
429-666F*	12X6	20- 1/2	13- 9/16	7- 1/4	11	14.72
429-668	12X8	12-13/32	13-21/32	9- 3/8	2- 1/4	10.57
429-668F*	12X8	15- 3/4	13- 9/16	9- 7/16	5- 1/4	12.30
429-670	12X10	12-3/8	13-21/32	11-19/32	1-9/32	10.83
429-670F*	12X10	15- 1/8	13- 9/16	11- 9/16	3- 5/8	13.16
429-693F*	14X3	26- 3/16	14-13/16	5	17- 5/16	18.94
429-694F*	14X4	25- 7/8	14-13/16	5	16- 5/8	17.51
429-696F*	14X6	22- 3/8	14-13/16	7- 1/4	12- 1/8	17.18
429-698F*	14X8	21-3/4	14- 3/4	9-7/16	10-1/2	17.15
429-700F*	14X10	17	14-13/16	11- 9/16	4- 3/4	14.51
429-702F*	14X12	16- 1/2	15	13- 3/4	3- 1/4	19.05
429-751F*	16X2	32- 7/8	17	5	23- 1/2	33.95
429-754F*	16X4	32- 1/2	17	5	22- 1/4	29.72
429-756F*	16X6	29	17	7- 3/16	17- 3/4	30.08
429-758F*	16X8	24- 3/4	17	9- 7/16	12- 1/2	28.87
429-760F*	16X10	24	17	11- 9/16	10- 3/4	30.50
429-762F*	16X12	18- 7/8	17	13- 3/4	4- 5/8	22.64
429-764F*	16X14	18- 1/2	16- 7/8	14- 7/8	3- 1/2	22.84
429-786F*	18X6	38	19	7- 3/16	25- 3/4	50.29
429-788F*	18X8	33- 3/4	19	9- 7/16	20- 1/2	46.36
429-790F*	18X10	33	19	11- 9/16	18- 3/4	46.43
429-792F*	18X12	27- 7/8	19	13- 5/8	12- 5/8	44.77
429-794F*	18X14	27- 1/2	19	14- 7/8	11- 1/2	44.48

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Coupling - Reducer

(Continued)

Socket x Socket

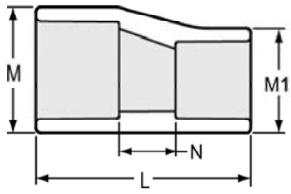


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
429-796F*	18X16	21- 5/8	19	17	4- 5/8	30.97
429-814F*	20X4	50- 1/2	21- 1/8	5	38- 1/4	74.00
429-816F*	20X6	47	21- 1/8	7- 3/16	33- 3/4	74.44
429-818F*	20X8	42- 3/4	21- 1/8	9- 7/16	28- 1/2	72.15
429-820F*	20X10	42	21- 1/8	11- 9/16	26- 3/4	82.75
429-822F*	20X12	36- 7/8	21- 1/8	13- 3/4	20- 5/8	74.24
429-824F*	20X14	36- 1/2	21- 3/8	14- 7/8	19- 1/2	75.07
429-826F*	20X16	30- 5/8	21- 1/8	17	12- 5/8	58.52
429-828F*	20X18	23- 1/4	21- 1/8	19- 1/8	4- 1/4	45.37
429-906F*	24X6	59- 1/4	25- 3/16	7- 3/16	44	145.04
429-908F*	24X8	55	25- 3/16	9- 7/16	38- 3/4	124.96
429-910F*	24X10	54- 1/4	25- 3/16	11- 9/16	37	126.88
429-912F*	24X12	49- 1/8	25- 3/16	13- 3/4	30- 7/8	108.48
429-914F*	24X14	48- 3/4	25- 3/16	14- 7/8	29- 3/4	106.10
429-916F*	24X16	42- 7/8	25- 3/16	17	22- 7/8	107.16
429-918F*	24X18	35- 1/2	25- 3/16	19- 1/8	14- 1/2	90.14
429-920F*	24X20	28- 3/4	25- 3/16	21- 3/16	6- 3/4	61.04

[1] Outlet sized with Bushing
* Fabricated

Coupling - Eccentric Reducer

Socket x Socket

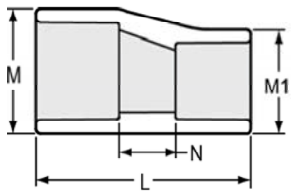


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
429-131FE*	1X3/4	3-5/8	1-9/16	1-1/4	1-3/8	.07
429-168FE*	1-1/4X1	4-1/4	1-15/16	1-9/16	1-1/2	.11
429-211FE*	1-1/2X1	5-3/16	2-3/16	1-9/16	2-7/16	.16
429-212FE*	1-1/2X1-1/4	4- 5/8	2- 3/16	1-15/16	1- 5/8	.19
429-249FE*	2X1	8-3/8	2-11/16	1-9/16	5-3/8	.38
429-250FE*	2X1-1/4	5- 3/4	2- 5/8	1-15/16	2- 1/2	.28
429-251FE*	2X1-1/2	5-1/8	2-11/16	2- 3/16	1-7/8	.29
429-290FE[2]*	2-1/2X1-1/4	9- 5/8	3- 3/16	1-15/16	6- 1/8	.59
429-291FE[2]*	2-1/2X1-1/2	9	3- 3/16	2- 3/16	5-1/2	.59
429-292FE*	2-1/2X2	6- 3/8	3- 3/16	2-11/16	2- 5/8	.44

Coupling - Eccentric Reducer

(Continued)

Socket x Socket



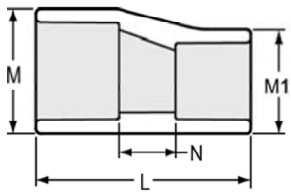
Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
429-336FE[2*]	3X1-1/4	11- 1/8	3-13/16	1-15/16	7- 3/8	.74
429-337FE[2*]	3X1-1/2	10-1/2	3-13/16	2- 3/16	6-3/4	.77
429-338E	3X2	5- 7/8	4- 5/32	2- 7/8	2-15/32	1.00
429-338FE[*]	3X2	7-15/16	3-13/16	2-11/16	3-15/16	.59
429-339FE[*]	3X2-1/2	6- 3/4	3- 7/8	3- 1/4	2- 1/2	.79
429-417FE[3*]	4X1	18-3/4	4-15/16	1-9/16	15-1/4	1.75
429-418FE[3*]	4X1-1/4	16- 1/8	4-15/16	1-15/16	12- 3/8	1.69
429-419FE[3*]	4X1-1/2	15-1/2	4-15/16	2- 3/16	11-3/4	1.71
429-420E	4X2	7-15/32	5	2-23/32	4- 1/16	1.28
429-420FE[2*]	4X2	12-13/16	4-15/16	2-11/16	8-13/16	1.64
429-421FE[2*]	4X2-1/2	11- 3/4	4-15/16	3- 1/4	7- 1/2	1.64
429-422FE[*]	4X3	8- 5/8	4-15/16	3-15/16	4- 1/8	1.22
429-490FE[*]	5X4	9- 7/16	6- 1/16	5	4- 3/16	1.90
429-527FE[4*]	6X1-1/2	23-3/16	7-1/8	2-3/16	18-7/16	3.70
429-528FE[2*]	6X2	15- 7/8	7- 1/8	2-11/16	11- 1/4	3.51
429-529FE[3*]	6X2-1/2	19- 7/16	7- 1/8	3- 1/4	14- 3/16	3.76
429-530FE[2*]	6X3	16- 5/16	7- 1/8	3-15/16	10-13/16	3.16
429-532E	6X4	8-31/32	7- 9/32	5- 1/32	3-15/16	2.90
429-532FE[*]	6X4	11- 1/8	7- 1/8	5	5- 5/8	2.27
429-533FE[*]	6X5	10- 5/8	7- 1/8	6- 1/16	4- 3/8	2.84
429-578FE[4*]	8X2	27- 1/8	9- 3/16	2-11/16	21- 1/2	9.64
429-580FE[3*]	8X3	25- 5/16	9- 3/16	3-15/16	18-13/16	7.18
429-582FE[2*]	8X4	19- 5/8	9- 3/16	5	13- 3/8	8.21
429-583FE[2*]	8X5	15- 5/8	9- 3/16	6- 1/16	12- 3/8	6.77
429-585FE[*]	8X6	14- 3/8	9- 3/16	7- 3/16	6- 7/8	4.85
429-624FE[2*]	10X4	22- 3/8	11- 3/8	5	15- 1/8	10.13
429-625FE[*]	10X5	22-3/8	11-3/8	6-1/16	14-1/8	9.33
429-626FE[*]	10X6	17- 1/8	11- 3/8	7- 1/4	8- 5/8	7.48
429-628FE[*]	10X8	16- 5/16	11- 3/8	9- 1/4	6-13/16	8.48
429-664FE[3*]	12X4	32- 3/8	13- 1/2	5	24- 1/8	20.78
429-666FE[2*]	12X6	27- 1/8	13- 1/2	7- 1/4	17- 5/8	16.79
429-668FE[2*]	12X8	26- 5/16	13- 1/2	9- 1/4	15- 3/16	18.12
429-670FE[*]	12X10	18- 3/8	13- 1/2	11- 1/2	6- 7/8	13.53
429-696FE[2*]	14X6	31- 3/8	15	7- 1/4	21- 1/8	26.14
429-698FE[2*]	14X8	30- 9/16	15	9- 1/4	19- 5/16	26.76
429-700FE[*]	14X10	22- 3/4	15	11- 3/4	10- 1/2	23.23
429-702FE[*]	14X12	19	15	13- 3/4	5- 3/4	21.29
429-756FE[3*]	16X6	43- 5/8	17	7- 1/4	32- 3/8	42.00
429-758FE[3*]	16X8	42-13/16	17	9- 1/4	30- 9/16	42.02
429-760FE[2*]	16X10	34- 7/8	17	11- 1/2	21- 5/8	38.22

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Coupling - Eccentric Reducer

(Continued)

Socket x Socket



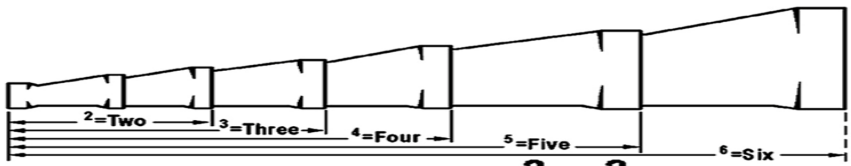
Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
429-762FE[1*]	16X12	26- 1/2	17	13- 3/4	12- 1/4	30.12
429-764FE[*]	16X14	19	16- 7/8	14- 7/8	6- 3/4	24.61
429-786FE[4*]	18X6	56	19	7- 1/4	43- 3/4	71.11
429-788FE[4*]	18X8	55- 3/16	19	9- 1/4	41-15/16	70.92
429-790FE[3*]	18X10	47- 1/4	19	11- 1/2	33	65.31
429-792FE[2*]	18X12	38- 7/8	19	13- 3/4	23- 5/8	55.50
429-794FE[2*]	18X14	34- 1/8	19	14- 7/8	18- 1/8	49.03
429-796FE[*]	18X16	25	19	17	8	38.72

* Fabricated

Eccentric Reducer Coupling Footnotes

Multi-Step Configurations

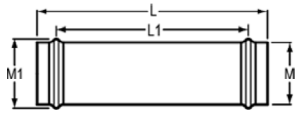
The number after the part number denotes steps listed below.



Example: 429-582 FE^2 (^{2}= 2 Step)

Repair Coupling, Schedule 40 Fabricated

Gasket x Gasket

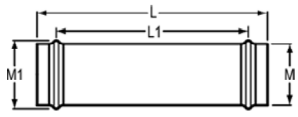


Part Number	Size	L	L1	M	M1	Approx. Wt. (Lbs.)
428-020F[*]	2	9- 1/8	6	2-11/16	3- 1/16	.71
428-030F[*]	3	15- 1/2	11- 3/4	3-15/16	4- 9/16	2.53
428-040F[*]	4	19- 1/2	15	5	5- 5/8	4.18
428-060F[*]	6	23	18-1/4	7-3/16	7-13/16	8.33
428-080F[*]	8	26- 1/8	21-1/2	9-1/16	9-13/16	14.00
428-100F[*]	10	27- 1/4	22- 3/8	11- 5/8	12- 3/8	20.94
428-120F[*]	12	28- 3/8	22- 3/8	13- 3/4	14-11/16	28.48

Repair Coupling, Schedule 40 Fabricated

(Continued)

Gasket x Gasket

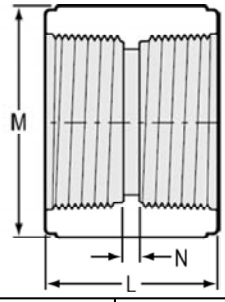


Part Number	Size	L	L1	M	M1	Approx. Wt. (Lbs.)
428-140F*	14	30	21-1/2	14- 7/8	16-3/8	36.67
428-160F*	16	31	24	17	18- 1/2	49.66
428-180F*	18	32	22-5/8	19-1/8	20-7/8	48.83
428-200F*	20	32	23-1/2	21-3/16	23-3/16	66.97
428-240F*	24	32	23-1/2	25-3/8	27-3/4	82.20

* Fabricated

Coupling

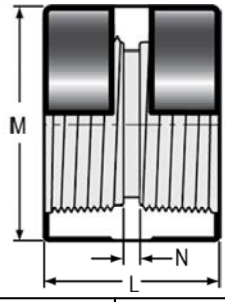
Fipt x Fipt



Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
430-005	1/2	1- 9/16	1- 1/8	7/32	.03
430-007	3/4	1- 9/16	1-11/32	3/32	.04
430-010	1	2- 1/16	1-11/16	3/32	.08
430-012	1-1/4	2- 3/16	2- 9/32	3/16	.20

Coupling - Special Reinforced

SR Fipt x SR Fipt - Stainless Steel Collar

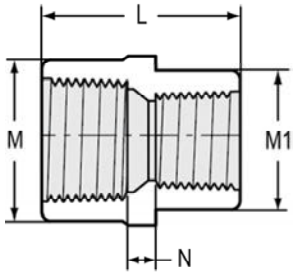


Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
430-005SR	1/2	1- 9/16	1- 3/16	1/16	.06
430-007SR	3/4	1-29/32	1- 3/8	3/32	.07
430-010SR	1	1-15/16	1-23/32	1/16	.13
430-012SR	1-1/4	2- 1/16	2- 1/16	3/16	.18
430-015SR	1-1/2	2- 3/16	2- 7/16	1/4	.27
430-020SR	2	2- 1/4	3	1/4	.41

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Coupling - Reducer

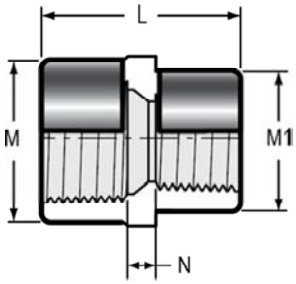
Fipt x Fipt



Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
430-101	3/4X1/2	1-11/16	1- 3/8	1- 3/16	1/4	.06

Coupling - Special Reinforced Reducer

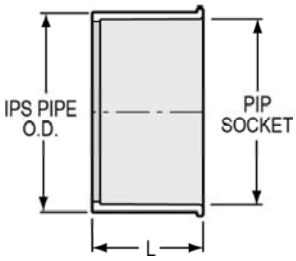
SR Fipt x SR Fipt - Stainless Steel Collar



Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
430-101SR	3/4X1/2	1- 3/4	1- 3/8	1- 7/32	1/4	.08

IPS to PIP Adapter

Spigot x Socket

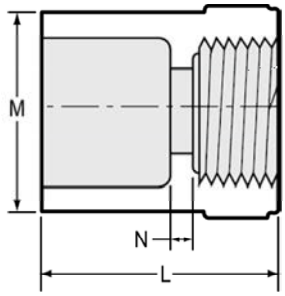


Part Number	Size	L	Approx. Wt. (Lbs.)
431-060	6	3- 9/16	.93
431-080	8	4-21/32	1.43
431-100F*	10	5- 5/8	2.53
431-120F*	12	6- 3/4	3.61

* Fabricated

Female Adapter

Socket x Fipt

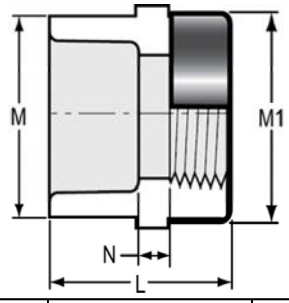


Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
435-003	3/8	1- 7/16	1	3/32	.03
435-005	1/2	1-19/32	1- 3/32	3/32	.03
D435-005	1/2	2- 1/8	1- 1/8	1/8	.04
435-007	3/4	1-27/32	1- 5/16	3/32	.05
D435-007	3/4	2- 7/32	1- 5/16	3/32	.05
435-010	1	2	1-21/32	3/32	.08
435-012	1-1/4	2- 9/32	1-31/32	1/16	.11
435-015	1-1/2	2- 5/16	2- 7/32	3/32	.13
435-020	2	2- 1/2	2- 3/4	1/8	.19
435-025	2-1/2	3- 1/4	3- 5/16	3/16	.42
435-030	3	3- 1/2	4	1/4	.55
435-040	4	3-23/32	5- 1/32	3/16	.81
435-050	5	5- 1/16	6- 5/16	3/16	1.46
435-060	6	5- 3/4	7- 3/16	5/16	2.10
435-080	8	6-15/16	9- 3/8	1/4	3.87
435-100F*	10	10- 1/4	11-15/16	3	10.88
435-120F*	12	11- 1/8	14- 1/8	2- 5/8	16.20

"D" prefix indicates Deep Socket Adapter
* Fabricated

Female Adapter - Special Reinforced

Socket x SR Fipt - Stainless Steel Collar

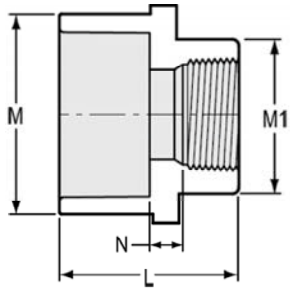


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
435-002SR	1/4	1- 5/16	13/16	13/16	5/32	.02
435-003SR	3/8	1- 7/16	15/16	15/16	1/16	.03
435-005SR	1/2	1-23/32	1- 3/16	1- 3/16	3/32	.06
435-007SR	3/4	1- 7/8	1-13/32	1- 3/8	3/32	.07
435-010SR	1	2- 1/8	1- 3/4	1- 3/4	1/8	.12
435-012SR	1-1/4	2- 5/16	2- 3/32	2- 3/32	1/8	.18
435-015SR	1-1/2	2- 7/16	2- 7/16	2- 7/16	1/8	.27
435-020SR	2	2-11/16	3	3	1/4	.43
435-025SR	2-1/2	3- 1/4	3- 9/16	3- 9/16	1/4	.66
435-030SR	3	3- 1/2	4- 9/32	4- 5/16	5/16	.96
435-040SR	4	3-15/16	5- 7/32	5- 7/32	3/16	1.37

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Female Adapter - Reducing

Socket x Fipt

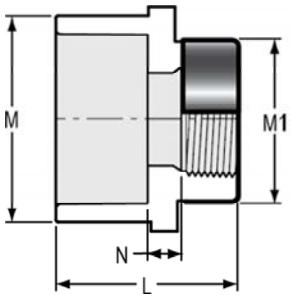


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
435-072	1/2X1/4	1-19/32	1- 3/32	13/16	1/4	.03
435-073	1/2X3/8	1-17/32	1- 3/32	15/16	3/16	.03
435-074	1/2X3/4	1-19/32	1- 3/32	1- 5/16	3/16	.04
435-098	3/4X1/4	1-15/16	1-13/32	27/32	13/32	.05
435-101	3/4X1/2	1-13/16	1- 5/16	1- 1/8	3/32	.04
435-102	3/4X1	1-15/16	1- 5/8	1- 5/16	3/32	.07
435-130	1X1/2	1-27/32	1- 5/8	1- 1/8	3/32	.07
435-131	1X3/4	2- 1/8	1- 5/8	1- 5/16	3/8	.07
435-133	1X1-1/2	2- 3/8	1- 5/8	2- 7/32	1/4	.12
435-168	1-1/4X1	2- 1/2	1-31/32	1- 5/8	11/32	.11
435-247	2X1/2	2-25/32	2-23/32	1- 3/16	21/32	.19
435-460F[1*]	4-1/2X4	8- 1/4	5- 5/8	5	3- 7/8	1.91
435-578F[1*]	8X2	14- 7/8	8- 5/8	5- 1/16	9- 5/8	6.21
435-582F[1*]	8X4	15- 3/16	9- 1/4	5	9- 7/16	6.60
435-628F[*]	10X8	11	11- 3/4	9- 1/4	4- 1/16	9.25

[1] Outlet sizes with Threaded Adapter
* Fabricated

Female Adapter - Special Reinforced Reducing

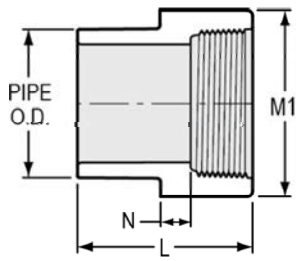
Socket x SR Fipt - Stainless Steel Collar



Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
435-072SR	1/2X1/4	1- 5/8	1- 3/32	27/32	1/4	.03
435-073SR	1/2X3/8	1-17/32	1-3/32	31/32	3/16	.03
435-074SR	1/2X3/4	1- 3/4	1- 3/16	1- 3/8	1/8	.07
435-098SR	3/4X1/4	1-15/16	1-13/32	27/32	13/32	.06
435-101SR	3/4X1/2	1- 7/8	1- 3/8	1- 3/16	1/4	.07
435-102SR	3/4X1	2- 1/16	1-13/32	1-23/32	1/4	.11
435-130SR	1X1/2	2	1-11/16	1- 3/16	7/32	.10
435-131SR	1X3/4	2- 1/16	1- 3/4	1- 3/8	3/16	.11
435-247SR	2X1/2	2-13/16	2-23/32	1-3/16	21/32	.20

Female Spigot Adapter

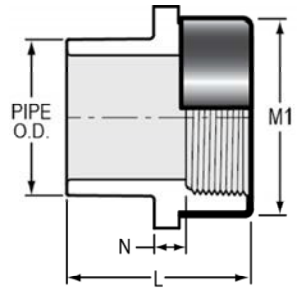
Spigot x Fipt



Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
478-005	1/2	1-19/32	1- 3/32	1/32	.03
478-007	3/4	1-15/16	1- 3/8	5/32	.05
478-010	1	2- 7/16	1-23/32	5/32	.10
478-012	1-1/4	2- 9/16	2- 1/16	9/32	.13
478-015	1-1/2	2-21/32	2-11/32	7/32	.16
478-020	2	2- 3/4	2-27/32	3/16	.20
478-030	3	3- 7/8	4	9/32	.56
478-040	4	4	5	3/8	.82

Female Spigot Adapter - Special Reinforced

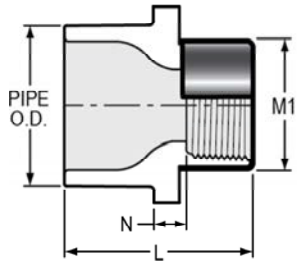
Spigot x SR Fipt - Stainless Steel Collar



Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
478-005SR	1/2	1- 3/4	1- 3/16	5/32	.05
478-007SR	3/4	1-15/16	1- 3/8	11/32	.07
478-010SR	1	2- 1/4	1-23/32	5/16	.12
478-012SR	1-1/4	2- 7/16	2- 1/16	3/8	.17
478-015SR	1-1/2	2- 5/8	2-13/32	13/32	.25
478-020SR	2	2-13/16	3	3/8	.38
478-030SR	3	3-13/16	4- 1/4	15/32	.91
478-040SR	4	4- 3/8	5- 7/32	9/16	1.36

Female Spigot Adapter - Special Reinforced Reducing

Spigot x SR Fipt - Stainless Steel Collar



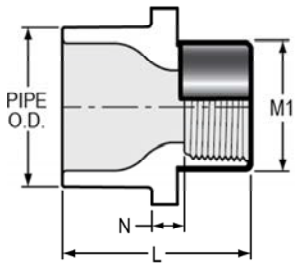
Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
478-072SR	1/2X1/4	1- 3/8	27/32	3/16	.02
478-098SR	3/4X1/4	2- 1/16	27/32	1/2	.05

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Female Spigot Adapter - Special Reinforced Reducing

(Continued)

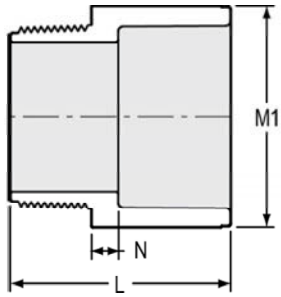
Spigot x SR Fipt - Stainless Steel Collar



Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
478-128SR	1X1/4	2- 3/8	27/32	11/16	.08

Male Adapter

Mipt x Socket

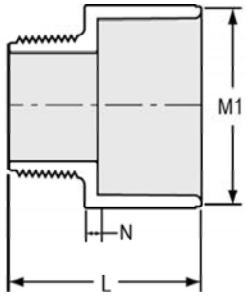


Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
436-003	3/8	1- 3/8	7/8	7/32	.01
436-005	1/2	1-17/32	1- 1/8	5/32	.02
436-007	3/4	1-23/32	1- 5/16	5/32	.04
436-010	1	2- 1/16	1- 5/8	7/32	.07
436-012	1-1/4	2- 7/16	1-31/32	3/16	.11
436-015	1-1/2	2-17/32	2- 1/4	3/16	.14
436-020	2	2-5/8	2-3/4	3/16	.20
436-025	2-1/2	3-13/16	3-13/32	9/32	.43
436-030	3	3-29/32	4- 3/32	9/32	.56
436-040	4	4- 1/32	5- 1/8	9/32	.83
436-050	5	5- 5/32	6- 1/4	5/16	1.41
436-060	6	5-11/16	7- 9/32	11/16	2.33
436-080	8	6-15/16	9- 3/8	13/32	4.03
436-100F*	10	10- 3/8	11-15/16	3- 3/16	11.16
436-120F*	12	11- 1/8	14- 1/8	2- 3/4	16.44

* Fabricated

Male Adapter - Reducing

Mipt x Socket

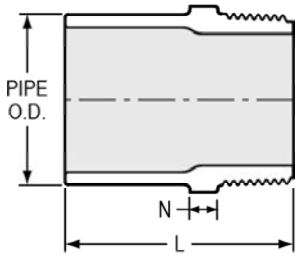


Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
436-053	3/8X1/2	1-11/16	1- 3/16	1/4	.03
436-073	1/2X3/8	1-17/32	15/16	1/8	.02
436-074	1/2X3/4	1-25/32	1- 5/16	5/32	.04
436-075	1/2X1	2- 9/32	1- 5/8	17/32	.06
436-101	3/4X1/2	1-17/32	1- 1/8	3/32	.02
436-102	3/4X1	1-15/16	1-21/32	3/16	.06
436-131	1X3/4	1-29/32	1- 3/16	3/16	.05
436-132	1X1-1/4	2- 1/4	1-31/32	7/32	.10
436-133	1X1-1/2	2- 3/8	2- 1/4	1/4	.12
436-168	1-1/4X1	2- 1/4	1- 5/8	3/16	.08
436-169	1-1/4X1-1/2	2-17/32	2- 7/32	3/16	.13
436-212	1-1/2X1-1/4	2-15/32	2	7/32	.10
436-213	1-1/2X2	2- 5/8	2- 3/4	15/32	.21
436-251	2X1-1/2	2- 9/16	2- 7/32	3/16	.18
436-252	2X2-1/2	3- 3/32	3- 5/16	1/4	.34
436-253	2X3	3-13/16	4	1	.51
436-294	2-1/2X3	4- 3/32	4- 1/32	5/8	.57
436-296	2-1/2X4	3-29/32	5- 3/16	5/16	.81
436-342	3X4	4- 5/8	5- 1/16	7/8	.96
436-537F*	6X10	15- 1/2	11- 3/8	7-15/16	8.50

* Fabricated

Male Spigot Adapter

Spigot x Mipt

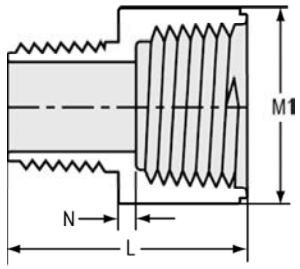


Part Number	Size	L	N	Approx. Wt. (Lbs.)
461-005	1/2	1-11/16	11/32	.02
461-007	3/4	2	13/32	.03
461-010	1	2- 1/4	11/32	.06
461-131	1X3/4	1-15/16	1/4	.05
461-012	1-1/4	2- 9/32	9/32	.09
461-015	1-1/2	2- 7/16	5/16	.12
461-020	2	2- 9/16	3/8	.18

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

IPT Adapter

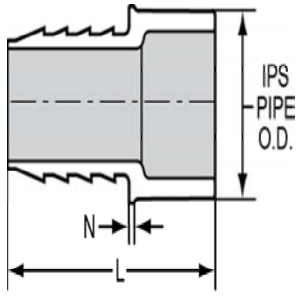
Mipt x Fipt



Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
446-003	3/8	1-13/32	29/32	5/32	.02
446-012	1-1/4	2- 3/16	2	5/32	.10
446-053	3/8X1/2	1- 1/2	1-3/16	5/32	.03
446-074	1/2X3/4	1-17/32	1- 5/16	5/32	.03

Insert Adapter (White PVC)

Insert x I.P.S. Spigot x I.P.S. Socket



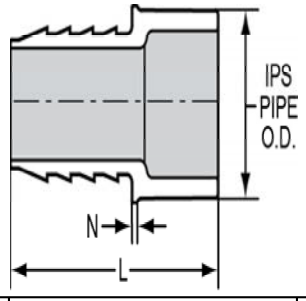
Part Number	Size	L	N	Approx. Wt. (Lbs.)
460-012N	1-1/4X1-1/4X1	3	9/32	.11
460-131N	3/4X1X3/4	2- 7/8	5/8	.06
460-132N	1X1-1/4X1	3	5/16	.10

ASTM D 2609 - Plastic Insert Fitting for Polyethylene (PE) pipe N=Nesting

Insert Adapter (White PVC)

Insert x I.P.S. Spigot

* Fabricated

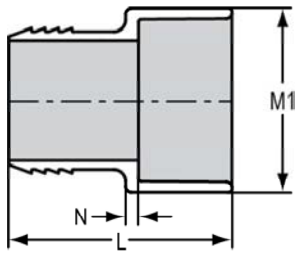


ASTM D 2609 - Plastic Insert Fitting for Polyethylene (PE) pipe

Part Number	Size	L	N	Approx. Wt. (Lbs.)
460-005	1/2	2- 7/16	7/32	.02
460-007	3/4	2-23/32	7/32	.04
460-010	1	2- 9/16	1/16	.05
460-012	1-1/4	3- 1/32	1/4	.10
460-015	1-1/2	3- 5/16	5/16	.11
460-020	2	3- 1/2	3/8	.20
460-030	3	4-17/32	13/32	.57
460-040	4	5-11/32	5/16	.72
1432-060	6	7-27/32	1	1.70
1432-080*	8	9- 7/8	5/8	5.37

Insert Adapter (White PVC)

Insert x Socket

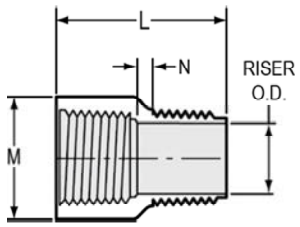


Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
474-005	1/2	2- 3/8	1- 1/16	1/8	.03
474-007	3/4	2- 7/16	1- 5/16	5/32	.04
474-010	1	2- 5/8	1- 5/8	1/8	.07
474-012	1-1/4	2-11/16	2	3/16	.10
474-015	1-1/2	3- 1/16	2- 1/4	3/16	.13
474-020	2	3	2-13/16	3/16	.16
474-030	3	4- 3/4	4	5/16	.50
474-040	4	5- 5/8	5	3/8	.81

ASTM D 2609 Plastic Insert Fittings for Polyethylene (PE) pipe

Riser Extension

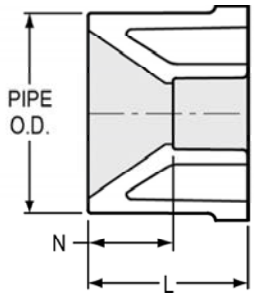
Fipt x Mipt



Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
434-005	1/2	1- 1/2	1- 1/8	1/8	.02
434-007	3/4	1-17/32	1- 5/16	5/32	.03
434-010	1	1-29/32	1- 5/8	5/32	.07

Reducer Bushing Flush Style

Spigot x Socket



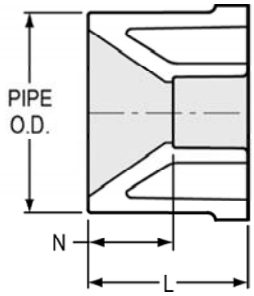
[1] Sized with Bushing
* Fabricated

Part Number	Size	L	N	Approx. Wt. (Lbs.)
437-052	3/8X1/4	31/32	5/16	.01
437-072	1/2X1/4	1- 3/32	13/32	.02
437-073	1/2X3/8	7/8	3/8	.01
437-101	3/4X1/2	1- 1/16	9/32	.01
437-130	1X1/2	1- 1/4	15/32	.04
437-131	1X3/4	1- 1/4	5/16	.03

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Reducer Bushing
Flush Style

Spigot x Socket



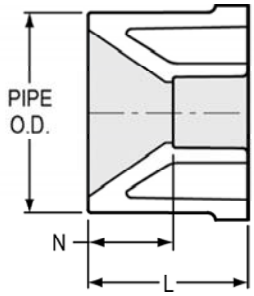
(Continued)

[1] Sized with Bushing
* Fabricated

Part Number	Size	L	N	Approx. Wt. (Lbs.)
437-166	1-1/4X1/2	1-13/32	21/32	.08
437-167	1-1/4X3/4	1- 1/2	9/16	.09
437-168	1-1/4X1	1- 1/2	7/16	.06
437-209	1-1/2X1/2	1-15/32	23/32	.10
437-210	1-1/2X3/4	1- 7/16	7/16	.11
437-211	1-1/2X1	1-17/32	1/2	.11
437-212	1-1/2X1-1/4	1-17/32	9/32	.05
437-247	2X1/2	1- 5/8	7/8	.17
437-248	2X3/4	1- 9/16	9/16	.16
437-249	2X1	1- 9/16	17/32	.16
437-250	2X1-1/4	1-19/32	11/32	.17
437-251	2X1-1/2	1- 9/16	1/4	.13
437-287	2-1/2X1/2	2- 1/4	1- 7/16	.32
437-288	2-1/2X3/4	2- 3/8	1- 3/8	.33
437-289	2-1/2X1	2- 1/32	29/32	.35
437-290	2-1/2X1-1/4	2- 3/16	1- 1/8	.36
437-291	2-1/2X1-1/2	2- 5/32	1- 3/16	.29
437-292	2-1/2X2	2- 1/16	11/16	.21
437-333	3X1/2	2-1/4	1-1/2	.50
437-334	3X3/4	2- 5/16	1- 5/16	.49
437-335	3X1	2- 7/32	1- 1/4	.48
437-336	3X1-1/4	2- 9/32	1- 1/32	.48
437-337	3X1-1/2	2- 9/32	31/32	.47
437-338	3X2	2- 7/32	9/16	.46
437-339	3X2-1/2	2- 7/32	7/16	.37
437-417[1]	4X1	2-19/32	1-9/16	1.02
437-418[1]	4X1-1/4	2-19/32	1-7/16	1.03
437-419	4X1-1/2	2-9/16	1-3/16	1.01
437-420	4X2	2-13/32	1- 1/32	.85
437-421	4X2-1/2	2- 5/16	9/16	.75
437-422	4X3	2-11/32	15/32	.78
437-486	5X2	3-13/32	2- 1/32	1.63
437-488	5X3	3- 7/16	1-15/32	1.39
437-490	5X4	2-31/32	23/32	1.30
437-528	6X2	3-17/32	2- 5/32	2.15
437-530	6X3	3-17/32	1- 5/8	2.21
437-532	6X4	3- 9/16	1- 1/2	2.09
437-534	6X5	3-17/32	7/8	1.89
437-578[1]	8X2	5	3- 5/8	4.81
437-580[1]	8X3	5- 1/4	3- 1/4	4.74
437-582	8X4	4-17/32	2- 1/2	3.95
437-583[1]	8X5	4- 3/4	1- 3/4	5.89
437-585	8X6	4-13/32	1- 3/8	3.99
437-623[1]	10X3	6	3-17/32	9.36

Reducer Bushing
Flush Style

Spigot x Socket



(Continued)

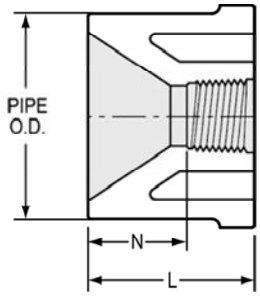
[1] Sized with Bushing
* Fabricated

Part Number	Size	L	N	Approx. Wt. (Lbs.)
437-624[1]	10X4	6	3- 3/4	8.85
437-626	10X6	5- 11/32	2- 5/16	6.76
437-628	10X8	5- 11/32	1- 5/16	8.57
437-666[1]	12X6	6-11/16	3- 3/4	17.27
437-621[1]	10X2	6	4	10.02
437-666F*	12X6	5-5/16	3-5/16	18.74
437-668	12X8	6- 1/2	2- 7/16	13.28
437-670	12X10	6- 11/32	1- 9/32	10.33
437-670F*	12X10	6	1	11.31
437-696F*	14X6	7-11/16	4-11/16	27.64
437-698F*	14X8	7- 5/16	3- 5/16	21.86
437-700F*	14X10	7- 1/2	2- 1/2	19.51
437-702F*	14X12	7	1	9.18
437-756F*	16X6	8-11/16	5-11/16	42.59
437-758F*	16X8	8- 5/16	4- 5/16	41.14
437-760F*	16X10	8- 1/2	3- 1/2	40.96
437-762F*	16X12	8	2	27.85
437-764F*	16X14	8	1	18.67
437-786F*	18X6	9-11/16	6-11/16	68.28
437-788F*	18X8	9- 5/16	5- 5/16	59.62
437-790F*	18X10	9- 1/2	4- 1/2	64.55
437-792F*	18X12	9	3	51.55
437-794F*	18X14	9	2	43.08
437-796F*	18X16	9	1	23.70
437-816F*	20X6	10-11/16	7-11/16	97.95
437-818F*	20X8	10- 5/16	6- 5/16	94.59
437-820F*	20X10	10- 1/2	5- 1/2	92.24
437-822F*	20X12	10	4	81.91
437-824F*	20X14	10	3	73.74
437-826F*	20X16	10	2	54.05
437-828F*	20X18	10	1	30.35
437-906F*	24X6	12-11/16	9-11/16	179.58
437-908F*	24X8	12- 5/16	8- 5/16	175.58
437-910F*	24X10	12- 1/2	7- 1/2	177.26
437-912F*	24X12	12	6	162.29
437-914F*	24X14	12	5	153.82
437-916F*	24X16	12	4	136.14
437-918F*	24X18	13	3	110.74
437-920F*	24X20	12	2	80.38

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Reducer Bushing
Flush Style

Spigot x Fipt

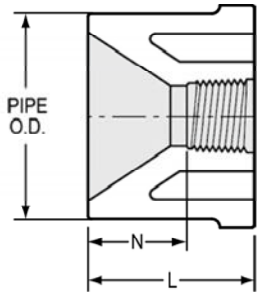


Part Number	Size	L	N	Approx. Wt. (Lbs.)
438-052	3/8X1/4	31/32	3/8	.01
438-071	1/2X1/8	1	9/16	.01
438-072	1/2X1/4	1- 1/32	7/16	.02
438-073	1/2X3/8	1	7/16	.01
438-098	3/4X1/4	1- 7/32	5/8	.04
438-101	3/4X1/2	1- 1/4	1/2	.02
438-127	1X1/8	1- 3/8	13/16	.05
438-128	1X1/4	1-13/32	25/32	.06
438-129	1X3/8	1-13/32	19/32	.06
438-130	1X1/2	1- 3/8	21/32	.05
438-131	1X3/4	1- 1/16	3/8	.03
438-166	1-1/4X1/2	1-15/32	23/32	.09
438-167	1-1/4X3/4	1-15/32	23/32	.09
438-168	1-1/4X1	1- 7/16	1/2	.07
438-206	1-1/2X1/8	1-11/16	1- 1/4	.14
438-207	1-1/2X1/4	1-19/32	15/16	.18
438-209	1-1/2X1/2	1-23/32	31/32	.15
438-210	1-1/2X3/4	1- 9/16	27/32	.11
438-211	1-1/2X1	1-23/32	13/16	.14
438-212	1-1/2X1-1/4	1- 1/2	9/16	.07
438-245	2X1/4	1- 3/4	1- 5/32	.17
438-247	2X1/2	1-29/32	1- 5/32	.25
438-248	2X3/4	1- 7/8	1- 5/32	.25
438-249	2X1	1- 7/8	1	.25
438-250	2X1-1/4	1- 5/8	13/16	.18
438-251	2X1-1/2	1-19/32	5/8	.14
438-287	2-1/2X1/2	2- 3/8	1- 5/8	.41
438-288	2-1/2X3/4	2- 3/8	1- 9/16	.44
438-289	2-1/2X1	2- 5/32	1- 1/4	.33
438-290	2-1/2X1-1/4	2- 3/8	1- 3/8	.42
438-291	2-1/2X1-1/2	2- 3/8	1- 3/8	.34
438-292	2-1/2X2	2- 1/16	1- 1/16	.25
438-334	3X3/4	2- 9/32	1- 9/16	.57
438-335	3X1	2- 1/4	1-11/32	.58
438-336	3X1-1/4	2- 1/4	1- 5/16	.53
438-337	3X1-1/2	2- 1/4	1- 1/4	.58
438-338	3X2	2- 3/16	1- 7/32	.56
438-339	3X2-1/2	2- 3/8	3/4	.45
438-420	4X2	2-13/32	1-13/32	.77
438-421	4X2-1/2	2-21/32	1- 3/32	1.04
438-422	4X3	2-13/32	1	.77
438-488	5X3	3- 7/16	1-13/16	1.53
438-490	5X4	2-15/16	1-11/32	1.44
438-528	6X2	3-17/32	2-17/32	2.20
438-530	6X3	3-17/32	2- 1/8	2.31

Reducer Bushing Flush Style

(Continued)

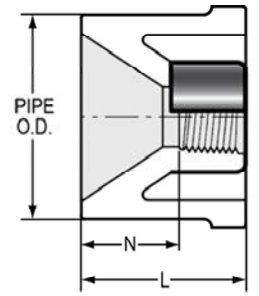
Spigot x Fipt



Part Number	Size	L	N	Approx. Wt. (Lbs.)
438-532	6X4	3-17/32	2- 1/32	2.53
438-534	6X5	3-31/32	2- 3/16	1.90

Reducer Bushing - Special Reinforced Flush Style

Spigot x SR Fipt - Stainless Steel Collar

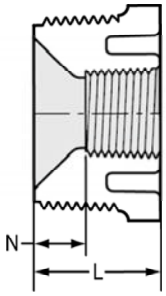


Part Number	Size	L	N	Approx. Wt. (Lbs.)
438-128SR	1X1/4	1-13/32	25/32	.07
438-207SR	1-1/2X1/4	1-19/32	15/16	.12
438-209SR	1-1/2X1/2	1-11/16	15/16	.16
438-210SR	1-1/2X3/4	1- 9/16	7/8	.14
438-247SR	2X1/2	1-29/32	1- 5/32	.25
438-248SR	2X3/4	1- 7/8	1- 1/8	.25
438-249SR	2X1	1-29/32	31/32	.26
438-334SR	3X3/4	2- 1/4	1- 1/2	.57
438-335SR	3X1	2- 1/4	1-11/32	.59
438-336SR	3X1-1/4	2- 1/4	1- 5/16	.58
438-337SR	3X1-1/2	2- 1/4	1- 3/8	.67
438-420SR	4X2	2-13/32	1-13/32	.85
438-528SR	6X2	3- 5/16	2- 9/32	2.64
438-530SR	6X3	3- 9/32	1- 7/8	2.71
438-532SR	6X4	3- 1/2	2- 1/32	2.60

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Reducer (T.T.) Bushing

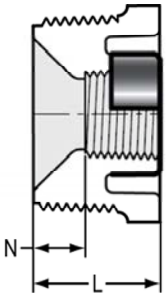
Mipt x Fipt



Part Number	Size	L	N	Approx. Wt. (Lbs.)
439-052	3/8X1/4	13/16	1/4	.01
439-071	1/2X1/8	27/32	13/32	.01
439-072	1/2X1/4	29/32	3/8	.01
439-073	1/2X3/8	15/16	3/8	.01
439-098	3/4X1/4	1- 1/32	15/32	.03
439-099	3/4X3/8	1- 1/32	7/16	.03
439-101	3/4X1/2	15/16	3/16	.01
439-128	1X1/4	1- 1/8	17/32	.04
439-130	1X1/2	1- 1/16	5/16	.04
439-131	1X3/4	1- 1/8	13/32	.03
439-166	1-1/4X1/2	1- 5/16	9/16	.08
439-167	1-1/4X3/4	1- 9/32	9/16	.08
439-168	1-1/4X1	1- 3/16	9/32	.06
439-209	1-1/2X1/2	1-11/32	19/32	.11
439-210	1-1/2X3/4	1-11/32	19/32	.11
439-211	1-1/2X1	1-11/32	7/16	.10
439-212	1-1/2X1-1/4	1-11/32	13/32	.06
439-247	2X1/2	1- 3/8	21/32	.16
439-248	2X3/4	1- 3/8	5/8	.16
439-249	2X1	1- 3/8	15/32	.16
439-250	2X1-1/4	1- 3/8	7/16	.15
439-251	2X1-1/2	1- 3/8	13/32	.12
439-292	2-1/2X2	1-29/32	7/8	.21
439-337	3X1-1/2	1-15/16	29/32	.49
439-338	3X2	1-15/16	15/16	.44
439-339	3X2-1/2	1-15/16	5/8	.37
439-420	4X2	2- 1/8	1- 1/8	.82
439-422	4X3	2- 1/8	1/2	.71

Reducer Bushing - Special Reinforced Flush Style

Mipt X SR Fipt - Stainless Steel Collar

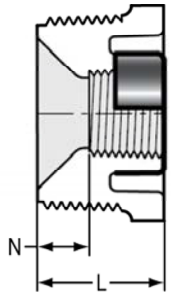


Part Number	Size	L	N	Approx. Wt. (Lbs.)
439-209SR	1-1/2X1/2	1-11/32	19/32	.12
439-210SR	1-1/2X3/4	1-11/32	19/32	.12
439-247SR	2X1/2	1-3/8	21/32	.17

Reducer Bushing - Special Reinforced Flush Style

(Continued)

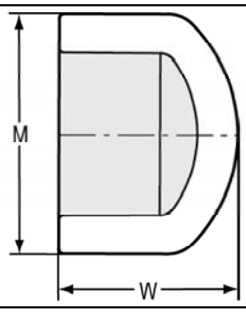
Mipt X SR Fipt - Stainless Steel Collar



Part Number	Size	L	N	Approx. Wt. (Lbs.)
439-248SR	2X3/4	1- 3/8	5/8	.18
439-249SR	2X1	1- 3/8	15/32	.19
439-420SR	4X2	2- 1/8	1- 1/8	.86

Cap

Socket



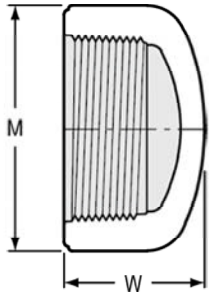
Part Number	Size	M	W	Approx. Wt. (Lbs.)
447-003	3/8	7/8	1	.01
447-005	1/2	1- 3/32	1- 1/16	.02
447-007	3/4	1- 5/16	1-9/32	.03
447-010	1	1-19/32	1-5/8	.06
447-012	1-1/4	1-31/32	1- 3/4	.09
447-015	1-1/2	2- 1/4	1-29/32	.11
447-020	2	2-23/32	2- 1/32	.17
447-025	2-1/2	3- 5/16	2- 9/16	.32
447-030	3	4	2-29/32	.49
447-040	4	5-1/32	3-13/32	.77
447-045F*	4-1/2	5- 7/16	3- 5/8	.88
447-050	5	6- 1/8	4-11/16	1.42
447-060	6	7- 1/4	5	1.99
447-080	8	9-3/8	6- 3/8	3.84
447-100F*	10	11-13/16	5- 1/4	5.70
447-120F*	12	13- 7/8	6- 7/8	8.09
447-140F*	14	15	7- 3/8	10.21
447-160F*	16	17- 1/16	9	14.03
447-180F*	18	19- 1/8	9	18.92
447-200F*	20	21- 3/16	12- 1/4	29.85
447-240F*	24	25- 5/16	14- 1/8	41.68

* Fabricated

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Cap

Fipt

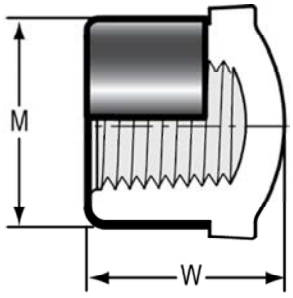


Part Number	Size	M	W	Approx. Wt. (Lbs.)
448-003	3/8	15/16	25/32	.01
448-005	1/2	1- 1/8	1- 1/32	.02
448-007	3/4	1-11/32	1- 1/16	.03
448-010	1	1- 5/8	1- 5/16	.05
448-012	1-1/4	2- 1/16	1-7/16	.09
448-015	1-1/2	2-9/32	1-9/16	.11
448-020	2	2- 3/4	1-23/32	.16
448-025	2-1/2	3- 9/32	2- 5/16	.34
448-030	3	4	2-13/32	.50
448-040	4	5- 5/32	2-13/16	.81
448-050	5	6-11/32	3- 3/32	1.51
448-060	6	7- 5/16	3- 5/32	1.64
448-080F*	8	9- 3/8	4- 3/8	3.62
448-100F*	10	11- 5/8	5- 3/4	5.83
448-120F*	12	13-13/16	6- 3/16	12.00

* Fabricated

Cap - Special Reinforced

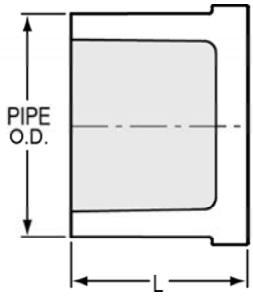
SR Fipt - Stainless Steel Collar



Part Number	Size	M	W	Approx. Wt. (Lbs.)
448-012SR	1-1/4	2- 1/16	1- 3/8	.12

Plug

Spigot

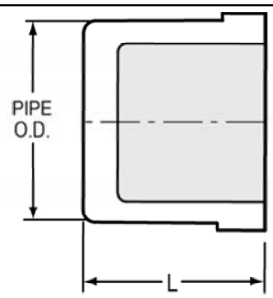


Part Number	Size	L	Approx. Wt. (Lbs.)
449-003	3/8	31/32	.01
449-005	1/2	7/8	.01
449-007	3/4	1- 1/8	.02
449-010	1	1- 3/8	.04
449-012	1-1/4	1-17/32	.08
449-015	1-1/2	1- 5/8	.10
449-020	2	1- 3/4	.16
449-025	2-1/2	2- 3/8	.34
449-030	3	2- 3/32	.38
449-040	4	2- 5/8	.76
449-060	6	3- 1/2	1.74
449-060F[4*]	6	9- 1/2	4.85
449-080F[4*]	8	10-15/16	8.83
449-100F[4*]	10	11- 1/4	11.98
449-120F[4*]	12	13- 7/8	18.15
449-140F[4*]	14	15- 3/8	23.71
449-160F[4*]	16	17- 1/2	32.07
449-180F[4*]	18	19	46.25
449-200F[4*]	20	23- 1/4	68.13
449-240F[4*]	24	27- 1/8	105.12

[4] Plug fabricated using Cap and pipe spigot.
* Fabricated

Plug - Counter Sunk

Spigot

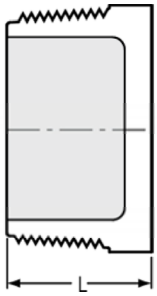


Part Number	Size	L	Approx. Wt. (Lbs.)
449-007CS	3/4	1- 1/4	.03
449-010CS	1	1- 5/32	.05

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Plug

Mipt

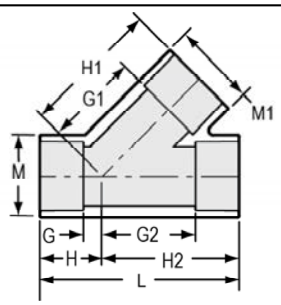


Part Number	Size	L	Approx. Wt. (Lbs.)
450-003	3/8	25/32	.01
450-005	1/2	13/16	.01
450-007	3/4	7/8	.02
450-010	1	1- 7/32	.04
450-012	1-1/4	1- 9/32	.06
450-015	1-1/2	1-11/32	.09
450-020	2	1- 3/8	.14
450-025	2-1/2	1-31/32	.26
450-030	3	1- 7/8	.38
450-040	4	2- 1/8	.72
450-060	6	2- 1/16	1.70
450-080	8	2-3/8	3.25
450-080F[4*]	8	9	9.29
450-100F[4*]	10	8- 1/2	12.68
450-120F[4*]	12	10- 7/8	19.68

[4] Plug fabricated using Cap and threaded pipe.
* Fabricated

Wye

Socket x Socket x Socket
1/2" - 2" - 235 psi Maximum Internal Pressure Rating @ 73°F (23°C) 2-1/2" - 6" - 150 psi Maximum Internal Pressure Rating @ 73°F (23° C) 8" - Larger & All Fabricated Sizes- 80 psi Maximum Internal Pressure Rating @ 73°F (23° C)

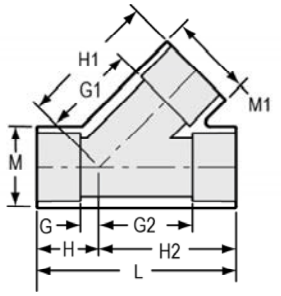


Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
475-005	1/2	1/4	1- 3/16	1- 3/16	1- 1/8	2- 1/16	2- 1/16	3- 3/16	1- 5/32	1- 5/32	.12
475-007	3/4	5/16	1- 3/8	1- 3/8	1- 5/16	2- 3/8	2- 3/8	3-23/32	1- 3/8	1- 3/8	.18
475-010	1	7/16	1- 7/8	1- 7/8	1- 1/2	2-29/32	2-29/32	4-13/32	1- 5/8	1- 5/8	.22
475-012	1-1/4	3/8	2- 1/4	2- 1/4	1- 5/8	3- 1/2	3- 1/2	5- 1/8	2- 1/16	2- 1/16	.50
475-015	1-1/2	9/16	2-19/32	2-19/32	1- 7/8	3-29/32	3-29/32	5-25/32	2- 7/32	2- 7/32	.46
475-020	2	7/16	3- 5/16	3- 5/16	1-31/32	4-11/16	4-11/16	6- 5/8	2-23/32	2-23/32	.69
475-025	2-1/2	11/16	4- 5/32	4- 3/32	2- 7/16	5-29/32	5-27/32	8- 9/32	3-11/32	3-11/32	1.39
475-030	3	7/8	4- 7/8	4-25/32	2- 3/4	6- 3/4	6-21/32	9-13/32	4	4	2.00
475-040	4	1- 1/4	5- 7/8	5- 7/8	3- 9/32	7-29/32	7- 7/8	11- 5/16	5- 1/32	5- 1/32	3.39
475-050F[*]	5	3- 3/4	9- 3/8	9- 3/8	6- 3/4	12- 3/8	12- 3/8	19- 1/8	6- 1/16	6- 1/16	9.82
475-060	6	1- 5/32	8-25/32	8- 3/16	4- 3/16	11-25/32	11- 3/16	15- 3/8	7- 9/16	7- 9/16	12.00
475-080	8	1-15/16	11-11/32	11-11/32	5-31/32	15-11/32	15-11/32	21- 5/16	9- 3/4	9- 3/4	25.22
475-100	10	2-13/32	14	14	7-13/32	19	19	26-13/32	11-19/32	11-19/32	26.77
475-100F[2*]	10	6- 9/16	17- 1/4	17- 1/4	11-13/16	22- 1/2	22- 1/2	34- 5/16	11- 1/2	11- 1/2	44.00
475-120	12	2-11/16	16- 1/8	16- 7/32	8- 3/4	22- 7/32	22- 9/32	31- 1/32	13-21/32	13-21/32	42.68

Wye

(Continued)

Socket x Socket x Socket
1/2" - 2" - 235 psi Maximum Internal Pressure Rating @ 73°F (23°C) 2-1/2" - 6" - 150 psi Maximum Internal Pressure Rating @ 73°F (23° C) 8" - Larger & All Fabricated Sizes- 80 psi Maximum Internal Pressure Rating @ 73°F (23° C)

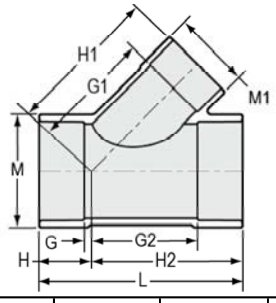


Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
475-120F[2*]	12	7- 5/16	20- 1/16	20- 1/16	13- 9/16	26- 5/16	26- 5/16	39- 7/8	13- 9/16	13- 9/16	64.53
475-140F[2*]	14	7- 3/16	21- 3/16	21- 3/16	14- 3/16	28- 3/16	28- 3/16	42- 3/8	14- 7/8	14- 7/8	90.24
475-160F[2*]	16	8- 3/4	24- 3/4	24- 3/4	16- 3/4	32- 3/4	32- 3/4	49- 1/2	17	17	122.99
475-180F[2*]	18	9- 7/16	27- 7/16	27- 7/16	18- 7/16	36- 7/16	36- 7/16	54- 7/8	19- 1/8	19- 1/8	151.20
475-200F[2*]	20	11- 7/16	30- 5/16	30- 5/16	21- 7/16	40- 5/16	40- 5/16	61- 3/4	21- 3/16	21- 3/16	196.91
475-240F[2*]	24	11	35	35	23	47	47	70	25- 3/8	25- 3/8	327.00

[2] Fiberglass reinforced.
* Fabricated

Wye - Reducing

Socket x Socket x Socket
1/2" - 2" - 235 psi Maximum Internal Pressure Rating @ 73°F (23°C) 2-1/2" - 6" - 150 psi Maximum Internal Pressure Rating @ 73°F (23° C) 8" - Larger & All Fabricated Sizes - 80 psi Maximum Internal Pressure Rating @ 73°F (23° C)



Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
475-101[1]	3/4X1/2	5/16	2- 5/32	1- 3/8	1- 5/16	2-15/16	2- 3/8	3-11/16	1- 3/8	1- 3/8	.20
475-131[1]	1X3/4	11/32	2	1- 3/4	1-15/32	3- 9/32	2- 7/8	4-11/32	1-23/32	1-23/32	.26
475-167[1]	1-1/4X3/4	3/8	2- 3/4	2- 1/4	1- 5/8	3- 3/4	3- 1/2	5- 1/8	2- 1/16	2- 1/16	.59
475-168[1]	1-1/4X1	3/8	2- 5/8	2- 1/4	1- 5/8	3- 3/4	3- 1/2	5- 1/8	2- 1/16	2- 1/16	.56
475-210[1]	1-1/2X3/4	1/2	3- 1/2	2- 9/16	1- 7/8	4- 1/2	3-15/16	5-13/16	2-11/32	2-11/32	.58
475-211[1]	1-1/2X1	1/2	3	2- 9/16	1- 7/8	4- 5/32	3-15/16	5-13/16	2-11/32	2-11/32	.58
475-212[1]	1-1/2X1-1/4	1/2	3- 1/4	2- 9/16	1- 7/8	4- 1/2	3-15/16	5-13/16	2-11/32	2-11/32	.52
475-248[1]	2X3/4	5/8	4- 1/4	3- 1/4	2- 1/8	5- 1/8	4- 3/4	6- 7/8	2- 7/8	2- 7/8	.85
475-249[1]	2X1	15/32	4- 3/32	3-11/32	2	5- 1/8	4- 7/8	6- 7/8	2- 7/8	2- 7/8	.86
475-251[1]	2X1-1/2	19/32	3- 7/16	3- 7/32	2- 1/8	4- 7/8	4- 3/4	6- 7/8	2- 7/8	2- 7/8	.82
475-292[1]	2-1/2X2	1	5- 9/16	4- 1/2	3	6-15/16	6- 1/2	9- 9/16	4- 3/16	4- 3/16	3.22
475-335[1]	3X1	11/16	5- 7/8	4- 7/32	2- 9/16	6-15/16	6- 1/8	8-23/32	4- 3/16	4- 3/16	2.49
475-336[1]	3X1-1/4	7/8	5- 3/4	4- 1/8	2- 3/4	7	6	8- 3/4	4- 3/16	4- 3/16	2.49
475-337[1]	3X1-1/2	1- 1/16	5-19/32	4-19/32	2-15/16	6-29/32	6-15/32	9-13/32	4	4	2.48
475-338[1]	3X2	3/4	5- 9/16	4- 1/4	2- 5/8	6-15/16	6- 1/8	8- 3/4	4- 3/16	4- 3/16	2.47
475-339[1]	3X2-1/2	7/8	4- 1/8	4-21/32	2- 3/4	6- 3/4	6	8- 3/4	4- 3/16	4- 3/16	2.37
475-420	4X2	1/8	4-13/16	4- 5/16	1- 7/8	6- 3/16	6- 5/16	8- 3/16	5- 1/32	2-23/32	1.98
475-422[1]	4X3	5/8	5- 5/16	5- 1/8	2- 5/8	7- 7/32	7- 1/8	9- 3/4	5- 1/32	4	2.66
475-528[1]	6X2	1/16	8- 5/8	6- 5/8	3	10	6-11/16	12-11/16	7- 9/16	4- 3/4	9.70
475-530[1]	6X3	1/32	8- 1/4	6-21/32	3- 1/32	10- 1/4	9-21/32	12-11/16	7- 9/16	5- 7/16	9.62
475-532	6X4	31/32	6- 9/16	5-11/16	3-15/16	8-27/32	8-23/32	12-21/32	7- 9/16	5- 7/16	8.84

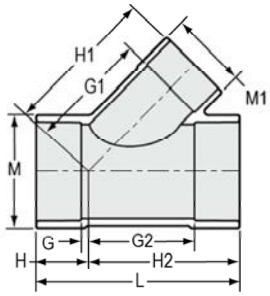
Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Wye - Reducing

(Continued)

Socket x Socket x Socket

1/2" - 2" - 235 psi Maximum Internal Pressure Rating @ 73°F (23°C) 2-1/2" - 6" - 150 psi Maximum Internal Pressure Rating @ 73°F (23° C) 8" - Larger & All Fabricated Sizes - 80 psi Maximum Internal Pressure Rating @ 73°F (23° C)



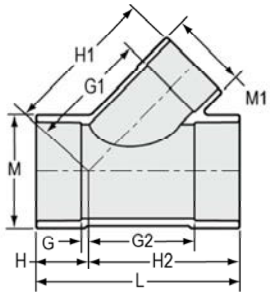
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
475-578F[2*]	8X2	9/16	9- 3/4	9- 3/16	4-13/16	11- 1/2	13- 7/16	18- 1/4	9- 1/4	2-11/16	11.90
475-580F[2*]	8X3	1- 5/16	10- 7/8	9-15/16	5- 9/16	13- 1/8	14- 3/16	19- 3/4	9- 1/4	3-15/16	14.31
475-582	8X4	11/16	9-1/8	8-3/16	3-5/16	11-3/8	12-3/16	15-1/2	9-23/32	5-1/4	14.81
475-582F[2*]	8X4	2- 1/16	11- 7/8	10-11/16	6- 5/16	14- 1/8	14-15/16	21- 1/4	9- 1/4	5	16.31
475-585F[2*]	8X6	3- 1/2	12-13/16	12- 1/8	7- 3/4	16- 1/16	16- 3/8	24- 1/8	9- 1/4	7- 3/16	21.03
475-621F[2*]	10X2	1/2	11- 3/16	10- 1/4	4- 3/4	12-15/16	15- 1/2	20- 1/4	11- 1/2	2-11/16	17.95
475-623F[2*]	10X3	1/2	12- 5/16	11- 1/4	5- 3/4	14- 9/16	16- 1/2	22- 1/4	11- 1/2	3-15/16	20.25
475-624F[2*]	10X4	1- 7/16	13- 5/16	12- 3/16	6-11/16	15- 9/16	17- 7/16	24- 1/8	11- 1/2	5	22.99
475-626	10X6	-3/16	12	11	4-13/16	15	16	20- 25/32	12- 1/16	7-21/32	28.18
475-626F[2*]	10X6	3- 1/2	14- 1/4	14- 1/4	8- 3/4	17- 1/2	19- 1/2	28- 1/4	11- 1/2	7- 3/16	29.11
475-628	10X8	1-7/8	12-5/8	11-15/16	6-15/16	16-5/8	16-15/16	23-13/16	12- 1/32	9-3/4	34.14
475-628F[2*]	10X8	5- 1/8	15-11/16	15- 7/8	10- 3/8	19-15/16	21- 1/8	31- 1/2	11- 1/2	9- 1/4	34.14
475-661F[2*]	12X2	1- 1/8	12- 9/16	11- 5/8	5- 1/8	14- 5/16	17- 7/8	23	13- 9/16	2-11/16	25.41
475-663F[2*]	12X3	3/8	13-11/16	12- 3/8	5- 7/8	15-15/16	18- 5/8	24- 1/2	13- 9/16	3-15/16	28.74
475-664F[2*]	12X4	3/8	14-11/16	13- 1/8	6- 5/8	16-15/16	19- 3/8	26	13- 9/16	5	32.24
475-666F[2*]	12X6	2- 3/8	15- 5/8	15- 1/8	8- 5/8	18- 7/8	21- 3/8	30	13- 9/16	7- 3/16	38.41
475-668F[2*]	12X8	3- 7/8	17- 1/16	16- 5/8	10- 1/8	21- 5/16	22- 7/8	33	13- 9/16	9- 1/4	45.53
475-670F[2*]	12X10	5- 3/8	18- 1/8	18- 1/8	11- 5/8	23- 3/8	24- 3/8	36	13- 9/16	11- 1/2	51.85
475-691F[2*]	14X2	2	13- 7/16	12	5	15- 3/16	19	24	14- 7/8	2-11/16	29.36
475-693F[2*]	14X3	3/4	14- 9/16	13- 1/4	6- 1/4	16-13/16	20- 1/4	26- 1/2	14- 7/8	3-15/16	33.06
475-694F[2*]	14X4	0	15- 9/16	14	7	17-13/16	21	28	14- 7/8	5	37.44
475-696F[2*]	14X6	1- 1/2	16- 1/2	15- 1/2	8- 1/2	19- 3/4	22- 1/2	31	14- 7/8	7- 3/16	45.39
475-698F[2*]	14X8	3	17-15/16	17	10	22- 3/16	24	34	14- 7/8	9- 1/8	52.01
475-700F[2*]	14X10	4- 1/2	19	18- 1/2	11- 1/2	24- 1/4	25- 1/2	37	14- 7/8	11- 1/2	64.61
475-702F[2*]	14X12	7	20-15/16	21	14	27- 3/16	28	42	14- 7/8	13- 9/16	74.55
475-751F[2*]	16X2	2	14- 3/4	14	6	16- 1/2	22	28	17	2-11/16	46.49
475-753F[2*]	16X3	1- 1/8	15- 7/8	14- 7/8	6- 7/8	18- 1/8	22- 7/8	29- 3/4	17	3-15/16	48.45
475-754F[2*]	16X4	1/2	16- 7/8	15- 1/2	7- 1/2	19- 1/8	23- 1/2	31	17	5	53.59
475-756F[2*]	16X6	1- 7/8	17-13/16	17- 7/8	9- 7/8	21- 1/16	25- 7/8	35- 3/4	17	7- 3/16	63.81
475-758F[2*]	16X8	2- 1/2	19- 1/4	18- 1/2	10- 1/2	23- 1/2	26- 1/2	37	17	9- 1/4	68.83
475-760F[2*]	16X10	4	20- 5/16	20	12	25- 9/16	28	40	17	11- 1/2	80.02
475-762F[2*]	16X12	5- 1/2	22- 1/4	21- 1/2	13- 1/2	28- 1/2	29- 1/2	43	17	13- 9/16	89.53
475-764F[2*]	16X14	6- 3/8	22- 1/2	22- 3/8	14- 3/8	29- 1/2	30- 3/8	44- 3/4	17	14- 7/8	100.41
475-786F[2*]	18X6	7/8	19- 1/8	18- 7/8	9- 7/8	22- 3/8	27- 7/8	37- 3/4	19- 1/8	7- 3/16	81.78
475-788F[2*]	18X8	2- 3/8	20- 9/16	20- 3/8	11- 3/8	24-13/16	29- 3/8	40- 3/4	19- 1/8	9- 1/4	92.20
475-790F[2*]	18X10	3- 3/8	21- 5/8	21- 3/8	12- 3/8	26- 7/8	30- 3/8	42- 3/4	19- 1/8	11- 1/2	102.13
475-792F[2*]	18X12	4- 7/8	23- 9/16	22- 7/8	13- 7/8	29-13/16	31- 7/8	45- 3/4	19- 1/8	13- 9/16	112.77
475-794F[2*]	18X14	5- 3/8	23-13/16	23- 3/8	14- 3/8	30-13/16	32- 3/8	46- 3/4	19- 1/8	14- 7/8	122.40
475-796F[2*]	18X16	7- 7/8	26- 1/16	25- 7/8	16- 7/8	34- 1/16	34- 7/8	51- 3/4	19- 1/8	17	118.75
475-816F[2*]	20X6	1/8	20- 1/2	19- 7/8	9- 7/8	23- 3/4	29- 7/8	39- 3/4	21- 3/16	7- 3/16	101.51

Wye - Reducing

(Continued)

Socket x Socket x Socket

1/2" - 2" - 235 psi Maximum Internal Pressure Rating @ 73°F (23°C) 2-1/2" - 6" - 150 psi Maximum Internal Pressure Rating @ 73°F (23° C) 8" - Larger & All Fabricated Sizes - 80 psi Maximum Internal Pressure Rating @ 73°F (23° C)



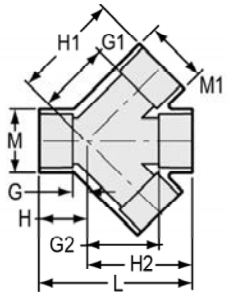
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
475-818F[2*]	20X8	1- 3/8	21-15/16	21- 3/8	11- 3/8	26- 3/16	31- 3/8	42- 3/4	21- 3/16	9- 1/4	109.36
475-820F[2*]	20X10	2- 3/8	23	22- 3/8	12- 3/8	28- 1/4	32- 3/8	44- 3/4	21- 3/16	11- 1/2	120.52
475-822F[2*]	20X12	4- 3/8	24-15/16	24- 3/8	14- 3/8	31- 3/16	34- 3/8	48- 3/4	21- 3/16	13- 9/16	133.54
475-824F[2*]	20X14	4- 7/8	25- 3/16	24- 7/8	14- 7/8	32- 3/16	34- 7/8	49- 3/4	21- 3/16	14- 7/8	147.64
475-826F[2*]	20X16	6- 3/8	27- 7/16	26- 3/8	16- 3/8	35- 7/16	36- 3/8	52- 3/4	21- 3/16	17	139.96
475-828F[2*]	20X18	7- 7/8	28-13/16	27- 7/8	17- 7/8	37-13/16	37- 7/8	55- 3/4	21- 3/16	19- 1/8	166.25
475-906F[2*]	24X6	1- 1/4	23- 3/16	22- 3/4	10- 3/4	26- 7/16	34- 3/4	45- 1/2	25- 3/8	7- 3/16	149.00
475-908F[2*]	24X8	1/4	24- 5/8	24- 1/4	12- 1/4	28- 7/8	36- 1/4	48- 1/2	25- 3/8	9- 1/4	165.00
475-910F[2*]	24X10	1- 3/8	25-11/16	25- 3/8	13- 3/8	30-15/16	37- 3/8	50- 3/4	25- 3/8	11- 1/2	176.10
475-912F[2*]	24X12	3- 1/4	27- 5/8	27- 1/4	15- 1/4	33- 7/8	39- 1/4	54- 1/2	25- 3/8	13- 9/16	195.15
475-914F[2*]	24X14	4	27- 7/8	28	16	34- 7/8	40	56	25- 3/8	14- 7/8	180.61
475-916F[2*]	24X16	6- 3/8	30- 1/8	30- 3/8	18- 3/8	38- 1/8	42- 3/8	60- 3/4	25- 3/8	17	235.63
475-918F[2*]	24X18	7- 7/8	31- 1/2	31- 7/8	19- 7/8	40- 1/2	43- 7/8	63- 3/4	25- 3/8	19- 1/8	224.54
475-920F[2*]	24X20	9- 1/8	33	33- 1/8	21- 1/8	43	45- 1/8	66- 1/4	25- 3/8	21- 3/16	256.44

[1] Sized with Bushing
[2] Fiberglass reinforced.
* Fabricated

Double Wye

Socket x Socket x Socket x Socket

100 psi Maximum Internal Pressure Rating @ 73° F (23°C)



Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
476-020F[2*]	2	3- 5/16	5-11/16	5-11/16	4-11/16	7- 1/16	7- 1/16	11- 3/4	2- 3/4	2- 3/4	3.32
476-030F[2*]	3	4- 7/8	8- 3/8	8- 3/8	6- 3/4	10- 1/4	10- 1/4	17	4	4	7.85
476-040F[2*]	4	4- 5/8	9-1/8	9- 1/8	6- 7/8	11- 11/16	11- 3/8	18- 1/4	5	5	9.69
476-060F[2*]	6	4- 7/8	11- 1/2	11- 1/2	8- 1/8	14- 3/4	14- 3/4	22- 7/8	7- 3/16	7- 3/16	22.11
476-080F[2*]	8	5- 5/8	14- 5/16	14- 5/16	9- 7/8	18- 9/16	18- 9/16	28- 7/16	9- 1/4	9- 1/4	36.46
476-100F[2*]	10	6- 9/16	17- 1/4	17- 1/4	11-13/16	22- 1/2	22- 1/2	34- 5/16	11- 1/2	11- 1/2	57.97
476-120F[2*]	12	7- 5/16	20- 1/16	20- 1/16	13- 9/16	26- 5/16	26- 5/16	39- 7/8	13- 9/16	13- 9/16	85.55
476-140F[2*]	14	7-3/16	21-3/16	21-3/16	14-3/16	28-3/16	28-3/16	42-3/8	14-7/8	14-7/8	110.04

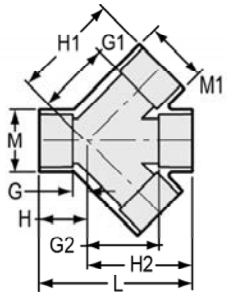
[2] Fiberglass reinforced.
* Fabricated

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Double Wye - Reducing

Socket x Socket x Socket x Socket

Size 3" is 150 psi, all Fabricated Sizes- 100 psi Maximum Internal Pressure Rating @ 73°F (23° C)



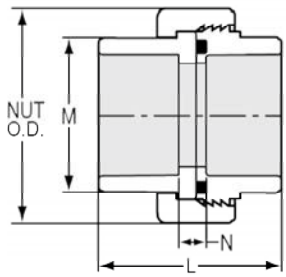
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
476-338	3X2	3/16	4- 1/4	4	2-1/16	5- 3/4	5-7/8	7-15/16	4- 3/16	2- 7/8	2.27
476-528F[2*]	6X2	7/8	8- 7/16	7- 1/2	4- 1/8	10- 3/16	10- 3/4	14- 7/8	7- 3/16	2-11/16	8.06
476-530F[2*]	6X3	1-13/16	9- 9/16	8- 7/16	5- 1/16	11-13/16	11-11/16	16- 3/4	7- 3/16	3-15/16	10.28
476-532F[2*]	6X4	2- 9/16	10- 9/16	9- 3/16	5-13/16	12-13/16	12- 7/16	18- 1/4	7- 3/16	5	13.01
476-578F[2*]	8X2	9/16	9- 3/4	9- 3/16	4-13/16	11- 1/2	13- 7/16	18- 1/4	9- 1/4	2-11/16	12.48
476-580F[2*]	8X3	1- 5/16	10- 7/8	9-15/16	5- 9/16	13- 1/8	14- 3/16	19- 3/4	9- 1/4	3-15/16	15.79
476-582F[2*]	8X4	2- 1/16	11- 7/8	10-11/16	6- 5/16	14- 1/8	14-15/16	21- 1/4	9- 1/4	5	18.50
476-585F[2*]	8X6	3- 1/2	12-13/16	12- 1/8	7- 3/4	16- 1/16	16- 3/8	24- 1/8	9- 1/4	7- 3/16	24.77
476-621F[2*]	10X2	1/2	11- 3/16	10- 1/4	4- 3/4	12-15/16	15- 1/2	20- 1/4	11- 1/2	2-11/16	13.92
476-623F[2*]	10X3	1/2	12- 5/16	11- 1/4	5- 3/4	14- 9/16	16- 1/2	22- 1/4	11- 1/2	3-15/16	17.25
476-624F[2*]	10X4	1- 7/16	13- 5/16	12- 3/16	6-11/16	15- 9/16	17- 7/16	24- 1/8	11- 1/2	5	26.45
476-626F[2*]	10X6	3- 1/2	14- 1/4	14- 1/4	8- 3/4	17- 1/2	19- 1/2	28- 1/4	11- 1/2	7- 3/16	33.48
476-628F[2*]	10X8	5- 1/8	15-11/16	15- 7/8	10- 3/8	19-15/16	21- 1/8	31- 1/2	11- 1/2	9- 1/4	42.77
476-661F[2*]	12X2	1- 1/8	12- 9/16	11- 5/8	5- 1/8	14- 5/16	17- 7/8	23	13- 9/16	2-11/16	32.17
476-663F[2*]	12X3	3/8	13-11/16	12- 3/8	5- 7/8	15-15/16	18- 5/8	24- 1/2	13- 9/16	3-15/16	26.15
476-664F[2*]	12X4	3/8	14-11/16	13- 1/8	6- 5/8	16-15/16	19- 3/8	26	13- 9/16	5	33.25
476-666F[2*]	12X6	2- 3/8	15- 5/8	15- 1/8	8- 5/8	18- 7/8	21- 3/8	30	13- 9/16	7- 3/16	42.55
476-668F[2*]	12X8	3- 7/8	17- 1/16	16- 5/8	10- 1/8	21- 5/16	22- 7/8	33	13- 9/16	9- 1/4	54.71
476-670F[2*]	12X10	5- 3/8	18- 1/8	18- 1/8	11- 5/8	23- 3/8	24- 3/8	36	13- 9/16	11- 1/2	67.88
476-756F[*]	16X6	1-7/8	17-1316	17-7/8	9-7/8	21-1/16	25-7/8	35-3/4	17	7-3/16	64.27
476-786F[*]	18X6	7/8	19-1/8	18-7/8	9-7/8	22-3/8	27-7/8	37-3/4	19-1/8	7-3/16	91.45

[2] Fiberglass reinforced.
* Fabricated

Union - Socket/Buna

Socket x Socket with Buna-N O-ring Seal

Dimensions Also Applicable to 497-XXX EPDM O-Ring Seals



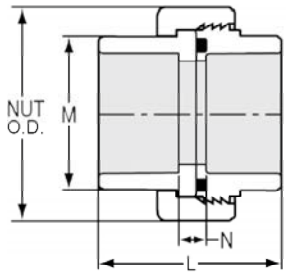
Pressure Rating
150 psi @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
457-005	1/2	1-27/32	1- 3/32	11/32	1-23/32	.08
457-007	3/4	2- 3/16	1- 5/16	11/32	1-31/32	.11
457-010	1	2- 7/16	1- 5/8	11/32	2- 3/8	.17
457-012	1-1/4	2-29/32	1-31/32	13/32	2-11/16	.24
457-015	1-1/2	3- 1/32	2- 1/4	3/8	3- 3/32	.32
457-020	2	3- 9/32	2-23/32	17/32	3- 5/8	.49
457-025	2-1/2	4- 1/16	3-11/32	9/16	4- 3/8	.87

Union - Socket/Buna

(Continued)

Socket x Socket with Buna-N O-ring Seal
Dimensions Also Applicable to
497-XXX EPDM O-Ring Seals

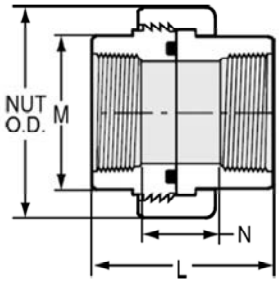


Pressure Rating
150 psi @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
457-030	3	4-11/32	4	11/16	5- 3/32	1.27
457-040	4	4- 5/8	5- 1/32	19/32	6- 3/16	1.78
457-060	6	6- 7/8	7- 9/32	13/16	8- 7/8	5.45

Union - Fipt/Buna

Fipt x Fipt with Buna O-ring Seal
Dimensions Also Applicable to
498-XXX EPDM O-Ring Seals

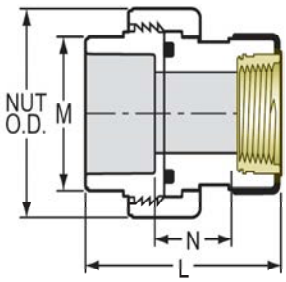


Pressure Rating
150 psi @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
458-005	1/2	1-25/32	1- 3/32	5/16	1-23/32	.08
458-007	3/4	1-25/32	1- 5/16	11/32	1-31/32	.11
458-010	1	2- 1/8	1- 5/8	11/32	2- 3/8	.18
458-012	1-1/4	2- 1/4	1-31/32	13/32	2-11/16	.23
458-015	1-1/2	2- 9/32	2- 1/4	3/8	3- 3/32	.31
458-020	2	2- 1/2	2-23/32	1/2	3- 5/8	.47
458-025	2-1/2	3- 5/32	3-11/32	9/16	4- 3/8	.88
458-030	3	3-13/32	4	5/8	5- 3/32	1.25
458-040	4	3- 9/16	5- 1/32	5/8	6- 3/16	1.75
458-060	6	4-27/32	7- 1/4	1- 1/2	8- 7/8	5.14

Union - Brass Fipt/Buna

Socket x Fipt with Brass Thread Insert & Buna-N O-ring Seal
Dimensions Also Applicable to
499-XXXBR EPDM O-Ring Seals



Pressure Rating
235 psi @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
459-010BR	1	2-13/16	1- 7/8	1- 1/32	2- 7/8	.52
459-012BR	1-1/4	3- 9/32	2- 7/32	1- 1/16	3- 5/16	.68
459-015BR	1-1/2	3- 1/2	2- 9/16	1- 3/32	3-17/32	.91
459-020BR	2	3- 5/8	2- 7/8	1- 1/4	4- 5/16	1.54

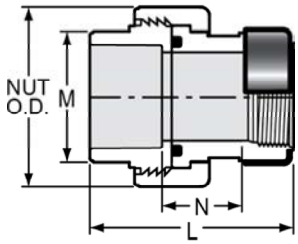
Not intended to convey or dispense water for human consumption through drinking or cooking

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Union - Special Reinforced Fipt/Buna

Socket x SR Fipt with Buna O-ring Seal - Stainless Steel Collar

Dimensions Also Applicable to
499-XXXSR EPDM O-Ring Seals



Pressure Rating
235 psi @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
459-002SR	1/4	2- 1/8	7/8	29/32	1-11/16	.09
459-003SR	3/8	2- 5/16	1	1	1-13/16	.06
459-005SR	1/2	2- 9/32	1- 9/32	21/32	1-31/32	.16
459-007SR	3/4	2-19/32	1-17/32	27/32	2- 1/2	.27
459-010SR	1	2-15/16	1-11/16	7/8	2- 7/8	.39
459-012SR	1-1/4	3- 7/32	2- 1/16	31/32	3- 5/16	.54
459-015SR	1-1/2	3- 7/16	2- 9/16	1- 1/16	3- 9/16	.67
459-020SR	2	4- 1/8	3	1- 9/16	4- 5/32	1.11
459-030SR	3	5- 9/32	4- 5/16	1-31/32	5-13/16	2.61
459-040SR	4	5-15/16	5- 1/4	2- 1/8	5- 3/4	4.02

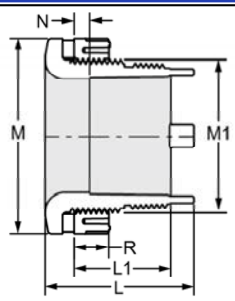




Tank Adapters with EPDM Gasket, Schedule 40

Socket(Male Pipe Thread)

150 psi Maximum Internal Pressure Rating @ 73° F (23°C)



Part Number	Size	L	L1	M	M1	N	R	Outlet Socket	Outlet Thread MIPT	Approx. Wt. (Lbs.)
4170E-005	1/2 Soc(1 MPT)	2- 5/16	1- 1/2	2- 3/16	1- 7/16	3/4	9/16	1/2	1	.16
4170E-007	3/4 Soc(1-1/4 MPT)	2- 3/8	1- 1/2	2- 1/2	1- 13/16	9/16	9/16	3/4	1-1/4	.24
4170E-010	1 Soc(1-1/2 MPT)	2- 3/8	1- 1/2	2- 3/4	2- 1/16	1/2	9/16	1	1-1/2	.28
4170E-012	1-1/4 Soc(2 MPT)	2- 3/8	1- 9/16	3- 3/16	2- 1/2	5/16	9/16	1-1/4	2	.40
4170E-015	1-1/2 Soc(2 MPT)	2- 3/8	1- 9/16	3- 3/16	2- 1/2	1/4	9/16	1-1/2	2	.35
4170E-020	2 Soc(2-1/2 MPT)	3- 1/4	2- 3/8	3- 13/16	3- 1/16	1	5/8	2	2-1/2	.58
4170E-025	2-1/2 Soc(3 MPT)	3- 1/2	2- 9/16	4- 1/2	3- 11/16	13/16	5/8	2-1/2	3	.87

Note: These tank adapters have both Socket and size larger Male Pipe Thread connection on external end. Adapter Nut has left hand thread to prevent loosening when installing threaded connection. End lugs allow holding body when tightening Adapter Nut.

Tank Adapter Hole Size Requirements

Tank Adapter Size	Recommended Minimum Hole Size	Minimum Inside Curvature Radius (inches)	Maximum Tank Wall Thickness (inches)
1/2	1-1/2	5.50	.44
3/4	1-7/8	7.50	.44
1	2-1/8	9.00	.44
1-1/4	2-1/2	12.00	.44
1-1/2	2-1/2	12.00	.44
2	3-1/8	17.50	.75
2-1/2	3-3/4	24.50	.88



Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Schedule 80 PVC Fittings, Unions & Tank Adapters



ENGINEERING GUIDE

Contact Spears® for any Information not found.

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

PVC Performance Engineered and Tested



SPEARS® Schedule 80 PVC product designs combine years of proven experience with computer generated stress analysis to yield the optimum physical structure and performance for each fitting. Material reinforcement is uniformly placed in stress concentration areas for substantially improved pressure handling capability. Resulting products are subjected to numerous verification tests to assure obtaining the very best PVC fittings available.

1/4" Through 14" Availability
Spears® comprehensive line of PVC injection molded fittings and extruded pipe offers a variety of configurations in sizes 1/4" through 14". Schedule 80 fittings are manufactured to ASTM D 2467 and pipe is produced to ASTM D 1785. Spears® exclusive CL150 Flanges are produced in sizes 1/2" - 18" with ANSI B16.5 bolt patterns, plus numerous Unions, Saddles, Transition and Specialty fittings in a variety of sizes.

Exceptional Chemical & Corrosion Resistance
Unlike metal, PVC fittings and pipe never rust, scale, or pit, and will provide many years of maintenance-free service and extended system life.

High Temperature Ratings
PVC thermoplastic can handle fluids at service temperatures up to 140°F (60°C), allowing a wide range of process applications, including corrosive fluids.

Lower Installation Costs
Substantially lower material costs than steel alloys or lined steel, combined with lighter weight and ease of installation, can reduce installation costs by as much as 60% over conventional metal systems.

Higher Flow Capacity
Smooth interior walls result in lower pressure loss and higher volume than conventional metal fittings.

Additional Fabricated Configurations through 36"
Extra large, hard-to-find, and custom configurations are fabricated from NSF® Certified pipe. Fittings are engineered and tested to provide full pressure handling capabilities according to Spears® specifications.

Advanced Design Specialty Fittings
Spears® wide range of innovative, improved products include numerous metal-to-plastic transition fittings and unions with Spears® patented special reinforced (SR) plastic threads.

PVC Valves
SPEARS® PVC Valve products are available for total system compatibility and uniformity.

PVC Sample Engineering Specifications
All PVC Schedule 80 pipe and fittings shall be produced by Spears® Manufacturing Company from PVC Type I, cell classification 12454, conforming to ASTM Standard D 1784. All PVC injection molded Schedule 80 fittings and extruded pipe shall be Certified for potable water service by NSF International. All Schedule 80 fittings shall be manufactured in strict compliance to ASTM D 2467 and Schedule 80 pipe shall be manufactured in strict compliance to ASTM D 1785. All fabricated fittings shall be produced in accordance with Spears® General Specifications for Fabricated Fittings. All PVC flanges shall be designed and manufactured to meet CL150 bolt pattern per ANSI Standard B16.5 and rated for a maximum internal pressure of 150 psi, non-shock at 73°F.

The information contained in this publication is based on current information and product design at the time of publication and is subject to change without notification. Our ongoing commitment to product improvement may result in some variation. No representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or results to be obtained therefrom. For verification of technical data or additional information not contained herein, please contact Spears® Technical Services Department [West Coast: (818) 364-1611 - East Coast: (678) 985-1263].

General Information

Recommendations For Installers And Users

Plastic piping systems should be **ENGINEERED, INSTALLED** and **OPERATED** in accordance with **ESTABLISHED DESIGN AND ENGINEERING STANDARDS AND PROCEDURES** for plastic piping systems. Suitability for the intended service application should be determined by the installer and/or user prior to installation of a plastic piping system. **PRIOR TO ASSEMBLY, all piping system components should be inspected for damage or irregularities. Mating components should be checked to assure that tolerances and engagements are compatible. Do not use any components that appear irregular or do not fit properly. Contact the appropriate manufacturer of the component product in question to determine usability. Consult all applicable codes and regulations for compliance prior to installation.**

Solvent Weld Connections - Use Spears® quality solvent cements and primers formulated for the intended service application, pipe size and type of joint. While the pipe and fitting materials may be compatible with the intended medium, the solvent cement may not be. Consult the manufacturers for suitability of use. Read and follow the cement and primer manufacturers' applications and cure time instructions thoroughly. Be sure to use the correct size applicator.

Threaded Connections - Use a quality grade thread sealant. **WARNING: SOME PIPE JOINT COMPOUNDS OR PTFE PASTES MAY CONTAIN SUBSTANCES THAT COULD CAUSE STRESS CRACKING TO PLASTIC.** Spears® Manufacturing company recommends the use of Spears® **BLUE 75™** Thread Sealant which has been tested for compatibility with Spears® products. Please follow the sealant manufacturers' application/installation instructions. Choice of an appropriate thread sealant other than those listed above is at the discretion of the installer. 1 to 2 turns beyond **FINGER TIGHT** is generally all that is required to make a sound plastic threaded connection. Unnecessary **OVERTIGHTENING** will cause **DAMAGE TO BOTH PIPE AND FITTING.**

Standards and Specifications

Molded Schedule 80 PVC products are manufactured to ASTM D 2467 for use with pipe manufactured to ASTM F 441. Certain products carry reduced pressure handling capability and have maximum internal pressure ratings at 73°F noted.

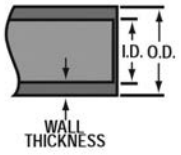
Fabricated Schedule 80 PVC pressure fittings (part numbers ending with "**F**") are manufactured to Spears® specifications for use with pipe manufactured to ASTM D 1785. General Specifications for Standard Fabricated Fittings for additional information.

All specified Schedule 80 PVC products are manufactured from materials certified by NSF® for use in potable water service.

"Lead Free" low lead certification - unless otherwise specified, all Spears® Schedule 80 fittings specified here-in are certified by NSF International to NSF/ANSI 372 and conforms with the lead content requirements for "lead free" plumbing as defined by California, Vermont, Maryland, and Louisiana state laws and the U.S. Safe Drinking Water Act. Weighted average lead content <=0.25%. Spears® PVC and CPVC Pipe, Fittings and Valves have always been lead-free and Certified by NSF International for use in potable water systems. Spears® offers a wide range of lead-free specialty fittings and transition adapters for plumbing applications. However, certain brass threaded adapter fittings for applications that are not intended to convey water for human consumption through drinking or cooking are still produced and available.

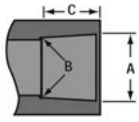
ASTM STANDARD DIMENSIONS

SCHEDULE 80 PIPE DIMENSIONS ASTM D 1785



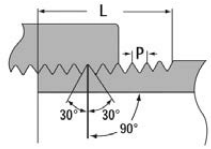
Nominal Pipe Size In.	Mean Outside Diameter In.	O. D. Tolerance In.	Minimum Wall Thickness In.
1/8	0.405	± 0.004	0.095
1/4	0.540	± 0.004	0.119
3/8	0.675	± 0.004	0.126
1/2	0.840	± 0.004	0.147
3/4	1.050	± 0.004	0.154
1	1.315	± 0.005	0.179
1-1/4	1.660	± 0.005	0.191
1-1/2	1.900	± 0.006	0.200
2	2.375	± 0.006	0.218
2-1/2	2.875	± 0.007	0.276
3	3.500	± 0.008	0.300
4	4.500	± 0.009	0.337
5	5.563	± 0.010	0.375
6	6.625	± 0.011	0.432
8	8.625	± 0.015	0.500
10	10.750	± 0.015	0.593
12	12.750	± 0.015	0.687

SCHEDULE 80 SOCKET DIMENSIONS ASTM D 2467



Nominal Size In.	Diameter			Socket Length Minimum C
	Entrance A	Bottom B	Tolerance A	
1/8	0.417	0.401	± 0.004	0.500
1/4	0.552	0.536	± 0.004	0.625
3/8	0.687	0.671	± 0.004	0.750
1/2	0.848	0.836	± 0.004	0.875
3/4	1.058	1.046	± 0.004	1.000
1	1.325	1.310	± 0.005	1.125
1-1/4	1.670	1.655	± 0.005	1.250
1-1/2	1.912	1.894	± 0.006	1.375
2	2.387	2.369	± 0.006	1.500
2-1/2	2.889	2.868	± 0.007	1.750
3	3.516	3.492	± 0.008	1.875
4	4.518	4.491	± 0.009	2.250
5	5.583	5.553	± 0.010	2.625
6	6.647	6.614	± 0.011	3.000
8	8.655	8.610	± 0.015	4.000
10	10.780	10.73	± 0.015	5.000
12	12.780	12.735	± 0.015	6.000
14	14.030	13.985	± 0.015	7.000

AMERICAN NATIONAL STANDARD TAPER PIPE THREADS (NPT) ANSI B1 .20.1 ASTM F 1498



Nominal Size In.	Threads Per Inch	Effective Thread Length L	Pitch Of Thread P
1/8	27	0.2639	0.03704
1/4	18	0.4018	0.05556
3/8	18	0.4078	0.05556
1/2	14	0.5337	0.07143
3/4	14	0.5457	0.07143
1	11-1/2	0.6828	0.08696
1-1/4	11-1/2	0.7068	0.08696
1-1/2	11-1/2	0.7235	0.08696
2	11-1/2	0.7565	0.08696
2-1/2	8	1.1375	0.12500
3	8	1.2000	0.12500
4	8	1.3000	0.12500
5	8	1.4063	0.12500
6	8	1.5125	0.12500
8	8	1.7125	0.12500

STANDARD COMPARISONS

SPEARS® IPS-to-Metric transition unions are listed by nominal size. The chart below compares nominal and actual* pipe O.D. for each size according to the designated standard.

JIS K6741 (mm)		DIN 8062 (mm)		ASTM D1785 (in.)		NPT-ANSI B1.20.1** Tapered Thread		BSP-BS21,DIN 2999,ISO 7/1 Thread	
Nominal	Actual*	O.D.	Actual*	Nominal	Actual*	Designation	Threads/in.	Designation	Threads/25.4mm
16	22	15	20	1/2	.840	1/2	14	1/2	14
20	26	20	25	3/4	1.050	3/4	14	3/4	14
25	32	25	32	1	1.315	1	11.5	1	11
30	38	38	40	1-1/4	1.660	1-1/4	11.5	1-1/4	11
40	48	40	50	1-1/2	1.900	1-1/2	11.5	1-1/2	11
50	60	50	63	2	2.375	2	11.5	2	11
75	89	80	90	3	3.500	3	8	3	11
100	114	100	110	4	4.500	4	8	4	11

*Specified dimension, certain tolerances apply **NPT and BSP have different thread angles and not compatible.

Schedule 80 Fittings

Injection Molded Dimension References:

G = (LAYING LENGTH) Intersection of center lines to bottom of socket/thread; 90° elbows, tees, crosses; ± 1/32 inch.
H = Intersection of center lines to face of fitting; 90° elbows tees, crosses; ± 1/32 inch.
J = Intersection of center lines to bottom of socket/thread; 45° elbows; ± 1/32 inch

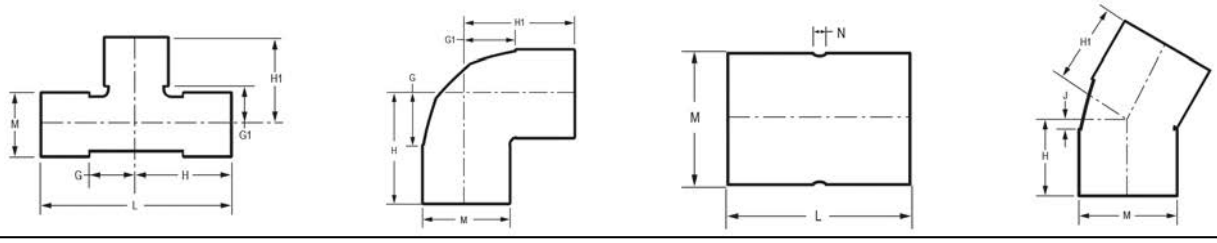
L = Overall length of fittings; ± 1/16 inch.
M = Outside diameter of socket/thread hub; ± 1/16 inch.
N = Socket bottom to socket bottom; couplings; ± 1/16 inch.
W = Height of cap; ± 1/16 inch.

Fabricated Dimension References:

G = (LAYING LENGTH) Intersection of center lines to bottom of socket/thread; 90° elbows, tees, crosses; ± 1/4 inch; 14" & larger ± 1/2 inch.
H = Intersection of center lines to face of fitting; 90° elbows ± 1/4 inch, 14" & larger ± 3/4 inch; wyes ± 1/2 inch; tees, crosses ± 1/4 inch; 14" larger ± 1/2 inch.
J = Intersection of center lines to bottom of socket/thread; 45° elbows; ± 1/4 inch; 14" & larger ± 1/2 inch.

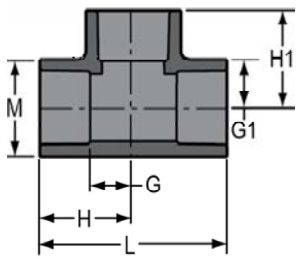
L = Overall length of fittings; ± 1/2 inch.; wyes ± 1 inch; 14" & larger ± 1 inch.
M = Outside diameter of socket/thread hub; ± 1/4 inch.
N = Socket bottom to socket bottom; couplings; ± 1/2 inch.
W = Height of cap; ± 1/4 inch.

Typical Fabricated Dimension References



Tee

Socket x Socket x Socket



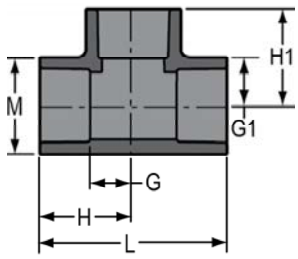
Part Number	Size	G	G1	H	H1	L	M	Approx. Wt. (Lbs.)
801-002	1/4	11/32	11/32	31/32	31/32	1-31/32	27/32	.03
801-003	3/8	15/32	15/32	1- 1/4	1- 1/4	2- 1/2	31/32	.06
801-005	1/2	17/32	17/32	1-15/32	1-15/32	2-15/16	1- 3/16	.10
801-007	3/4	11/16	11/16	1-11/16	1-11/16	3- 3/8	1-13/32	.15
801-010	1	7/8	7/8	2	2	4	1- 3/4	.25
801-012	1-1/4	1- 1/32	1- 1/32	2- 9/32	2- 9/32	4-19/32	2- 3/32	.39
801-015	1-1/2	1- 3/16	1- 3/16	2- 9/16	2- 9/16	5- 1/8	2- 3/8	.51
801-020	2	1-7/16	1-7/16	2-15/16	2-15/16	5-7/8	2- 7/8	.79
801-025	2-1/2	1- 3/4	1- 3/4	3- 1/2	3- 1/2	7	3-15/32	1.46
801-030	3	2- 1/16	2- 1/16	3-31/32	3-31/32	7-15/16	4- 5/32	2.14
801-040	4	2- 1/2	2- 1/2	4- 3/4	4- 3/4	9- 1/2	5- 1/4	3.51
801-050	5	3- 5/32	3- 5/32	5-25/32	5-25/32	11-19/32	6-13/32	5.80
801-050F*	5	5- 1/2	5- 1/2	8- 1/2	8- 1/2	17	6- 5/16	13.25
801-060	6	3-25/32	3-25/32	6-25/32	6-25/32	13-19/32	7-19/32	9.51
801-080	8	4-13/16	4-13/16	8- 7/8	8- 7/8	17- 3/4	9-23/32	21.03
801-080F*	8	7- 5/8	7- 5/8	11- 7/8	11- 7/8	23- 3/4	9- 5/8	17.16

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Tee

(Continued)

Socket x Socket x Socket

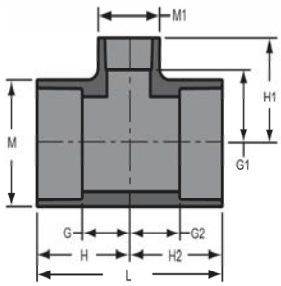


Part Number	Size	G	G1	H	H1	L	M	Approx. Wt. (Lbs.)
801-100	10	5-15/16	5-29/32	10-29/32	10-29/32	21-13/16	12-3/16	37.89
801-100F*	10	9	9	14- 1/4	14- 1/4	28- 1/2	11-15/16	39.85
801-120	12	6-15/16	6-15/16	12-15/16	12-15/16	25- 7/8	14- 1/4	54.44
801-120F*	12	11- 1/4	11- 1/4	17- 1/2	17- 1/2	35	14- 1/8	68.42
801-140	14	7- 1/32	7- 1/32	14- 7/32	14- 1/32	28- 7/16	15-21/32	127.21
801-140F*	14	12- 1/4	12- 1/4	19- 1/4	19- 1/4	38- 1/2	15- 1/2	90.74
801-160F*	16	13	13	21	21	42	17-11/16	144.86
801-180F*	18	13- 3/4	13- 3/4	22- 3/4	22- 3/4	45- 1/2	19- 7/8	170.14
801-200F*	20	16- 3/8	16- 3/8	26- 3/8	26- 3/8	52- 3/4	22- 1/16	246.44
801-240F*	24	20- 1/4	20- 1/4	32- 1/4	32- 1/4	64- 1/2	26- 7/16	422.65

* Fabricated

Tee - Reducing

Socket x Socket x Socket

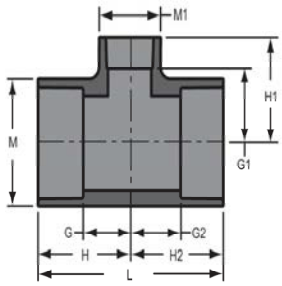


Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
801-101	3/4X1/2	19/32	23/32	19/32	1-19/32	1-19/32	1-19/32	3- 3/16	1-13/32	1- 3/16	.13
801-130	1X1/2	19/32	7/8	19/32	1-23/32	1- 3/4	1-23/32	3- 7/16	1- 3/4	1- 3/16	.19
801-131	1X3/4	11/16	27/32	11/16	1-53/64	1-27/32	1-53/64	3-21/32	1- 3/4	1-13/32	.22
801-157	1-1/4X1X3/4	23/32	1- 1/16	11/16	1-7/8	2- 1/16	1-15/16	3-3/4	2-2/32	1- 7/16	.30
801-158	1-1/4X1X1	13/32	15/16	13/32	2- 1/8	1-31/32	1-15/16	4	2- 1/16	1-11/16	.32
801-159	1-1/4X1X1-1/4	15/16	1- 1/32	7/8	2- 3/16	2- 5/32	2- 1/8	4- 5/16	2- 1/16	2- 1/16	.39
801-166[1]	1-1/4X1/2	7/8	1-13/32	7/8	2- 3/32	2- 3/8	2- 3/32	4- 7/32	2- 1/8	1- 3/4	.30
801-167	1-1/4X3/4	5/8	31/32	5/8	1-15/16	1-31/32	1-15/16	3- 7/8	2- 1/8	1-13/32	.27
801-168	1-1/4X1	27/32	1- 1/32	27/32	2- 3/32	2- 5/32	2- 3/32	4- 7/32	2- 3/32	1- 3/4	.34
801-202	1-1/2X1-1/4X1	7/8	1- 7/32	7/8	2- 1/4	2-11/32	2- 1/4	4- 1/2	2- 7/16	1-13/16	.39
801-209	1-1/2X1/2	9/16	1- 1/16	9/16	1-31/32	1-15/16	1-31/32	3-15/16	2- 3/8	1- 3/16	.33
801-210	1-1/2X3/4	11/16	1- 1/32	11/16	2- 1/16	2- 1/32	2- 1/16	4- 5/32	2-11/32	1-13/32	.36
801-211	1-1/2X1	27/32	1- 5/32	27/32	2-15/32	2- 5/16	2-15/32	4-15/16	2-11/32	1- 3/4	.41
801-212	1-1/2X1-1/4	1- 3/16	1- 3/16	1- 3/16	2- 9/16	2- 7/16	2- 9/16	5- 1/8	2- 3/8	2- 1/8	.51
801-247	2X1/2	9/16	1-13/32	9/16	2- 3/32	2- 9/32	2- 3/32	4- 3/16	2- 7/8	1- 5/32	.43
801-248	2X3/4	11/16	1-13/32	11/16	2- 3/16	2-13/32	2- 3/16	4- 3/8	2-27/32	1- 3/8	.51
801-249	2X1	27/32	1- 7/16	27/32	2- 3/8	2- 9/16	2- 3/8	4- 3/4	2- 7/8	1- 3/4	.57
801-250	2X1-1/4	1-1/32	1-7/16	1-1/32	2-17/32	2-11/16	2-17/32	5-1/16	2-27/32	2-1/16	.61
801-251	2X1-1/2	1- 5/32	1-13/32	1- 5/32	2-11/16	2-13/16	2-11/16	5- 3/8	2-15/16	2-15/32	.77

Tee - Reducing

Socket x Socket x Socket

(Continued)



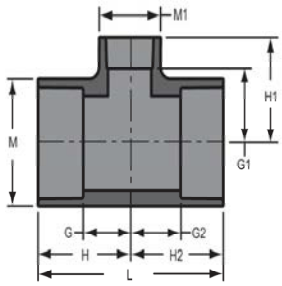
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
801-254[1]	2X2X4	3-11/16	2-15/32	3-11/16	5- 3/16	4-23/32	5- 3/16	10-11/32	5- 1/4	5- 1/4	5.53
801-287	2-1/2X1/2	19/32	1-19/32	19/32	2- 3/8	2-15/32	2- 3/8	4-23/32	3- 1/2	1- 3/16	.74
801-288	2-1/2X3/4	21/32	1- 1/2	21/32	2- 7/16	2-17/32	2- 7/16	4-27/32	3-17/32	1-13/32	.80
801-289	2-1/2X1	27/32	1-23/32	27/32	2- 5/8	2-27/32	2- 5/8	5- 1/4	3-17/32	1-23/32	.98
801-290	2-1/2X1-1/4	1- 1/32	1- 3/4	1- 1/32	2-27/32	3	2-27/32	5- 11/16	3- 9/16	2- 1/32	1.11
801-291	2-1/2X1-1/2	1-5/32	1-23/32	1-5/32	2-31/32	3- 1/8	2-31/32	5-29/32	3-9/16	2-3/8	1.21
801-292	2-1/2X2	1-13/32	1- 5/8	1-13/32	3- 3/16	3- 1/8	3- 3/16	6-3/8	3-1/2	2- 7/8	1.31
801-333[1]	3X1/2	1- 7/16	2- 7/8	1- 7/16	3- 5/16	3- 3/4	3- 5/16	6- 5/8	4- 3/16	2- 7/8	1.29
801-334[1]	3X3/4	1- 7/16	2-11/16	1- 7/16	3- 5/16	3-11/16	3- 5/16	6- 5/8	4- 3/16	2- 7/8	1.27
801-335	3X1	7/8	2	7/8	2- 3/4	3- 1/8	2- 3/4	5-1/2	4- 7/32	1-3/4	1.24
801-336[1]	3X1-1/4	1- 5/8	1-15/16	1- 5/8	3- 5/16	3- 5/8	3- 5/16	6- 5/8	4- 3/16	2- 7/8	1.84
801-337	3X1-1/2	1- 5/32	2- 1/16	1- 5/32	3- 1/16	3- 7/16	3- 1/16	6-1/8	4- 3/16	2- 3/8	1.44
801-338	3X2	1- 7/16	1-13/16	1- 7/16	3- 5/16	3- 5/16	3- 5/16	6- 5/8	4- 7/32	2- 7/8	1.64
801-339	3X2-1/2	1- 3/4	1-31/32	1- 3/4	3- 5/8	3-11/16	3- 5/8	7- 1/4	4- 3/16	3-17/32	1.91
801-415[1]	4X1/2	1-7/16	3-17/32	1-7/16	3-11/16	4-13/32	3-11/16	7-11/32	5-1/4	2-7/8	1.97
801-417	4X1	27/32	2-19/32	27/32	3-1/8	3-23/32	3-1/8	6-1/4	5-1/4	1-3/4	1.91
801-418[1]	4X1-1/4	1- 1/8	2-31/32	1- 1/8	3-13/32	4- 7/32	3-13/32	6-25/32	5- 1/4	2- 3/8	2.09
801-419	4X1-1/2	1- 1/8	2- 9/16	1- 1/8	3- 3/8	3-15/16	3- 3/8	6- 3/4	5- 1/4	2- 3/8	2.03
801-420	4X2	1- 7/16	2- 1/2	1- 7/16	3-11/16	4	3-11/16	7- 3/8	5- 1/4	2- 7/8	2.32
801-421[1]	4X2-1/2	2- 1/16	2-11/16	2- 1/16	4- 5/16	4- 3/4	4- 5/16	8- 5/8	5- 1/4	4- 1/8	3.38
801-422	4X3	2- 1/8	2-23/32	2- 1/8	4- 3/8	4-19/32	4- 3/8	8-25/32	5- 1/4	4- 3/16	3.01
801-482F*	5X1-1/4	4	4-11/16	4	7	6- 3/16	7	14	6- 5/16	2- 1/16	5.98
801-484[1]	5X1-1/2	3- 5/32	5-17/32	3- 5/32	5-13/16	6-29/32	5-13/16	11- 5/8	6-13/32	6-13/32	8.13
801-484F*	5X1-1/2	4- 1/8	5	4- 1/8	7- 1/8	6- 1/2	7- 1/8	14- 1/4	6- 5/16	2- 5/16	5.82
801-486[1]	5X2	3- 5/32	5- 3/32	3- 5/32	5-13/16	6-19/32	5-13/16	11-19/32	6-13/32	6-13/32	8.12
801-486F*	5X2	4- 5/16	4- 3/4	4- 5/16	7- 5/16	6- 1/2	7- 5/16	14- 5/8	6- 5/16	2-13/16	5.82
801-487[1]	5X2-1/2	3- 5/32	4-23/32	3- 5/32	5-13/16	6-15/32	5-13/16	11- 5/8	6-13/32	6-13/32	8.12
801-488[1]	5X3	3- 5/32	4- 5/8	3- 5/32	5-13/16	6- 1/2	5-13/16	11-19/32	6-13/32	6-13/32	7.94
801-490[1]	5X4	3- 5/32	3-29/32	3- 5/32	5-13/16	6- 5/32	5-13/16	11- 5/8	6-13/32	6-13/32	7.11
801-523[1]	6X1/2	1- 7/16	4-13/16	1- 7/16	4- 7/16	5-11/16	4- 7/16	8- 7/8	7-19/32	2- 7/8	4.40
801-524[1]	6X3/4	1	4	1	3-7/8	5	3-7/8	7-3/4	7-9/16	1-3/4	4.38
801-525	6X1	27/32	3-23/32	27/32	3- 7/8	4-27/32	3- 7/8	7- 3/4	7- 9/16	1- 3/4	4.35
801-526[1]	6X1-1/4	1- 7/16	4- 3/16	1- 7/16	4- 7/16	5-15/32	4- 7/16	8- 7/8	7-19/32	2- 7/8	5.40
801-527[1]	6X1-1/2	1- 7/16	4- 3/32	1- 7/16	4- 7/16	5- 1/2	4- 7/16	8- 7/8	7-19/32	2- 7/8	5.35
801-528	6X2	1- 7/16	3-23/32	1- 7/16	4- 7/16	5- 1/4	4- 7/16	8- 7/8	7-19/32	2- 7/8	5.20
801-529[1]	6X2-1/2	2- 1/16	3-13/16	2- 1/16	5- 1/16	5- 7/8	5- 1/16	10- 1/8	7- 9/16	4- 1/4	6.84
801-530	6X3	2- 1/16	3- 3/4	2- 1/16	5- 3/32	5- 5/8	5- 3/32	10- 3/16	7-19/32	4- 1/4	6.47
801-530F*	6X3	4-3/4	5-5/8	4-3/4	8	7-7/8	8	16	7-1/2	4-1/8	8.53
801-532	6X4	2-11/16	3-25/32	2-11/16	5-11/16	6-1/16	5-11/16	11-3/8	7-9/16	5- 1/4	7.42
801-533F*	6X5	5- 3/4	6- 1/2	5- 3/4	9	9- 1/2	9	18	7- 1/2	6- 5/16	10.61
801-575[1]	8X1	4-1/16	7-27/32	4-1/16	7-29/32	8-31/32	7-29/32	15-27/32	9-3/4	7-9/16	12.66

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Tee - Reducing

Socket x Socket x Socket

(Continued)

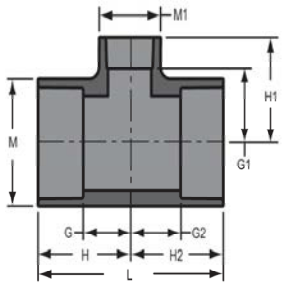


Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
801-578[1]	8X2	3-13/16	6- 5/8	3-13/16	7-13/16	8- 1/8	7-13/16	15- 5/8	9-11/16	7- 9/16	12.52
801-578F*	8X2	4-11/16	6- 1/8	4-11/16	8-15/16	7- 7/8	8-15/16	17- 7/8	9- 5/8	2-13/16	12.88
801-579F*	8X2-1/2	4- 7/8	6-15/16	4- 7/8	9- 1/8	8- 5/16	9- 1/8	18- 1/4	9- 5/8	3- 7/16	13.98
801-580[1]	8X3	3-23/32	6- 1/2	3-23/32	7- 3/4	8- 3/8	7- 3/4	15- 1/2	9-11/16	7- 1/2	12.35
801-580F*	8X3	5- 3/16	6-11/16	5- 3/16	9- 7/16	8-15/16	9- 7/16	18- 7/8	9- 5/8	4- 1/8	14.42
801-582[1]	8X4	2- 5/8	4-27/32	2- 5/8	6- 5/8	7- 3/32	6- 5/8	13- 1/4	9- 23/32	5- 9/32	11.51
801-582F*	8X4	5- 3/4	7-11/16	5- 3/4	10	9-15/16	10	20	9- 5/8	5- 3/16	12.22
801-585	8X6	3-27/32	4-13/16	3-27/32	7-29/32	8	7-29/32	15-27/32	9-23/32	7- 9/16	15.75
801-621F*	10X2	4- 3/8	7- 1/8	4- 3/8	9- 5/8	8- 7/8	9- 5/8	19- 1/4	11-15/16	2-13/16	22.37
801-622F*	10X2-1/2	5- 1/4	7- 5/16	5- 1/4	10- 1/2	9- 5/16	10- 1/2	21	11-15/16	3- 7/16	23.34
801-623[1]	10X3	3-25/32	7-17/32	3-25/32	9-25/64	9- 3/8	9-25/64	18-25/32	12- 1/16	7- 9/16	27.04
801-623F*	10X3	4- 7/8	7-11/16	4- 7/8	10- 1/8	9-15/16	10- 1/8	20- 1/4	11-15/16	4- 1/8	22.99
801-624[1]	10X4	3- 7/8	7- 3/16	3- 7/8	9- 3/8	9- 1/2	9- 3/8	18- 3/4	12- 1/16	7- 9/16	26.87
801-624F*	10X4	5- 3/8	8-11/16	5- 3/8	10- 5/8	10-15/16	10- 5/8	21- 1/4	11-15/16	5- 3/16	24.53
801-626	10X6	3- 7/8	5-27/32	3- 7/8	9- 3/8	8-27/32	9- 3/8	18- 3/4	12- 1/16	7- 9/16	24.20
801-626F*	10X6	5- 7/8	9- 1/16	5- 7/8	11- 1/8	12- 5/16	11- 1/8	22- 1/4	11-15/16	7- 1/2	27.45
801-628[1]	10X8	5-15/16	7- 3/4	5-15/16	11- 7/16	11- 3/4	11- 7/16	22- 7/8	12- 1/16	12- 1/16	47.99
801-628F*	10X8	8- 1/4	9-15/16	8- 1/4	13- 1/2	14- 3/16	13- 1/2	27	11-15/16	9- 5/8	32.94
801-661F*	12X2	4- 3/4	8	4- 3/4	11	9- 3/4	11	22	14- 1/8	2-13/16	33.90
801-662F*	12X2-1/2	5- 7/16	8- 3/16	5- 7/16	11-11/16	10- 3/16	11-11/16	23- 3/8	14- 1/8	3- 7/16	35.57
801-663F*	12X3	5- 1/4	8- 9/16	5- 1/4	11- 1/2	10-13/16	11- 1/2	23	14- 1/8	4- 1/8	35.74
801-664[1]	12X4	4-11/32	10- 1/8	4-11/32	10-15/16	12- 3/8	10-15/16	21- 7/8	14- 1/4	9-23/32	45.20
801-664F*	12X4	5- 3/4	9- 9/16	5- 3/4	12	11-13/16	12	24	14- 1/8	5- 3/16	37.93
801-665F*	12X5	7- 1/8	9- 5/16	7- 1/8	13- 3/8	12- 5/16	13- 3/8	26- 3/4	14- 1/8	6- 5/16	41.81
801-666[1]	12X6	4-7/8	8-9/16	4-7/8	11-15/32	11-9/16	11-15/32	22-15/16	14-9/32	9-23/32	45.12
801-666F*	12X6	7- 1/4	9-15/16	7- 1/4	13- 1/4	13- 3/16	13- 1/4	26- 1/2	14- 1/8	7- 1/2	44.03
801-668	12X8	4-7/8	7- 1/2	4-7/8	11-15/32	11-7/16	11-15/32	22-29/32	14- 1/4	9-3/4	40.00
801-668F*	12X8	8	10-13/16	8	14- 1/4	15- 1/16	14- 1/4	28- 1/2	14- 1/8	9- 5/8	48.33
801-670F*	12X10	10-1/4	10-13/16	10-1/4	16-1/2	16- 1/16	16-1/2	33	14- 1/8	11-15/16	57.04
801-691F*	14X2	5- 3/16	8- 9/16	5- 3/16	12- 3/16	10- 5/16	12- 3/16	24- 3/8	15- 1/2	2-13/16	44.81
801-692F*	14X2-1/2	5- 7/16	8- 3/4	5- 7/16	12- 7/16	10- 3/4	12- 7/16	24- 7/8	15- 1/2	3- 7/16	44.33
801-693F*	14X3	5- 3/4	9- 1/8	5- 3/4	12- 3/4	11- 3/8	12- 3/4	25- 1/2	15- 1/2	4- 1/8	45.79
801-694F*	14X4	6- 1/2	10- 1/8	6- 1/2	13- 1/2	12- 3/8	13- 1/2	27	15- 1/2	5- 3/16	49.50
801-696F*	14X6	8- 1/4	10- 1/2	8- 1/4	15- 1/4	13- 3/4	15- 1/4	30- 1/2	15- 1/2	7- 1/2	56.33
801-698F*	14X8	9- 1/4	11- 3/8	9- 1/4	16- 1/4	15- 5/8	16- 1/4	32- 1/2	15- 1/2	9- 5/8	63.20
801-700F*	14X10	10- 1/8	11- 3/8	10- 1/8	17- 1/8	16- 5/8	17- 1/8	34- 1/4	15- 1/2	11-15/16	70.63
801-702	14X12	7-1/32	7-13/32	7-1/32	14-1/32	13-13/32	14-1/32	28-1/16	15-21/32	14-11/32	61.20
801-702F*	14X12	11	11- 3/8	11	18	17- 5/8	18	36	15- 1/2	14- 1/8	80.08
801-751F*	16X2	5- 7/8	9- 1/2	5- 7/8	13- 7/8	11- 1/4	13- 7/8	27- 3/4	17-11/16	2-13/16	63.28
801-752F*	16X2-1/2	6	9-11/16	6	14	11-11/16	14	28	17-11/16	3- 7/16	67.64

Tee - Reducing

Socket x Socket x Socket

(Continued)



Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
801-753F*	16X3	6- 5/16	10- 1/16	6- 5/16	14- 5/16	12- 5/16	14- 5/16	28- 5/8	17-11/16	4- 1/8	64.31
801-754F*	16X4	6- 1/8	11- 1/16	6- 1/8	14- 1/8	13- 5/16	14- 1/8	28- 1/4	17-11/16	5- 3/16	64.55
801-756F*	16X6	8- 5/8	11- 7/16	8- 5/8	16- 5/8	14-11/16	16- 5/8	33- 1/4	17-11/16	7- 1/2	77.70
801-758F*	16X8	9- 5/8	12- 5/16	9- 5/8	17- 5/8	16- 9/16	17- 5/8	35- 1/4	17-11/16	9- 5/8	85.11
801-760F*	16X10	10- 5/8	12- 5/16	10- 5/8	18- 5/8	17- 9/16	18- 5/8	37- 1/4	17-11/16	11-15/16	93.59
801-762F*	16X12	11- 5/8	12- 5/16	11- 5/8	19- 5/8	18- 9/16	19- 5/8	39- 1/4	17-11/16	14- 1/8	103.31
801-764F*	16X14	12- 3/4	12-11/16	12- 3/4	20- 3/4	19-11/16	20- 3/4	41- 1/2	17-11/16	15- 1/2	121.40
801-784F*	18X4	6- 7/8	11-15/16	6- 7/8	15- 7/8	14- 3/16	15- 7/8	31- 3/4	19- 7/8	5- 3/16	96.66
801-786F*	18X6	8- 1/2	12- 5/16	8- 1/2	17- 1/2	15- 9/16	17- 1/2	35	19- 7/8	7- 1/2	106.96
801-788F*	18X8	9- 1/2	13- 3/16	9- 1/2	18- 1/2	17- 7/16	18- 1/2	37	19- 7/8	9- 5/8	110.40
801-790F*	18X10	10- 1/2	13- 3/16	10- 1/2	19- 1/2	18- 7/16	19- 1/2	39	19- 7/8	11-15/16	119.95
801-792F*	18X12	11- 1/2	13- 3/16	11- 1/2	20- 1/2	19- 7/16	20- 1/2	41	19- 7/8	14- 1/8	130.75
801-794F*	18X14	12- 3/4	13- 9/16	12- 3/4	21- 3/4	20- 9/16	21- 3/4	43- 1/2	19-11/16	15- 1/2	151.68
801-796F*	18X16	13- 1/2	14- 3/16	13- 1/2	22- 1/2	22- 3/16	22- 1/2	45	19-11/16	17-11/16	156.73
801-814F*	20X4	7-11/16	12- 7/8	7-11/16	17-11/16	15- 1/8	17-11/16	35- 3/8	22- 1/16	5- 3/16	123.16
801-816F*	20X6	8- 7/8	13- 1/4	8- 7/8	18- 7/8	16- 1/2	18- 7/8	37- 3/4	22- 1/16	7- 1/2	133.48
801-818F*	20X8	9- 7/8	14- 1/8	9- 7/8	19- 7/8	18- 3/8	19- 7/8	39- 3/4	22- 1/16	9- 5/8	148.71
801-820F*	20X10	10- 7/8	14- 1/8	10- 7/8	20- 7/8	19- 3/8	20- 7/8	41- 3/4	22- 1/16	11-15/16	157.48
801-822F*	20X12	11- 7/8	14- 1/8	11- 7/8	21- 7/8	20- 3/8	21- 7/8	43- 3/4	22- 1/16	14- 1/8	171.00
801-824F*	20X14	12- 7/8	14- 1/2	12- 7/8	22- 7/8	21- 1/2	22- 7/8	45- 3/4	22- 1/16	15- 1/2	182.95
801-826F*	20X16	14	15- 1/8	14	24	23- 1/8	24	48	22- 1/16	17-11/16	200.42
801-828F*	20X18	15	15	15	25	24	25	50	22- 1/16	19- 7/8	218.37
801-904F*	24X4	9	14-11/16	9	21	16-15/16	21	42	26- 7/16	5- 3/16	220.00
801-906F*	24X6	9- 1/4	15- 1/16	9- 1/4	21- 1/4	18- 5/16	21- 1/4	42- 1/2	26- 7/16	7- 1/2	221.91
801-908F*	24X8	10- 1/4	15-15/16	10- 1/4	22- 1/4	20- 3/16	22- 1/4	44- 1/2	26- 7/16	9- 5/8	233.12
801-910F*	24X10	11- 1/4	15-15/16	11- 1/4	23- 1/4	21- 3/16	23- 1/4	46- 1/2	26- 7/16	11-15/16	236.36
801-912F*	24X12	12- 1/4	15-15/16	12- 1/4	24- 1/4	22- 3/16	24- 1/4	48- 1/2	26- 7/16	14- 1/8	264.25
801-914F*	24X14	13- 1/4	16- 5/16	13- 1/4	25- 1/4	23- 5/16	25- 1/4	50- 1/2	26- 1/16	15- 1/2	285.14
801-916F*	24X16	14- 3/4	16-15/16	14- 3/4	26- 3/4	24-15/16	26- 3/4	53- 1/2	26- 7/16	17-11/16	295.09
801-918F*	24X18	15- 3/4	16-13/16	15- 3/4	27- 3/4	25-13/16	27- 3/4	55- 1/2	26- 7/16	19- 7/8	315.88
801-920F*	24X20	16- 3/4	18- 3/16	16- 3/4	28- 3/4	28- 3/16	28- 3/4	57- 1/2	26- 7/16	22- 1/16	336.80

[1] Sized with Bushing

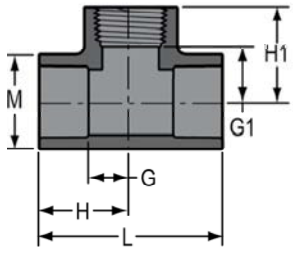
* Fabricated

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Spears® Manufacturing Company

Tee

Socket x Socket x Fipt

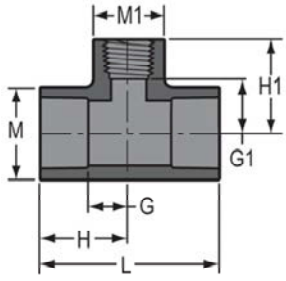


Part Number	Size	G	G1	H	H1	L	M	Approx. Wt. (Lbs.)
802-002	1/4	5/16	3/8	15/16	15/16	1-29/32	7/8	.04
802-005	1/2	19/32	21/32	1-15/32	1-11/32	2-15/16	1- 3/16	.11
802-007	3/4	5/8	5/8	1-19/32	1-13/32	3- 3/16	1-13/32	.14
802-010	1	11/16	3/4	1-13/16	1- 5/8	3-13/16	1-13/16	.23
802-012	1-1/4	13/16	1- 1/16	2- 3/32	1-15/16	4- 5/32	2- 3/32	.34
802-015	1-1/2	29/32	1- 1/4	2-11/32	2- 5/32	4-11/16	2- 3/8	.48
802-020	2	1-5/16	1-7/16	2-13/16	2-13/32	5-5/8	2-27/32	.76
802-030	3	1-31/32	2- 1/8	3- 3/4	3-17/32	7-15/32	4- 5/16	2.28
802-040	4	2-11/32	2-21/32	4- 5/8	4- 5/32	9- 7/32	5- 9/32	3.27
802-060F*	6	3-3/4	8-5/8	6-3/4	10-1/8	13-1/2	7-5/8	13.42
802-080F*	8	4-13/16	10-13/16	8-13/16	12-9/16	17-11/16	9-11/16	25.57

* Fabricated

Tee - Reducing

Socket x Socket x Fipt

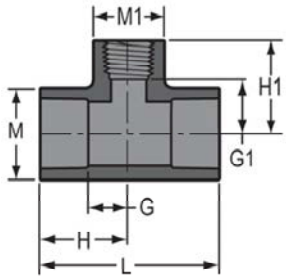


Part Number	Size	G	G1	H	H1	L	M	M1	Approx. Wt. (Lbs.)
802-101	3/4X1/2	19/32	25/32	1-19/32	1- 7/16	3- 7/32	1-13/32	1- 3/16	.13
802-130	1X1/2	7/16	29/32	1- 9/16	1- 5/8	3- 1/8	1-23/32	1- 7/16	.17
802-131	1X3/4	21/32	13/16	1-13/16	1-17/32	3- 5/8	1-23/32	1- 3/8	.21
802-166	1-1/4X1/2	7/16	1- 1/8	1-11/16	1-27/32	3- 3/8	2- 3/32	1- 3/16	.24
802-167[1]	1-1/4X3/4	7/8	1-23/32	2- 1/8	2- 7/16	4- 7/32	2- 3/32	1- 3/4	.38
802-168	1-1/4X1	27/32	1- 1/32	2- 3/32	1-29/32	4- 7/32	2- 3/32	1-11/16	.33
802-209[1]	1-1/2X1/2	11/16	1-9/16	2-3/32	2- 9/32	4- 5/32	2-11/32	1-13/32	.32
802-210[1]	1-1/2X3/4	7/8	1-27/32	2- 1/4	2-19/32	4- 1/2	2- 3/8	1-11/16	.46
802-211	1-1/2X1	27/32	1- 9/32	2- 1/4	2- 3/32	4-15/32	2- 3/8	1-11/16	.60
802-212	1-1/2X1-1/4	1- 1/32	1- 5/32	2- 7/16	2- 3/32	4-27/32	2- 3/8	2- 1/16	.46
802-247	2X1/2	1/2	1- 1/2	2	2- 7/32	4	2- 7/8	1- 3/16	.44
802-248	2X3/4	5/8	1- 3/8	2- 1/8	2- 3/32	4- 1/4	2- 7/8	1- 3/8	.46
802-249	2X1	27/32	1- 1/2	2-11/32	2-11/32	4-11/16	2- 7/8	1-11/16	.54
802-250[1]	2X1-1/4	1- 3/16	2- 1/16	2-11/16	3	5- 3/8	2- 7/8	2-13/32	.86
802-251[1]	2X1-1/2	1- 7/16	2- 5/16	2-15/16	3-11/32	5- 7/8	2- 7/8	2- 7/8	.98
802-287	2-1/2X1/2	9/16	1-25/32	2- 5/16	2-15/32	4-19/32	3- 1/2	1- 3/16	.74
802-288[1]	2-1/2X3/4	27/32	2-11/32	2-21/32	3- 5/32	5- 9/32	3- 9/16	1-13/16	1.02
802-289[1]	2-1/2X1	1- 3/32	2-11/32	2-27/32	3- 1/4	5-11/16	3- 1/2	2- 1/8	1.18

Tee - Reducing

Socket x Socket x Fipt

(Continued)



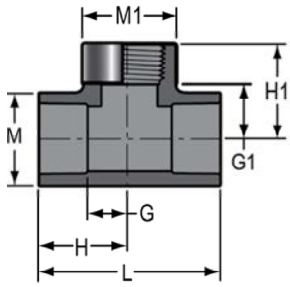
Part Number	Size	G	G1	H	H1	L	M	M1	Approx. Wt. (Lbs.)
802-290[1]	2-1/2X1-1/4	1- 3/16	2-15/32	2-31/32	3-15/32	5-15/16	3- 1/2	2- 3/8	1.30
802-291[1]	2-1/2X1-1/2	1- 7/16	2- 1/2	3- 3/16	3- 1/2	6- 3/8	3- 1/2	2- 7/8	1.50
802-292[1]	2-1/2X2	1- 3/4	3-15/16	3- 1/2	2- 7/8	7	3-15/32	3-15/32	1.71
802-333[1]	3X1/2	7/8	2-11/16	2- 3/4	3- 7/16	5- 1/2	4- 1/8	1-23/32	1.30
802-334[1]	3X3/4	7/8	2-19/32	2- 3/4	3-11/32	5- 1/2	4- 3/16	1- 3/4	1.28
802-335[1]	3X1	1- 3/16	2-31/32	3- 1/16	3- 7/8	6- 1/8	4- 1/8	2-11/32	1.58
802-337[1]	3X1-1/2	1- 7/16	2-23/32	3- 5/16	3-23/32	6- 5/8	4- 1/4	2-29/32	1.83
802-338[1]	3X2	2- 3/32	3-11/32	3-31/32	4- 3/8	7-15/16	4- 5/32	4- 5/32	2.70
802-339[1]	3X2-1/2	2- 3/32	2- 3/4	3-31/32	4- 5/16	7-15/16	4- 1/8	4- 1/8	2.60
802-415[1]	4X1/2	1- 7/16	3- 5/8	3-11/16	4- 3/8	7- 3/8	5- 1/4	2- 7/8	1.97
802-416[1]	4X3/4	1-15/32	3-27/32	3-23/32	4-17/32	7- 7/16	5- 1/4	2- 7/8	1.96
802-417[1]	4X1	1- 7/16	3-17/32	3-23/32	4-13/32	7-13/32	5- 1/4	2- 7/8	2.17
802-419[1]	4X1-1/2	3-11/16	3- 1/2	3-11/16	3-31/32	7- 3/8	5- 1/4	2- 7/8	2.50
802-420[1]	4X2	2- 1/8	4- 1/32	4- 3/8	5- 1/32	8-25/32	5- 1/4	4- 3/16	3.56
802-421[1]	4X2-1/2	2- 1/8	3-15/32	4- 3/8	5	8-25/32	5- 1/4	4- 3/16	3.47
802-422[1]	4X3	2- 5/8	3- 5/8	4- 7/8	5- 1/4	9- 3/4	5- 1/4	5- 1/4	4.37
802-525[1]	6X1	2- 1/16	5- 3/16	5- 3/32	6- 1/16	10- 5/32	7-19/32	4- 1/4	5.46
802-528F[2*]	6X2	4- 5/8	5- 1/8	7- 7/8	6- 9/16	15- 3/4	7- 1/2	3	8.16
802-529[1]	6X2-1/2	2- 1/16	4-21/32	5- 3/32	6- 3/16	10- 5/32	7-19/32	4- 1/4	6.93
802-530[1]	6X3	2-11/16	4- 3/4	5- 9/16	6- 3/8	11- 1/8	7- 1/2	5- 1/4	8.29
802-532F[2*]	6X4	5- 1/4	6- 3/4	8- 1/2	8- 1/4	17	7- 1/2	5- 3/16	10.10
802-578F[*]	8X2	4-11/16	6- 1/16	8-15/16	7- 1/2	17- 7/8	9- 5/8	3	13.50
802-580F[*]	8X3	5- 3/16	7	9- 7/16	8- 7/16	18- 7/8	9- 5/8	4- 1/8	14.91
802-582F[2*]	8X4	5- 3/4	7-11/16	10	9- 1/8	20	9- 5/8	5- 3/16	12.74
802-621F[*]	10X2	4- 3/8	7- 9/16	9- 5/8	8-15/16	19- 1/4	11-15/16	3	22.86
802-623F[*]	10X3	4- 7/8	8- 3/16	10- 1/8	9- 5/8	20- 1/4	11-15/16	4- 1/8	23.34
802-624F[2*]	10X4	5- 3/8	8-13/16	10- 5/8	10- 5/16	21- 1/4	11-15/16	5- 3/16	26.16
802-661F[*]	12X2	4- 3/4	8- 7/16	11	9-13/16	22	14- 1/8	3	34.15
802-663F[*]	12X3	5- 1/4	9- 1/4	11- 1/2	10-11/16	23	14- 1/8	4- 1/8	36.32
802-664F[*]	12X4	5- 3/4	9-15/16	12	11- 7/16	24	14- 1/8	5- 3/16	38.44

[1] Sized with Bushing
[2] Fiberglass reinforced.
* Fabricated

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Tee - Special Reinforced

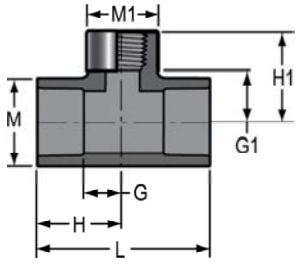
Socket x Socket x SR Fipt - Stainless Steel Collar



Part Number	Size	G	G1	H	H1	L	M	M1	Approx. Wt. (Lbs.)
802-005SR	1/2	5/8	5/8	1-15/32	1- 3/8	2-15/16	1- 7/32	1- 7/32	.12
802-007SR	3/4	19/32	11/16	1-19/32	1-13/32	3- 3/16	1-13/32	1-13/32	.15
802-010SR	1	21/32	11/16	1-13/16	1- 5/8	3- 5/8	1-23/32	1-11/16	.27
802-012SR	1-1/4	13/16	1- 1/16	2- 3/32	1-15/16	4- 3/16	2- 3/32	2- 1/16	.36
802-015SR	1-1/2	15/16	1- 7/32	2-11/32	2- 5/32	4-11/16	2-11/32	2- 7/16	.51
802-020SR	2	1- 5/16	1- 1/2	2-13/16	2-13/32	5-21/32	2- 7/8	3- 1/32	.80
802-030SR	3	1-27/32	2- 3/32	3-23/32	3-17/32	7- 7/16	4- 9/32	4- 9/32	2.33
802-040SR	4	2-11/32	2-21/32	4- 5/8	4- 5/32	9- 7/32	5- 1/4	5- 1/4	3.39

Tee - Special Reinforced Reducing

Socket x Socket x SR Fipt - Stainless Steel Collar

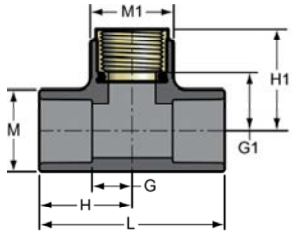


Part Number	Size	G	G1	H	H1	L	M	M1	Approx. Wt. (Lbs.)
802-072SR	1/2X1/4	7/16	11/16	1- 5/16	1- 7/32	2- 5/8	1- 5/32	27/32	.08
802-098SR	3/4X1/4	7/16	13/16	1- 7/16	1- 5/16	2- 7/8	1- 3/8	27/32	.11
802-101SR	3/4X1/2	19/32	25/32	1-19/32	1-7/16	3- 7/32	1-13/32	1- 3/16	.14
802-128SR[1]	1X1/4	7/8	2- 5/8	2	2-11/16	4	2- 3/32	27/32	.33
802-130SR	1X1/2	7/16	29/32	1- 9/16	1- 5/8	3- 1/8	1-23/32	1- 3/16	.19
802-131SR	1X3/4	21/32	7/8	1-13/16	1-19/32	3-19/32	1-23/32	1- 3/8	.21
802-164SR[1]	1-1/4X1/4	27/32	2-13/16	2- 1/8	3-13/32	4- 7/32	2- 3/32	27/32	.42
802-166SR	1-1/4X1/2	7/16	1- 1/8	1-11/16	1-27/32	3-13/32	2- 3/32	1- 3/16	.25
802-168SR	1-1/4X1	27/32	1- 1/32	2- 3/32	1-29/32	4- 7/32	2- 3/32	1-11/16	.34
802-207SR[1]	1-1/2X1/4	27/32	1-31/32	2- 1/4	2-19/32	4-15/32	2-11/32	1- 3/4	.49
802-211SR	1-1/2X1	27/32	1- 7/32	2- 1/4	2- 1/8	4-15/32	2- 3/8	1-11/16	.41
802-212SR	1-1/2X1-1/4	1- 1/32	1- 5/32	2- 7/16	2- 3/32	4-27/32	2- 3/8	2- 1/16	.49
802-247SR	2X1/2	1/2	1- 1/2	2	2- 1/4	4	2- 7/8	1- 3/16	.45
802-248SR	2X3/4	19/32	1-13/32	2- 1/8	2- 1/8	4- 1/4	2- 7/8	1- 3/8	.48
802-287SR	2-1/2X1/2	9/16	1- 3/4	2- 5/16	2- 1/2	4-19/32	3- 1/2	1- 7/32	.75
802-331SR[1]	3X1/4	1-13/32	4- 1/2	3- 5/16	5- 1/32	6- 9/16	4- 3/16	27/32	1.32
802-413SR[1]	4X1/4	1- 7/16	5- 3/16	3-11/16	5-25/32	7- 3/8	5- 1/4	27/32	1.99

[1] Sized with Bushing

Tee - Brass Transition

Socket x Socket x Fipt With Brass Thread Insert

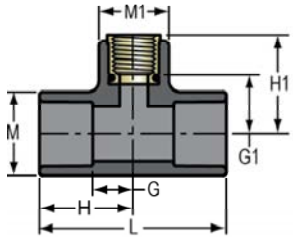


Part Number	Size	G	G1	H	H1	L	M	M1	Approx. Wt. (Lbs.)
802-005BR	1/2	7/8	31/32	1- 7/16	1-17/32	2- 5/8	1- 5/32	1- 7/32	.16
802-007BR	3/4	17/32	1- 5/32	1-17/32	1-13/16	3- 1/16	1-13/32	1- 3/8	.24

Not intended to convey or dispense water for human consumption through drinking or cooking

Tee - Brass Transition Reducing

Socket x Socket x Fipt With Brass Thread Insert

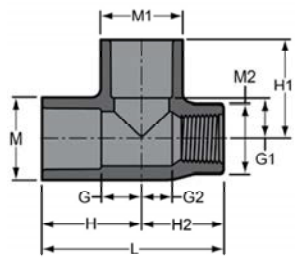


Part Number	Size	G	G1	H	H1	L	M	M1	Approx. Wt. (Lbs.)
802-072BR	1/2X1/4	7/16	7/8	1- 5/16	1-17/32	2- 5/8	1- 3/16	1- 3/16	.11
802-101BR	3/4X1/2	7/16	1- 1/32	1- 7/16	1- 5/8	2-29/32	1-13/32	1- 3/16	.18

Not intended to convey or dispense water for human consumption through drinking or cooking

Tee - Reducing

Socket x Fipt x Socket



Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
803-095	3/4X1/2X3/4	11/16	11/16	11/16	1-11/16	1-11/16	1- 3/8	3- 3/32	1-13/32	1-13/32	.14

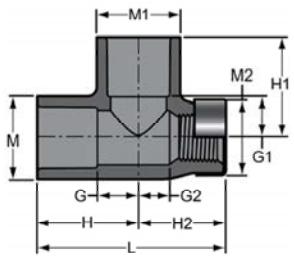




Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Tee - Special Reinforced Reducing

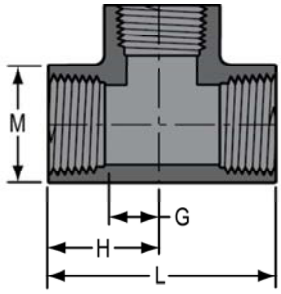
Socket x SR Fipt - Stainless Steel Collar x Socket



Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
803-095SR	3/4X1/2X3/4	11/16	11/16	11/16	1-11/16	1-11/16	1-13/32	3- 1/8	1-13/32	1-13/32	.15

Tee

Fipt x Fipt x Fipt

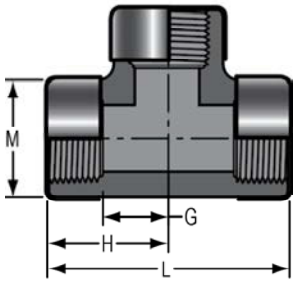


Part Number	Size	G	H	L	M	Approx. Wt. (Lbs.)
805-002	1/4	1/2	1- 3/32	2- 3/16	27/32	.05
805-003	3/8	9/16	1- 5/32	2- 5/16	15/16	.07
805-005	1/2	17/32	1- 1/4	2-15/32	1- 3/16	.11
805-007	3/4	21/32	1-15/32	2-15/16	1- 1/2	.19
805-010	1	3/4	1-23/32	3- 7/16	1-27/32	.33
805-012	1-1/4	15/16	1-31/32	3-29/32	2- 1/4	.47
805-015	1-1/2	1- 1/8	2- 3/16	4- 3/8	2-13/32	.59
805-020	2	1- 5/8	2- 5/8	5- 1/4	3	1.07
805-025	2-1/2	1- 9/16	3- 1/8	6- 1/4	3-19/32	1.66
805-030	3	1-15/16	3- 9/16	7- 3/32	4-11/32	2.80
805-040	4	2-1/2	4- 7/32	8- 7/16	5-7/16	4.09
805-060F*	6	8-5/8	10-1/8	20-1/4	7- 3/16	19.03

* Fabricated

Tee - Special Reinforced

SR Fipt x SR Fipt x SR Fipt - Stainless Steel Collar

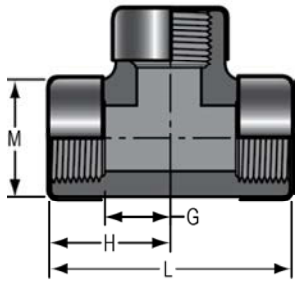


Part Number	Size	G	H	L	M	Approx. Wt. (Lbs.)
805-002SR	1/4	17/32	1- 1/8	2- 1/4	27/32	.09
805-003SR	3/8	19/32	1- 3/16	2-11/32	31/32	.08
805-005SR	1/2	1/2	1- 1/4	2- 1/2	1- 3/16	.13
805-007SR	3/4	19/32	1-11/32	2-11/16	1- 3/8	.16

Tee - Special Reinforced

(Continued)

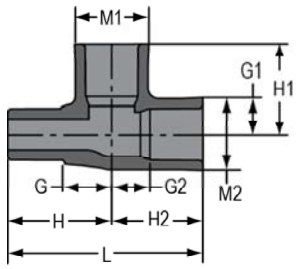
SR Fipt x SR Fipt x SR Fipt - Stainless Steel Collar



Part Number	Size	G	H	L	M	Approx. Wt. (Lbs.)
805-010SR	1	7/8	1-25/32	3- 9/16	1-11/16	.31
805-015SR	1-1/2	1- 1/4	2- 3/16	4-13/32	2-13/32	.66
805-020SR	2	1- 5/8	2- 5/8	5- 1/4	3	1.16

Tee - Street

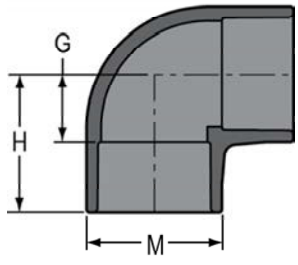
Spigot x Socket x Socket



Part Number	Size	G	G1	G2	H	H1	H2	L	M1	Approx. Wt. (Lbs.)
844-005	1/2	23/32	23/32	1/2	1-19/32	1-21/32	1-19/32	3- 5/32	1- 3/16	.10
844-007	3/4	13/16	27/32	7/8	1-13/16	1- 7/8	1-13/16	3- 5/8	1-13/32	.15
844-010	1	1- 3/32	13/16	13/16	2- 7/32	2	2	4- 7/32	1- 3/4	.25
844-012	1-1/4	1- 1/4	1- 5/32	1- 1/8	2- 7/16	2- 5/16	2- 7/16	4- 7/8	2- 3/32	.38
844-015	1-1/2	1-13/16	1- 1/8	1- 1/8	2- 7/8	2- 9/16	2- 9/16	5-11/32	2-11/32	.51
844-020	2	1-23/32	1- 7/16	1-13/32	3- 1/4	2-15/16	2-15/16	6- 5/32	2- 7/8	.78

90° Ell

Socket x Socket



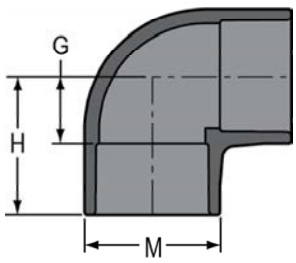
Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
806-002	1/4	11/32	1	13/16	.03
806-003	3/8	15/32	1- 1/4	31/32	.04
806-005	1/2	9/16	1-15/32	1- 3/16	.07
806-007	3/4	5/8	1-11/16	1- 7/16	.12
806-010	1	7/8	2	1- 3/4	.19
806-012	1-1/4	1-1/32	2- 9/32	2-1/8	.29
806-015	1-1/2	1- 5/32	2- 9/16	2- 3/8	.39
806-020	2	1-13/32	2-15/16	2- 7/8	.60
806-025	2-1/2	1- 9/16	3-11/32	3-15/32	1.07

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

90° Ell

(Continued)

Socket x Socket

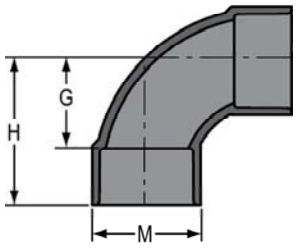


Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
806-030	3	2- 1/16	3-31/32	4- 3/16	1.61
806-040	4	2-19/32	4-27/32	5- 1/4	2.80
806-045F*	4-1/2	6- 1/2	9	5- 5/8	4.86
806-050	5	3	5- 3/4	6- 3/8	4.30
806-050F*	5	5- 1/2	8- 1/2	6- 5/16	6.22
806-060	6	3- 3/4	6- 3/4	7-19/32	7.60
806-080	8	4-25/32	8-25/32	9- 3/4	14.58
806-080F*	8	8-1/2	12-3/4	9-5/8	13.62
806-100	10	5-25/32	10-13/16	12-5/32	26.34
806-100F*	10	10	15- 1/4	11-15/16	30.83
806-120	12	6-27/32	12-29/32	14-3/8	42.95
806-120F*	12	11- 1/2	17- 3/4	14- 1/8	45.85
806-140	14	7- 1/2	14- 1/2	15-11/16	54.20
806-140F*	14	13- 1/2	20- 1/2	15- 1/2	70.94
806-160F*	16	15- 9/16	23- 9/16	17-11/16	101.70
806-180F*	18	17-11/16	26-11/16	19- 7/8	164.83
806-200F*	20	19-13/16	29-13/16	22- 1/16	193.41
806-240F*	24	24	36	26- 7/16	324.00

* Fabricated

90° Ell Sweep

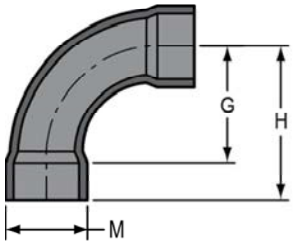
Socket x Socket



Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
806-005S	1/2	27/32	1-23/32	1- 3/16	.07
806-007S	3/4	1- 1/32	2- 1/32	1-13/32	.11
806-010S	1	1- 5/16	2- 7/16	1-23/32	.19
806-012S	1-1/4	1- 9/16	2-13/16	2- 3/32	.29
806-015S	1-1/2	1- 3/4	3- 1/8	2-11/32	.38
806-020S	2	2- 5/16	3-13/16	2- 7/8	.64

90° Ell - Long Sweep

Socket x Socket

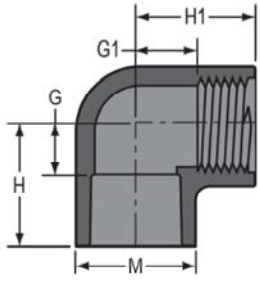


Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
806-005LSF*	1/2	1- 7/8	2- 3/4	1- 1/8	.12
806-007LSF*	3/4	2- 7/16	3- 7/16	1- 7/16	.22
806-010LSF*	1	2- 7/8	4	1-11/16	.37
806-012LSF*	1-1/4	3- 5/8	4- 7/8	2- 1/16	.55
806-015LSF*	1-1/2	4- 1/8	5- 1/2	2- 5/16	.59
806-020LSF*	2	4- 3/4	6- 5/16	2-13/16	1.00
806-025LSF*	2-1/2	5- 3/4	7- 3/4	3- 7/16	1.56
806-030LSF*	3	7	9	4- 1/8	2.35
806-040LSF*	4	9	11- 1/4	5- 3/16	3.96
806-060LSF*	6	13	16- 1/4	7- 1/2	10.96
806-080LSF*	8	23-1/2	27-3/4	9-5/8	28.88
806-100LSF*	10	27	32-1/4	11-15/16	54.18

* Fabricated

90° Ell

Socket x Fipt



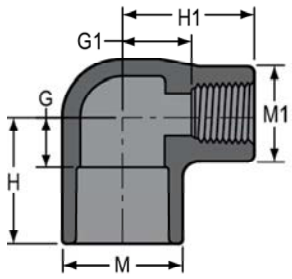
Part Number	Size	G	G1	H	H1	M	Approx. Wt. (Lbs.)
807-002	1/4	5/16	5/16	15/16	15/16	7/8	.03
807-003	3/8	1/4	3/8	1- 1/32	1- 1/32	1- 1/32	.05
807-005	1/2	15/32	9/16	1-11/32	1- 9/32	1- 3/16	.08
807-007	3/4	5/8	5/8	1- 9/16	1- 9/16	1- 3/8	.10
807-010	1	11/16	25/32	1-13/16	1-11/16	1-23/32	.18
807-012	1-1/4	23/32	1- 1/32	1-31/32	1-31/32	2- 1/16	.28
807-015	1-1/2	31/32	1- 7/32	2-11/32	2- 5/32	2-3/8	.39
807-020	2	1-13/32	1-1/2	2-15/16	2-1/2	3	.80
807-030	3	1-27/32	2- 7/32	3-23/32	3- 9/16	4- 9/32	1.92
807-040	4	2- 5/16	2- 7/8	4- 9/16	4- 9/32	5- 1/4	2.86
807-060[1]	6	3- 3/4	7- 1/8	6- 3/4	8- 7/8	7- 9/16	10.35

[1] Thread outlet sized with Female Adapter

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

90° Ell - Reducing

Socket x Fipt

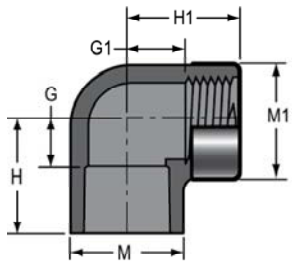


Part Number	Size	G	G1	H	H1	M	M1	Approx. Wt. (Lbs.)
807-101	3/4X1/2	1/2	25/32	1-17/32	1-17/32	1-13/32	1-3/16	.11
807-130[1]	1X1/2	27/32	1-17/32	1-31/32	2- 1/4	1-23/32	1-23/32	.25
807-131[1]	1X3/4	7/8	1-17/32	2	2- 1/4	1- 3/4	1- 3/4	.24

[1] Sized with Bushing

90° Ell - Special Reinforced

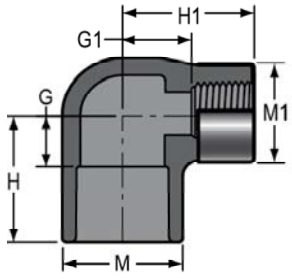
Socket x SR Fipt - Stainless Steel Collar



Part Number	Size	G	G1	H	H1	M	M1	Approx. Wt. (Lbs.)
807-005SR	1/2	15/32	23/32	1-11/32	1- 9/32	1- 3/16	1- 7/32	.09
807-007SR	3/4	9/16	21/32	1- 9/16	1-13/32	1- 3/8	1- 3/8	.11
807-010SR	1	19/32	13/16	1-23/32	1-23/32	1-11/16	1-23/32	.20
807-012SR	1-1/4	23/32	1- 1/32	1-31/32	1-31/32	2- 1/16	2- 1/16	.30
807-015SR	1-1/2	31/32	1- 5/32	2- 3/8	2- 1/8	2-11/32	2- 7/16	.40
807-020SR	2	1-13/32	1- 1/2	2-15/16	2-17/32	3	3-1/32	.82
807-030SR	3	1-13/16	2- 7/32	3-23/32	3- 9/16	4- 9/32	4- 9/32	1.99
807-040SR	4	2- 9/32	2-25/32	4- 9/16	4- 7/32	5- 1/4	5- 1/4	2.94

90° Ell - Special Reinforced Reducing

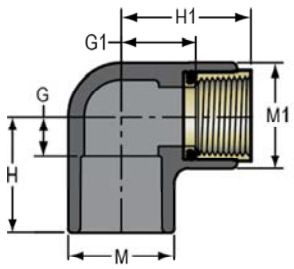
Socket x SR Fipt - Stainless Steel Collar



Part Number	Size	G	G1	H	H1	M	M1	Approx. Wt. (Lbs.)
807-101SR	3/4X1/2	1/2	13/16	1-17/32	1-17/32	1-13/32	1- 3/16	.11
807-130SR	1X1/2	9/16	1	1-23/32	1- 5/8	1-23/32	1- 3/16	.13

90° Ell - Brass Transition

Socket x Fipt With Brass Thread Insert

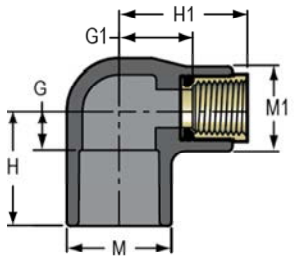


Part Number	Size	G	G1	H	H1	M	M1	Approx. Wt. (Lbs.)
807-005BR	1/2	13/32	31/32	1- 9/32	1-17/32	1- 5/32	1- 3/16	.14
807-007BR	3/4	1/2	1- 5/32	1- 1/2	1-25/32	1- 3/8	1-13/32	.20

Not intended to convey or dispense water for human consumption through drinking or cooking

90° Ell - Brass Transition Reducing

Socket x Fipt With Brass Thread Insert

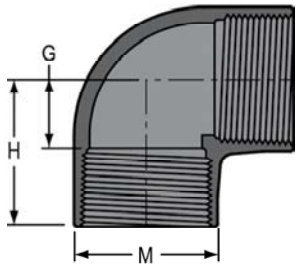


Part Number	Size	G	G1	H	H1	M	M1	Approx. Wt. (Lbs.)
807-101BR	3/4X1/2	15/32	1- 3/32	1- 15/32	1- 21/32	1-13/32	1- 3/16	.16

Not intended to convey or dispense water for human consumption through drinking or cooking

90° Ell

Fipt x Fipt



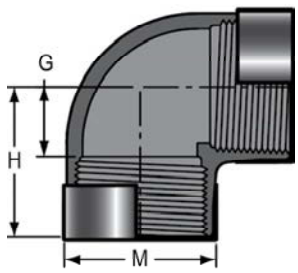
Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
808-002	1/4	11/32	15/16	7/8	.03
808-003	3/8	9/16	1- 5/32	15/16	.05
808-005	1/2	1/2	1- 7/32	1- 9/32	.08
808-007	3/4	5/8	1- 3/8	1- 3/8	.11
808-010	1	25/32	1- 5/8	1-23/32	.20
808-012	1-1/4	7/8	1- 7/8	2- 1/16	.30
808-015	1-1/2	1- 5/32	2- 3/32	2- 7/16	.46
808-020	2	1- 9/16	2-17/32	3	.85
808-025	2-1/2	1- 5/8	3- 3/16	3- 9/16	1.20
808-030	3	1-29/32	3-17/32	4-13/32	2.29
808-040	4	2-15/32	4-3/16	5-15/32	3.29

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas

See Spears® Product Sourcebook for product Offerings

90° Ell - Special Reinforced

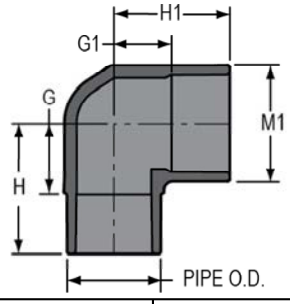
SR Fipt x SR Fipt - Stainless Steel Collar



Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
808-003SR	3/8	9/16	1- 5/32	15/16	.06
808-005SR	1/2	1/2	1- 7/32	1- 3/16	.10
808-007SR	3/4	5/8	1- 3/8	1- 3/8	.13
808-010SR	1	25/32	1-11/16	1-23/32	.22
808-012SR	1-1/4	15/16	1- 7/8	2- 1/16	.33
808-015SR	1-1/2	1- 1/32	2- 1/8	2- 7/16	.50
808-020SR	2	1-19/32	2- 1/2	3	.92

90° Street Ell

Spigot x Socket



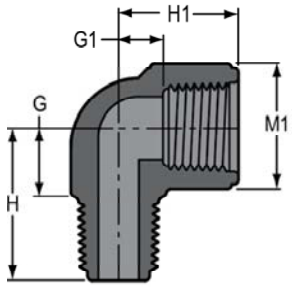
Part Number	Size	G	G1	H	H1	M1	Approx. Wt. (Lbs.)
809-005	1/2	13/16	7/16	1-21/32	1- 7/16	1- 5/32	.07
809-007	3/4	29/32	11/16	1-27/32	1-11/16	1- 3/8	.11
809-010	1	1-3/32	27/32	2- 7/32	2	1-23/32	.19
809-012	1-1/4	1- 9/32	13/16	2-19/32	2- 1/4	2- 3/32	.29
809-015	1-1/2	1- 7/16	1- 3/16	2-13/16	2- 9/16	2- 3/8	.39
809-020	2	1- 3/4	1- 7/16	3- 1/4	2-31/32	2- 7/8	.59
809-025	2-1/2	2-1/2	1-5/8	4-1/2	3-3/8	3-7/16	1.31
809-030	3	2- 3/8	1-13/16	4- 1/4	3-11/16	4- 3/16	1.64
809-040	4	3-1/16	2-5/8	5-11/32	4-29/32	5- 1/4	2.85
809-060	6	5- 1/4	3- 7/8	8- 1/2	6- 7/8	7- 9/16	9.03
809-080	8	8	5	12	8-7/8	9- 3/4	16.85
809-100	10	8- 5/8	5-13/16	14- 5/16	11- 3/8	12- 1/16	33.74
809-120	12	10-1/4	7	17	13-1/16	14-3/8	53.96
809-140	14	11-1/16	7-9/16	18-5/16	14-5/8	15-11/16	63.10





90° Street Ell

Mipt x Fipt

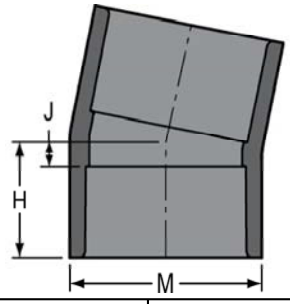


Part Number	Size	G	G1	H	H1	M1	Approx. Wt. (Lbs.)
812-002	1/4	9/16	5/16	1-1/16	29/32	13/16	.02
812-005[1]	1/2	11/16	13/32	1-11/32	1- 5/32	1- 3/16	.05
812-007	3/4	7/8	17/32	1-1/2	1-9/32	1-7/16	.08
812-010[1]	1	1- 1/32	21/32	1-13/16	1- 9/16	1- 3/4	.15
812-012[1]	1-1/4	2- 9/16	1	3- 9/32	1-31/32	2- 7/32	.39
812-015[1]	1-1/2	2-11/16	1- 1/4	3- 7/16	2- 1/8	2-13/32	.53

[1] Sized with Adapter

11-1/4° Ell

Socket x Socket



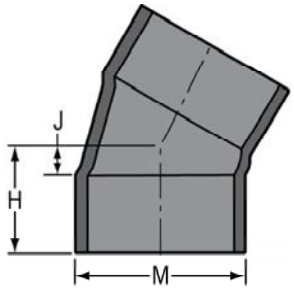
Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
811-015	1-1/2	1-19/32	7/32	2- 3/8	.24
811-020	2	1-23/32	7/32	2-27/32	.33
811-025F*	2-1/2	2-11/16	11/16	3- 7/16	.81
811-030	3	2- 3/16	5/16	4- 1/8	.87
811-040	4	2-21/32	13/32	5- 1/4	1.52
811-045F*	4-1/2	3- 1/2	1	5- 5/8	2.31
811-050F*	5	3-13/16	13/16	6- 5/16	2.84
811-060F*	6	4- 1/4	1	7- 1/2	4.42
811-080F*	8	5- 3/8	1- 1/8	9- 5/8	6.56
811-100F*	10	6-11/16	1- 7/16	11-15/16	14.94
811-120F*	12	7-13/16	1- 9/16	14- 1/8	25.13
811-140F*	14	9	2	15- 1/2	33.00
811-160F*	16	10- 3/8	2- 3/8	17-11/16	48.73
811-180F*	18	11- 3/4	2- 3/4	19- 7/8	71.78
811-200F*	20	13- 1/8	3- 1/8	22- 1/16	96.58
811-240F*	24	15-13/16	3-13/16	26- 7/16	179.55

* Fabricated

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

30° Ell

Socket x Socket

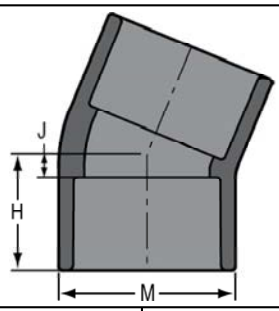


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
815-005F*	1/2	1- 7/16	7/16	1- 1/8	.08
815-007F*	3/4	1- 7/16	7/16	1- 3/8	.11
815-010F*	1	1- 3/4	1/2	1-11/16	.13
815-012F*	1-1/4	2- 3/16	11/16	2- 1/16	.27
815-015F*	1-1/2	2- 3/16	11/16	2- 5/16	.33
815-020F*	2	2- 1/2	3/4	2-13/16	.54
815-025F*	2-1/2	3	1	3- 7/16	.81
815-030F*	3	3- 5/16	1- 1/16	4- 1/8	1.34
815-040F*	4	3- 7/16	1- 3/16	5- 3/16	2.08
815-045F*	4-1/2	4	1- 1/2	5- 5/8	2.78
815-050F*	5	4- 3/8	1- 3/8	6- 5/16	3.30
815-060	6	4-13/16	1- 7/8	7- 9/16	5.59
815-080F*	8	6- 3/16	1-15/16	9- 5/8	7.57
815-100F*	10	7- 3/4	2- 1/2	11-15/16	16.93
815-120F*	12	9- 1/16	2-13/16	14- 1/8	27.92
815-140F*	14	10- 7/16	3- 7/16	15- 1/2	37.94
815-160F*	16	11-15/16	3-15/16	17-11/16	55.09
815-180F*	18	13- 7/16	4- 7/16	19- 7/8	77.09
815-200F*	20	15	5	22- 1/16	119.89
815-240F*	24	18- 1/8	6- 1/8	26- 7/16	15.46

* Fabricated

22-1/2° Ell

Socket x Socket

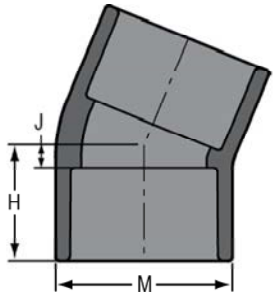


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
816-005	1/2	1- 1/16	3/16	1- 5/32	.05
816-007	3/4	1- 3/16	3/16	1- 7/16	.08
816-010	1	1- 3/8	9/32	1-23/32	.13
816-010F*	1	1-3/4	1/2	1-11/16	.15
816-015F*	1-1/2	2- 1/8	5/8	2- 5/16	.28
816-012	1-1/4	1- 1/2	5/16	2- 3/32	.19
816-015	1-1/2	1-21/32	1/4	2- 3/8	.25

22-1/2° EII

Socket x Socket

(Continued)

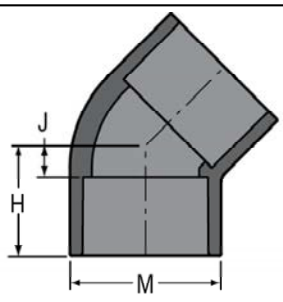


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
816-020	2	1- 7/8	7/16	2- 7/8	.38
816-025	2-1/2	2- 7/32	15/32	3- 1/2	.68
816-025F*	2-1/2	2- 7/8	7/8	3- 7/16	.83
816-030	3	2-13/32	9/16	4- 5/32	.96
816-040	4	2- 7/8	5/8	5- 1/4	1.64
816-045F*	4-1/2	3-13/16	1- 5/16	5- 5/8	2.55
816-050F*	5	4- 1/8	1- 1/8	6- 5/16	3.14
816-060	6	4- 9/16	1- 3/8	7- 7/16	4.33
816-060F*	6	4- 5/8	1- 3/8	7- 1/2	4.87
816-080	8	5- 1/16	1- 1/32	9- 3/4	8.18
816-080F*	8	5- 7/8	1- 5/8	9- 5/8	7.06
816-100F*	10	7- 5/16	2- 1/16	11-15/16	15.94
816-120F*	12	8- 9/16	2- 5/16	14- 1/8	26.53
816-140F*	14	9-13/16	2-13/16	15- 1/2	36.29
816-160F*	16	11- 5/16	3- 5/16	17-11/16	52.97
816-180F*	18	12- 3/4	3- 3/4	19- 7/8	74.44
816-200F*	20	14- 1/4	4- 1/4	22- 1/16	119.89
816-240F*	24	17- 3/16	5- 3/16	26- 7/16	189.95

* Fabricated

45° EII

Socket x Socket



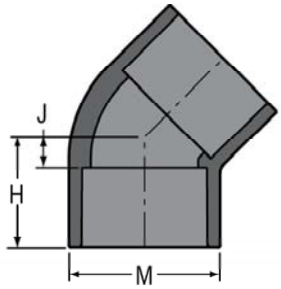
Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
817-002	1/4	13/16	5/32	27/32	.02
817-003	3/8	31/32	7/32	1	.03
817-005	1/2	1- 1/8	1/4	1- 3/16	.06
817-007	3/4	1- 5/16	5/16	1- 7/16	.09
817-010	1	1- 7/16	5/16	1-23/32	.14
817-012	1-1/4	1- 5/8	3/8	2- 1/8	.21
817-015	1-1/2	1-13/16	7/16	2- 3/8	.30
817-020	2	2- 1/8	5/8	2- 7/8	.45
817-025	2-1/2	2-13/32	21/32	3- 1/2	.83
817-030	3	2-29/32	29/32	4- 5/32	1.11
817-040	4	3- 5/16	1- 1/16	5- 1/4	1.99

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

45° Ell

Socket x Socket

(Continued)

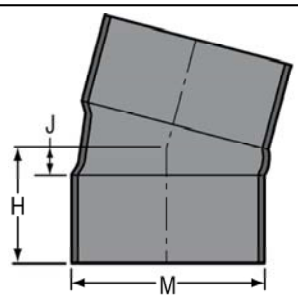


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
817-045F*	4-1/2	4- 1/2	2	5- 5/8	2.62
817-050	5	4	1-11/32	6-13/32	3.28
817-050F*	5	4- 7/8	1- 7/8	6- 5/16	3.74
817-060	6	4- 3/4	1- 3/4	7-19/32	5.46
817-080	8	6	2	9- 3/4	10.16
817-100	10	7-5/8	2-19/32	12-1/8	18.98
817-100F*	10	8-11/16	3- 7/16	11-15/16	17.37
817-120	12	9-3/16	3-1/8	14-3/8	31.85
817-120F*	12	10- 1/8	3- 7/8	14- 1/8	30.72
817-140	14	10- 5/16	3- 5/16	15- 5/8	39.65
817-140F*	14	11- 9/16	4- 9/16	15- 1/2	41.24
817-160F*	16	13- 5/16	5- 5/16	17-11/16	61.44
817-180F*	18	15	6	19- 7/8	87.73
817-200F*	20	16- 3/4	6- 3/4	22- 1/16	112.97
817-240F*	24	20- 3/16	8- 3/16	26- 7/16	204.20

* Fabricated

15° Ell

Socket x Socket

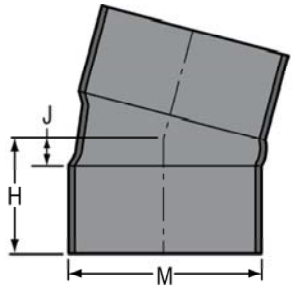


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
818-020F*	2	2- 5/16	9/16	2-13/16	.38
818-025F*	2-1/2	2- 3/4	3/4	3- 7/16	.79
818-030F*	3	3	3/4	4- 1/8	1.17
818-040F*	4	3- 1/8	7/8	5- 3/16	1.62
818-045F*	4-1/2	3- 5/8	1- 1/2	5- 5/8	2.31
818-050F*	5	3-15/16	15/16	6- 5/16	2.98
818-060F*	6	4- 3/8	1- 1/8	7- 1/2	4.42
818-080F*	8	4- 1/2	1- 1/4	9- 5/8	6.56
818-100F*	10	6-15/16	1-11/16	11-15/16	14.94
818-120F*	12	8- 1/16	1-13/16	14- 1/8	25.13
818-140F*	14	9- 5/16	2- 5/16	15- 1/2	34.64
818-160F*	16	10-11/16	2-11/16	17-11/16	50.85

15° Ell

(Continued)

Socket x Socket

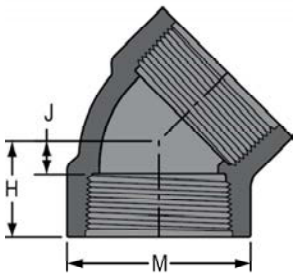


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
818-180F*	18	12- 1/16	3- 1/16	19- 7/8	71.78
818-200F*	20	13- 1/2	3- 1/2	22- 1/16	119.89
818-240F*	24	16- 1/4	4- 1/4	26- 7/16	170.96

* Fabricated

45° Ell

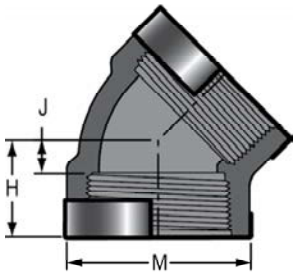
Fipt x Fipt



Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
819-002	1/4	25/32	3/16	27/32	.02
819-003	3/8	13/16	3/16	1	.03
819-005	1/2	31/32	5/16	1- 3/16	.06
819-007	3/4	1- 3/32	13/32	1- 3/8	.08
819-010	1	1- 7/32	7/32	1-11/16	.14
819-012	1-1/4	1- 7/16	7/16	2- 3/16	.23
819-015	1-1/2	1- 1/2	15/32	2- 1/2	.31
819-020	2	1-23/32	21/32	3	.46
819-025	2-1/2	2-17/32	31/32	3- 1/2	1.08
819-030	3	2-23/32	1	4- 9/32	1.77
819-040	4	3- 1/4	1- 7/32	5- 1/4	2.70

45° Ell - Special Reinforced

SR Fipt x SR Fipt - Stainless Steel Collar

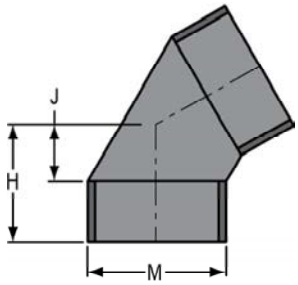


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
819-005SR	1/2	1	5/16	1- 3/16	.08
819-007SR	3/4	1- 1/8	13/32	1- 3/8	.10
819-010SR	1	1- 1/4	13/32	1-23/32	.17

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

60° Ell

Socket x Socket

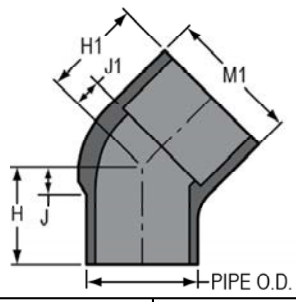


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
824-005F*	1/2	1- 5/8	5/8	1- 1/8	.08
824-007F*	3/4	1-11/16	11/16	1- 3/8	.17
824-010F*	1	2	3/4	1-11/16	.33
824-012F*	1-1/4	2- 1/2	1	2- 1/16	.26
824-015F*	1-1/2	2- 5/8	1- 1/8	1- 3/8	.39
824-020F*	2	3	1- 1/4	2-13/16	.62
824-025F*	2-1/2	3- 9/16	1- 9/16	3- 7/16	.72
824-030F*	3	4	1- 3/4	4- 1/8	1.67
824-040F*	4	4- 5/16	2- 1/16	5- 3/16	2.31
824-060F*	6	6- 1/8	2- 7/8	7- 1/2	5.85
824-080F*	8	7- 3/4	3- 1/2	9- 5/8	18.81
824-100F*	10	9-11/16	4- 7/16	11-15/16	20.92
824-120F*	12	11- 5/16	5- 1/16	14- 1/8	33.51
824-140F*	14	12-15/16	5-15/16	15- 1/2	41.18
824-160F*	16	14-13/16	6-13/16	17-11/16	108.06
824-180F*	18	16- 3/4	7- 3/4	19- 7/8	95.70
824-200F*	20	23-11/16	13-11/16	22- 1/16	129.88
824-240F*	24	28-11/16	16-11/16	26- 7/16	223.19

* Fabricated

45° Street Ell

Spigot x Socket

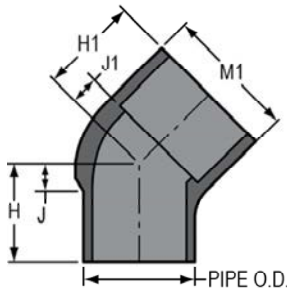


Part Number	Size	H	H1	J	J1	M1	Approx. Wt. (Lbs.)
827-005	1/2	1- 9/32	1- 5/16	11/32	7/16	1- 3/16	.05
827-007	3/4	1- 1/2	1- 1/2	7/16	1/2	1-13/32	.09
827-010	1	1-25/32	1- 1/2	19/32	3/8	1- 3/4	.14
827-012	1-1/4	2	1-23/32	5/8	15/32	2- 3/32	.22
827-015	1-1/2	2- 1/32	2- 1/8	19/32	25/32	2-11/32	.29
827-020	2	2- 5/16	2-11/32	11/16	3/8	2-27/32	.43
827-025	2-1/2	3-11/16	2- 9/16	1-11/16	13/16	3- 1/2	1.09
827-030	3	3- 1/4	2-13/16	1- 3/16	29/32	4- 5/32	1.18
827-040	4	3-13/16	3-13/16	1- 9/32	1- 9/16	5- 1/4	2.14
827-060	6	5- 3/32	4-25/32	2- 1/16	2- 1/16	7-19/32	5.69

45° Street Ell

(Continued)

Spigot x Socket

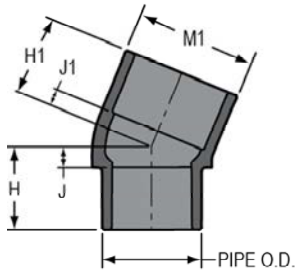


Part Number	Size	H	H1	J	J1	M1	Approx. Wt. (Lbs.)
827-080	8	6- 5/8	5-31/32	2-19/32	1- 3/4	9- 3/4	10.52
827-100	10	10-21/32	8- 3/16	2-19/32	5- 5/16	12- 3/16	24.55
827-120	12	13- 1/4	9-11/16	6- 3/8	3- 3/32	14-13/32	43.10
827-140F*	14	11- 9/16	11- 9/16	4- 9/16	4- 9/16	15- 1/2	61.04
827-160F*	16	18- 5/16	13- 5/16	9- 5/16	5- 5/16	17-11/16	78.40
827-180F*	18	20- 1/2	15	10- 1/2	6	19- 7/8	114.31
827-200F*	20	22- 3/4	16- 3/4	11- 3/4	6- 3/4	22- 1/16	156.52
827-240F*	24	27- 3/16	20- 3/16	14- 3/16	8- 3/16	26- 7/16	261.18

* Fabricated

22-1/2° Street Ell

Spigot x Socket

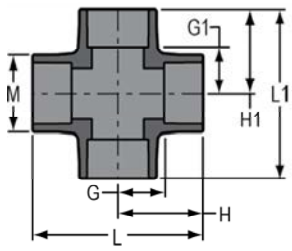


Part Number	Size	H	H1	J	J1	M1	Approx. Wt. (Lbs.)
842-005	1/2	7/8	1	1/8	1/8	1- 3/16	.04
842-007	3/4	1- 1/4	1- 5/32	3/16	3/16	1- 3/8	.07
842-010	1	1- 7/16	1-11/32	5/16	7/32	1-23/32	.12
842-012	1-1/4	1- 9/16	1- 9/16	5/16	3/8	2- 3/32	.19
842-015	1-1/2	1-21/32	1- 7/8	9/32	1/2	2- 3/8	.25
842-020	2	2	1-29/32	15/32	13/32	2- 7/8	.42
842-025	2-1/2	2- 7/32	2- 7/32	15/32	15/32	3- 1/2	.66
842-030	3	2- 1/2	2- 5/16	21/32	7/16	4- 5/32	.96
842-040	4	2-27/32	3- 1/32	9/16	25/32	5- 1/4	1.64
842-060	6	5-11/16	3-15/16	2- 3/8	7/8	7- 5/8	6.54
842-080	8	7- 3/8	5- 1/8	3- 1/8	1- 1/8	9- 3/4	11.05

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Cross

Socket x Socket x Socket x Socket

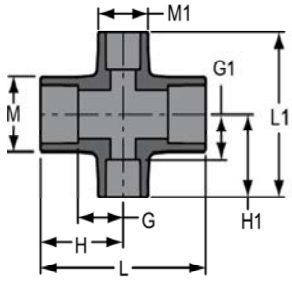


Part Number	Size	G	G1	H	H1	L	L1	M	M1	Approx. Wt. (Lbs.)
820-002	1/4	13/32	13/32	1- 1/32	1- 1/32	2- 1/16	2- 1/16	27/32	27/32	.04
820-005	1/2	9/16	9/16	1-15/32	1-15/32	2-15/16	2-15/16	1- 3/16	1- 3/16	.12
820-007	3/4	5/8	5/8	1- 5/8	1- 5/8	3- 9/32	3- 9/32	1-13/32	1-13/32	.21
820-010	1	31/32	31/32	2- 3/32	2- 3/32	4- 7/32	4- 7/32	1-23/32	1-23/32	.42
820-012	1-1/4	1- 3/32	1- 3/32	2- 3/8	2- 3/8	4- 3/4	4- 3/4	2- 1/8	2- 1/8	.60
820-015	1-1/2	1- 1/4	1- 1/4	2- 5/8	2- 5/8	5- 1/4	5- 1/4	2- 3/8	2- 3/8	.80
820-020	2	1- 1/2	1- 1/2	3	3	6	6	3	3	1.34
820-025	2-1/2	1-11/16	1-11/16	3-15/32	3-15/32	6-29/32	6-29/32	3-17/32	3-17/32	2.01
820-030	3	2- 3/32	2- 3/32	3-31/32	3-31/32	7-15/16	7-15/16	4-11/32	4-11/32	3.28
820-040	4	2- 5/8	2- 5/8	4- 7/8	4- 7/8	9- 3/4	9- 3/4	5-11/32	5-11/32	5.30
820-060F*	6	6- 1/4	6- 1/4	9- 1/2	9- 1/2	19	19	7- 1/2	7- 1/2	15.05
820-080F*	8	7- 5/8	7- 5/8	11- 7/8	11- 7/8	23- 3/4	23- 3/4	9- 5/8	9- 5/8	21.20
820-100F*	10	9	9	14- 1/4	14- 1/4	28- 1/2	28- 1/2	11-15/16	11-15/16	49.81
820-120F*	12	11- 1/4	11- 1/4	17- 1/2	17- 1/2	35	35	14- 1/8	14- 1/8	86.58
820-140F*	14	12- 1/4	12- 1/4	19- 1/4	19- 1/4	38- 1/2	38- 1/2	15- 1/2	15- 1/2	115.49
820-160F*	16	13	13	21	21	42	42	17-11/16	17-11/16	156.80
820-180F*	18	13- 3/4	13- 3/4	22- 3/4	22- 3/4	45- 1/2	45- 1/2	19- 7/8	19- 7/8	215.34
820-200F*	20	16- 3/8	16- 3/8	26- 3/8	26- 3/8	52- 3/4	52- 3/4	22- 1/16	22- 1/16	306.39
820-240F*	24	20- 1/4	20- 1/4	32- 1/4	32- 1/4	64- 1/2	64- 1/2	26- 7/16	26- 7/16	527.12

* Fabricated

Cross - Reducing

Socket x Socket x Socket x Socket

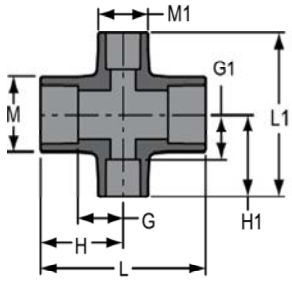


Part Number	Size	G	G1	H	H1	L	L1	M	M1	Approx. Wt. (Lbs.)
820-130[1]	1X1/2	1	1- 7/16	2- 1/8	2- 3/8	4- 7/32	4- 3/4	1-23/32	1-23/32	.53
820-131	1X3/4	23/32	5/8	1- 5/8	1- 5/8	3- 1/4	3- 1/4	1- 7/8	1- 1/2	.29
820-166[1]	1-1/4X1/2	1- 3/32	1- 3/32	2- 3/8	2-11/16	4- 3/4	5- 3/16	3- 3/32	3- 3/32	.84
820-167	1-1/4X3/4	1- 1/16	23/32	2- 1/16	1-31/32	4- 3/32	3-31/32	2- 1/16	1-13/32	.33
820-209[1]	1-1/2X1/2	1- 7/32	1- 7/32	2-21/32	2-31/32	5- 1/4	5-15/16	2- 3/8	2- 3/8	1.09
820-210	1-1/2X3/4	11/16	1- 5/32	2- 3/32	2- 3/16	4- 3/16	4-11/32	2- 3/8	1-13/32	.40
820-211[1]	1-1/2X1	1- 3/4	1- 3/4	2- 5/8	3	5- 5/16	5- 7/8	1- 3/8	1- 3/8	1.05
820-248[1]	2X3/4	11/16	1- 7/16	2- 7/32	2- 7/16	4-13/32	4- 7/8	2-29/32	1-13/32	.54
820-249[1]	2X1	1- 1/2	2- 9/32	3	3- 7/16	6	6-27/32	3	3	1.81

Cross - Reducing

Socket x Socket x Socket x Socket

(Continued)



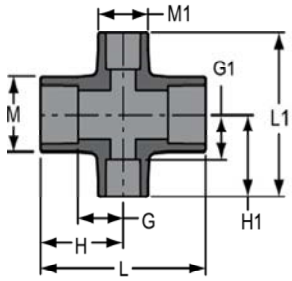
Part Number	Size	G	G1	H	H1	L	L1	M	M1	Approx. Wt. (Lbs.)
820-251[1]	2X1-1/2	1- 1/2	2	3	3- 3/8	6	6- 3/4	2- 7/8	2- 7/8	1.62
820-289	2-1/2X1	7/8	1-23/32	2-11/16	2- 7/8	5-11/32	5- 3/4	3- 1/2	1- 3/4	.96
820-291[1]	2-1/2X1-1/2	1-11/16	2-15/32	3- 7/16	3-27/32	6- 7/8	7-23/32	3- 9/16	3- 9/16	2.76
820-336[1]	3X1-1/4	2- 3/32	3- 1/8	3-31/32	4- 3/8	7-29/32	8- 3/4	4- 3/16	4- 3/16	4.54
820-338[1]	3X2	2- 3/32	2-27/32	3-31/32	4- 5/16	7-29/32	8- 5/8	4-13/32	4- 5/16	4.22
820-420[1]	4X2	2- 5/8	3-13/16	4- 7/8	5-11/32	9- 3/4	10-21/32	5-11/32	5- 11/32	7.32
820-420F[*]	4X2	3- 7/8	4- 1/4	6- 1/8	6	12- 1/4	12	5- 3/16	2-13/16	3.94
820-422[1]	4X3	2- 5/8	3- 7/16	4- 7/8	5- 5/16	9- 3/4	10- 5/8	5- 1/4	5- 1/4	6.98
820-528F[*]	6X2	4- 5/8	5- 3/16	7- 7/8	6-15/16	15- 3/4	13- 7/8	7- 1/2	2-13/16	8.30
820-530F[*]	6X3	4- 3/4	5- 3/4	8	8	16	16	7- 1/2	4- 1/8	9.29
820-532F[*]	6X4	5- 1/4	6- 3/4	8- 1/2	9	17	18	7- 1/2	5- 3/16	11.87
820-533F[*]	6X5	5- 3/4	6- 1/2	9	9- 1/2	18	19	7- 1/2	6- 5/16	13.25
820-578F[*]	8X2	4-11/16	6- 1/8	8-15/16	7- 7/8	17- 7/8	15- 3/4	9- 5/8	2-13/16	12.99
820-580F[*]	8X3	5- 3/16	6-11/16	9- 7/16	8-15/16	18- 7/8	17- 7/8	9- 5/8	4- 1/8	16.54
820-582F[*]	8X4	5- 3/4	7-11/16	10	9-15/16	20	19- 7/8	9- 5/8	5- 3/16	16.57
820-585F[*]	8X6	6- 3/4	8- 1/16	11	11- 5/16	22	22- 5/8	9- 5/8	7- 1/2	18.69
820-621F[*]	10X2	4- 3/8	7- 1/8	9- 5/8	8- 7/8	19- 1/4	17-11/16	11-15/16	2-13/16	19.46
820-622F[*]	10X2-1/2	5- 1/4	7- 5/16	10- 1/2	9- 5/16	21	18- 5/8	11-15/16	3- 7/16	7.21
820-623F[*]	10X3	4- 7/8	7-11/16	10- 1/8	9-15/16	20- 1/4	19-13/16	11-15/16	4- 1/8	24.75
820-624F[*]	10X4	5- 3/8	8-11/16	10- 5/8	10-15/16	21- 1/4	21-13/16	11-15/16	5- 3/16	25.92
820-626F[*]	10X6	5- 7/8	9- 1/16	11- 1/8	12- 5/16	22- 1/4	24- 5/8	11-15/16	7- 1/2	30.99
820-628F[*]	10X8	8- 1/4	9-15/16	13- 1/2	14- 3/16	27	28- 3/8	11-15/16	9- 5/8	37.99
820-661F[*]	12X2	4- 3/4	8	11	9- 3/4	22	19- 1/2	14- 1/8	2-13/16	34.21
820-663F[*]	12X3	5- 1/4	8- 9/16	11- 1/2	10-13/16	23	21- 5/8	14- 1/8	4- 1/8	36.58
820-664F[*]	12X4	5- 3/4	9- 9/16	12	11-13/16	24	23- 5/8	14- 1/8	5- 3/16	39.32
820-666F[*]	12X6	7- 1/4	9-15/16	13- 1/4	13- 3/16	26- 1/2	26- 3/8	14- 1/8	7- 1/2	47.58
820-668F[*]	12X8	8	10-13/16	14- 1/4	15- 1/16	28- 1/2	30- 1/8	14- 1/8	9- 5/8	53.38
820-670F[*]	12X10	10-1/4	10-13/16	16-1/2	16- 1/16	33	32- 1/8	14- 1/8	11-15/16	67.15
820-691F[*]	14X2	5- 3/16	8- 9/16	12- 3/16	10- 5/16	24- 3/8	20- 5/8	15- 1/2	2-13/16	43.63
820-693F[*]	14X3	5- 3/4	9- 1/8	12- 3/4	11- 3/8	25- 1/2	22- 3/4	15- 1/2	4- 1/8	46.69
820-694F[*]	14X4	6- 1/2	10- 1/8	13- 1/2	12- 3/8	27	24- 3/4	15- 1/2	5- 3/16	50.92
820-696F[*]	14X6	8- 1/4	10- 1/2	15- 1/4	13- 3/4	30- 1/2	27- 1/2	15- 1/2	7- 1/2	60.27
820-698F[*]	14X8	9- 1/4	11- 3/8	16- 1/4	15- 5/8	32- 1/2	31- 1/4	15- 1/2	9- 5/8	70.30
820-700F[*]	14X10	10- 1/8	11- 3/8	17- 1/8	16- 5/8	34- 1/4	33- 1/4	15- 1/2	11-15/16	82.03
820-702F[*]	14X12	11	11- 3/8	18	17- 5/8	36	35- 1/4	15- 1/2	14- 1/8	97.46
820-751F[*]	16X2	5- 7/8	9- 1/2	13- 7/8	11- 1/4	27- 3/4	22- 1/2	17-11/16	2-13/16	67.41
820-753F[*]	16X3	6- 5/16	10- 1/16	14- 5/16	12- 5/16	28- 5/8	24- 5/8	17-11/16	4- 1/8	65.41
820-754F[*]	16X4	6- 1/8	11- 1/16	14- 1/8	13- 5/16	28- 1/4	26- 5/8	17-11/16	5- 3/16	68.64
820-756F[*]	16X6	8- 5/8	11- 7/16	16- 5/8	14-11/16	33- 1/4	29- 3/8	17-11/16	7- 1/2	81.24

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Cross - Reducing

Socket x Socket x Socket x Socket

(Continued)



Part Number	Size	G	G1	H	H1	L	L1	M	M1	Approx. Wt. (Lbs.)
820-758F*	16X8	9- 5/8	12- 5/16	17- 5/8	16- 9/16	35- 1/4	33- 1/8	17-11/16	9- 5/8	92.75
820-760F*	16X10	10- 5/8	12- 5/16	18- 5/8	17- 9/16	37- 1/4	35- 1/8	17-11/16	11-15/16	109.05
820-762F*	16X12	11- 5/8	12- 5/16	19- 5/8	18- 9/16	39- 1/4	37- 1/8	17-11/16	14- 1/8	125.11
820-764F*	16X14	12- 3/4	12-11/16	20- 3/4	19-11/16	41- 1/2	39- 3/8	17-11/16	15- 1/2	142.85
820-784F*	18X4	6- 7/8	11-15/16	15- 7/8	14- 3/16	31- 3/4	28- 3/8	19- 7/8	5- 3/16	98.05
820-786F*	18X6	8- 1/2	12- 5/16	17- 1/2	15- 9/16	35	31- 1/8	19- 7/8	7- 1/2	110.51
820-788F*	18X8	9- 1/2	13- 3/16	18- 1/2	17- 7/16	37	34- 7/8	19- 7/8	9- 5/8	119.11
820-790F*	18X10	10- 1/2	13- 3/16	19- 1/2	18- 7/16	39	36- 7/8	19- 7/8	11-15/16	130.90
820-792F*	18X12	11- 1/2	13- 3/16	20- 1/2	19- 7/16	41	38- 7/8	19- 7/8	14- 1/8	147.20
820-794F*	18X14	12- 3/4	13- 9/16	21- 3/4	20- 9/16	43- 1/2	41- 1/8	19-11/16	15- 1/2	173.13
820-796F*	18X16	13- 1/2	14- 3/16	22- 1/2	22- 3/16	45	44- 3/8	19-11/16	17-11/16	188.52
820-814F*	20X4	7-11/16	12- 7/8	17-11/16	15- 1/8	35- 3/8	30- 1/4	22- 1/16	5- 3/16	132.99
820-816F*	20X6	8- 7/8	13- 1/4	18- 7/8	16- 1/2	37- 3/4	33	22- 1/16	7- 1/2	143.90
820-818F*	20X8	9- 7/8	14- 1/8	19- 7/8	18- 3/8	39- 3/4	36- 3/4	22- 1/16	9- 5/8	153.75
820-820F*	20X10	10- 7/8	14- 1/8	20- 7/8	19- 3/8	41- 3/4	38- 3/4	22- 1/16	11-15/16	172.42
820-822F*	20X12	11- 7/8	14- 1/8	21- 7/8	20- 3/8	43- 3/4	40- 3/4	22- 1/16	14- 1/8	193.65
820-824F*	20X14	12- 7/8	14- 1/2	22- 7/8	21- 1/2	45- 3/4	43	22- 1/16	15- 1/2	208.73
820-826F*	20X16	14	15- 1/8	24	23- 1/8	48	46- 1/4	22- 1/16	17-11/16	230.08
820-828F*	20X18	15	15	25	24	50	48	22- 1/16	19- 7/8	263.57
820-904F*	24X4	9	14-11/16	21	16-15/16	42	33- 7/8	26- 7/16	5- 3/16	209.09
820-906F*	24X6	9- 1/4	15- 1/16	21- 1/4	18- 5/16	42- 1/2	36- 5/8	26- 7/16	7- 1/2	225.46
820-908F*	24X8	10- 1/4	15-15/16	22- 1/4	20- 3/16	44- 1/2	40- 3/8	26- 7/16	9- 5/8	238.17
820-910F*	24X10	11- 1/4	15-15/16	23- 1/4	21- 3/16	46- 1/2	42- 3/8	26- 7/16	11-15/16	259.70
820-912F*	24X12	12- 1/4	15-15/16	24- 1/4	22- 3/16	48- 1/2	44- 3/8	26- 7/16	14- 1/8	281.00
820-914F*	24X14	13- 1/4	16- 5/16	25- 1/4	23- 5/16	50- 1/2	46- 5/8	26- 1/16	15- 1/2	306.59
820-916F*	24X16	14- 3/4	16-15/16	26- 3/4	24-15/16	53- 1/2	49- 7/8	26- 7/16	17-11/16	324.75
820-918F*	24X18	15- 3/4	16-13/16	27- 3/4	25-13/16	55- 1/2	51- 5/8	26- 7/16	19- 7/8	361.07
820-920F*	24X20	16- 3/4	18- 3/16	28- 3/4	28- 3/16	57- 1/2	56- 3/8	26- 7/16	22- 1/16	34.40

[1] Sized with Bushing

* Fabricated

Repair Coupling- Fabricated

Gasket x Gasket

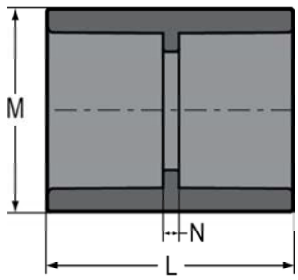


Part Number	Size	L	L1	M	M1	Approx. Wt. (Lbs.)
828-020F*	2	9- 1/8	6	2-13/16	3- 3/16	.96
828-030F*	3	15- 1/2	11- 3/4	4- 1/8	4- 5/8	3.25
828-040F*	4	19- 1/2	15	5- 3/16	5- 3/4	5.68
828-060F*	6	23	18-1/4	7- 1/2	8- 1/8	12.61
828-080F*	8	26-1/8	19	9- 5/8	10- 3/8	21.38
828-100F*	10	28	21-1/4	11-15/16	13-1/8	33.00
828-120F*	12	29	21-3/8	14- 1/8	15-3/8	49.16
828-140F*	14	30	21	15- 1/2	17-1/4	62.11
828-160F*	16	31	22-1/4	17-11/16	18-7/8	75.99
828-180F*	18	32	19-7/8	22-5/8	21-7/8	73.10
828-200F*	20	32	23-1/2	22-1/16	24-1/16	113.21
828-240F*	24	32	23-1/2	26-7/16	28-13/16	142.50

* Fabricated

Coupling

Socket x Socket



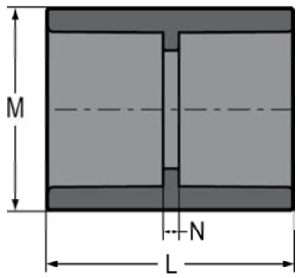
Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
829-002	1/4	1- 3/8	27/32	1/16	.02
829-003	3/8	1-5/8	1	3/32	.03
829-005	1/2	1- 7/8	1- 3/16	1/8	.04
829-007	3/4	2- 1/8	1-13/32	1/8	.07
829-010	1	2-15/32	1-23/32	3/16	.11
829-012	1-1/4	2-11/16	2- 7/32	3/16	.23
829-015	1-1/2	2- 7/8	2-11/32	3/32	.21
829-020	2	3- 1/8	2-27/32	3/32	.31
829-025	2-1/2	3-11/16	3-15/32	1/4	.55
829-030	3	3-31/32	4- 5/32	3/16	.79
829-040	4	4- 3/4	5- 5/16	1/4	1.34
829-050	5	5-15/32	6- 3/8	7/32	2.05

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Coupling

Socket x Socket

(Continued)

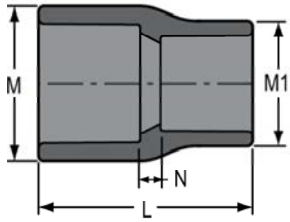


Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
829-050F*	5	7- 3/8	6- 5/16	1- 3/8	2.89
829-060	6	6- 3/8	7- 9/16	1/4	3.34
829-080	8	8- 1/4	9-23/32	9/32	6.54
829-100	10	10- 9/32	12- 1/16	1/4	11.54
829-100F*	10	12- 1/2	11-15/16	2	13.94
829-120	12	12- 3/8	14- 7/32	3/8	19.08
829-120F*	12	14- 1/4	14- 1/8	1- 3/4	21.80
829-140	14	14- 7/16	15- 5/8	3/8	27.04
829-140F*	14	16- 1/4	15- 1/2	2- 1/4	29.69
829-160F*	16	19-3/4	17-11/16	3-3/4	42.37
829-180F*	18	22	19- 7/8	4	67.00
829-200F*	20	23- 3/4	22- 1/16	3- 3/4	84.73
829-240F*	24	29- 1/4	26- 7/16	5- 1/4	147.22

* Fabricated

Coupling - Reducer

Socket x Socket

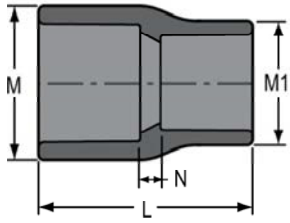


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
829-101	3/4X1/2	2- 3/32	1-13/32	1- 5/32	7/32	.06
829-130	1X1/2	2- 3/16	1-23/32	1-13/32	7/32	.11
829-131	1X3/4	2-13/32	1-23/32	1-13/32	1/4	.09
829-166	1-1/4X1/2	2- 9/16	2- 3/32	1- 5/32	7/16	.13
829-167	1-1/4X3/4	2-19/32	2- 3/32	1- 5/8	11/32	.16
829-168	1-1/4X1	2-11/16	2- 1/8	1- 3/4	5/16	.16
829-209	1-1/2X1/2	2-27/32	2-11/32	1- 3/16	19/32	.18
829-210	1-1/2X3/4	2- 7/8	2- 3/8	1-13/32	17/32	.20
829-211	1-1/2X1	2- 7/8	2-11/32	1-15/16	3/8	.25
829-212	1-1/2X1-1/4	2-13/16	2-13/32	2- 1/8	5/32	.21
829-247	2X1/2	3- 3/32	2- 7/8	1- 5/32	11/16	.29
829-248	2X3/4	3- 7/32	2- 7/8	1-13/32	23/32	.30
829-249	2X1	3-1/2	3	1-23/32	27/32	.36
829-250	2X1-1/4	3-11/32	2- 7/8	2- 3/32	19/32	.30
829-251	2X1-1/2	3- 7/32	2-27/32	2-11/32	1/4	.29
829-291	2-1/2X1-1/2	3- 3/4	3- 1/2	2- 3/8	19/32	.50

Coupling - Reducer

(Continued)

Socket x Socket



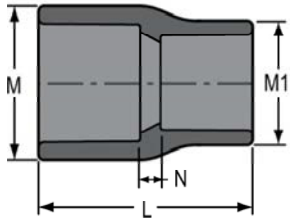
Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
829-292	2-1/2X2	3-21/32	3-15/32	2-27/32	13/32	.48
829-335[1]	3X1	4- 7/16	4- 1/8	2- 7/8	1- 7/16	.98
829-336[1]	3X1-1/4	4- 7/32	4- 5/32	2-29/32	1- 1/16	.93
829-337[1]	3X1-1/2	3-1/2	4- 3/16	2- 3/8	7/32	.69
829-338	3X2	4	4- 5/32	2-7/8	19/32	.74
829-339	3X2-1/2	4-1/8	4- 5/32	3- 15/32	1/2	.75
829-339F*	3X2-1/2	6	4- 1/16	3- 7/16	1- 3/4	.90
829-416[1]	4X3/4	5-23/32	5- 9/32	2-29/32	2-13/32	1.66
829-417[1]	4X1	5-15/16	5- 9/32	2-29/32	2-17/32	1.68
829-419[1]	4X1-1/2	5-23/32	5- 9/32	2-29/32	2- 1/16	1.59
829-420	4X2	5- 1/2	5- 9/32	2- 7/8	1-25/32	1.44
829-421	4X2-1/2	4- 9/16	5- 3/16	3- 1/2	17/32	1.27
829-422	4X3	4-19/32	5- 1/4	4- 3/16	15/32	1.25
829-460F*	4-1/2X4	6-15/16	5- 5/8	5- 3/16	2- 3/16	2.08
829-487F*	5X2-1/2	8- 1/8	6- 1/4	5- 3/16	3- 5/8	3.55
829-488F*	5X3	7-15/16	6- 1/4	5- 3/16	2-15/16	3.21
829-490F*	5X4	7- 3/4	6- 1/4	5- 3/16	2- 1/2	2.24
829-491F*	5X4-1/2	6-7/8	6-5/16	5-11/16	1-3/8	2.53
829-528[1]	6X2	7- 1/16	7- 1/2	5	2- 9/16	4.28
829-529[1]	6X2-1/2	6-31/32	7-19/32	5- 9/32	2- 3/16	4.29
829-530[1]	6X3	7- 1/8	7- 9/16	5- 9/32	2- 1/4	4.11
829-530F*	6X3	9- 3/16	7- 5/16	5- 3/16	3-15/16	3.85
829-532	6X4	6- 5/8	7- 5/8	5- 5/16	1- 7/16	3.27
829-534F*	6X4-1/2	7-7/8	7-3/8	5-11/16	2-1/8	2.97
829-533F*	6X5	8-15/16	7- 3/8	6- 5/16	2-11/16	3.74
829-579F*	8X2-1/2	15	9- 1/2	5- 3/16	8- 3/4	8.32
829-580F*	8X3	14-15/16	9- 1/2	5- 3/16	8-11/16	7.95
829-582F*	8X4	14- 5/8	9- 1/2	5- 3/16	8- 1/8	7.15
829-583F*	8X5	14-11/16	9- 1/2	6- 5/16	7- 7/16	7.77
829-585	8X6	8	9- 3/4	7- 1/2	1	6.16
829-621F*	10X2	21- 1/2	11- 3/4	5- 3/16	14- 3/4	16.16
829-623F*	10X3	21- 7/16	11- 3/4	5- 3/16	14- 3/16	15.77
829-624F*	10X4	21- 1/8	11- 3/4	5- 3/16	13- 5/8	14.75
829-625F*	10X5	21- 3/16	11- 3/4	6- 5/16	12-15/16	14.90
829-626	10X6	10-19/32	12- 1/32	7-19/32	2-17/32	11.07
829-626F*	10X6	17- 1/2	11- 3/4	7- 1/2	9	12.82
829-628	10X8	10- 5/8	12	9- 3/4	1-17/32	11.29
829-664F*	12X4	28- 3/8	13-15/16	5- 3/16	19- 7/8	27.74
829-665F*	12X5	28- 7/16	13-15/16	6- 5/16	19- 3/16	28.96
829-666F*	12X6	24- 3/4	13-15/16	7- 1/2	15- 1/4	26.75
829-668	12X8	12- 5/8	14- 7/32	9- 3/4	2- 7/16	17.85

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Coupling - Reducer

(Continued)

Socket x Socket

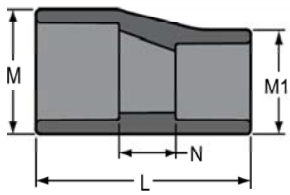


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
829-668F*	12X8	20- 1/2	13-15/16	9- 5/8	10	22.51
829-670F*	12X10	16- 3/8	13-15/16	11-15/16	4- 7/8	19.92
829-694F*	14X4	30- 1/8	15- 3/16	5- 3/16	20- 7/8	29.93
829-696F*	14X6	26- 1/2	15- 3/16	7- 1/2	16- 1/4	30.29
829-698F*	14X8	22- 1/4	15- 3/16	9- 5/8	11	27.50
829-700F*	14X10	18- 1/8	15- 3/16	11-15/16	5- 7/8	23.91
829-702F*	14X12	17- 3/4	15- 3/8	14- 1/8	4- 1/2	27.40
829-754F*	16X4	38	17- 3/8	5- 3/16	27- 3/4	50.44
829-756F*	16X6	34- 3/8	17- 3/8	7- 1/2	23- 1/8	53.09
829-758F*	16X8	30- 1/8	17- 3/8	9- 5/8	17- 7/8	48.85
829-760F*	16X10	26	17- 3/8	11-15/16	12- 3/4	46.26
829-762F*	16X12	20- 1/4	17- 3/8	14- 1/8	6	36.30
829-764F*	16X14	21- 1/4	17- 1/2	15- 1/2	5- 1/4	42.89
829-784F*	18X4	47- 3/8	19-11/16	5- 3/16	36- 1/8	86.76
829-786F*	18X6	43- 3/4	19-11/16	7- 1/2	31- 1/2	92.19
829-788F*	18X8	39- 1/2	19-11/16	9- 5/8	26- 1/4	89.60
829-790F*	18X10	35- 3/8	19-11/16	11-15/16	21- 1/8	85.36
829-792F*	18X12	29- 5/8	19-11/16	14- 1/8	14- 3/8	68.96
829-794F*	18X14	29- 5/8	19-11/16	15- 1/2	13- 5/8	77.68
829-796F*	18X16	23	19-11/16	17-11/16	6	55.09
829-814F*	20X4	58	21- 7/8	5- 3/16	45- 3/4	128.41
829-816F*	20X6	54- 3/8	21- 7/8	7- 1/2	41- 1/8	131.05
829-818F*	20X8	50- 1/8	21- 7/8	9- 5/8	35- 7/8	140.15
829-820F*	20X10	46	21- 7/8	11-15/16	30- 3/4	137.92
829-822F*	20X12	40- 1/4	21- 7/8	14- 1/8	24	127.96
829-824F*	20X14	40- 1/4	21- 7/8	15- 1/2	23- 1/4	118.16
829-826F*	20X16	33- 5/8	21- 7/8	17-11/16	15- 5/8	100.86
829-828F*	20X18	25- 1/2	21- 7/8	19- 7/8	6- 1/2	77.09
829-904F*	24X4	71- 1/2	26- 1/16	5- 3/16	57- 1/4	227.54
829-906F*	24X6	67- 7/8	26- 1/16	7- 1/2	52- 5/8	226.55
829-908F*	24X8	63- 5/8	26- 1/16	9- 5/8	47- 3/8	225.73
829-910F*	24X10	59- 1/2	26- 1/16	11-15/16	42- 1/4	219.72
829-912F*	24X12	53- 3/4	26- 1/16	14- 1/8	35- 1/2	192.81
829-914F*	24X14	53- 3/4	26- 1/16	15- 1/2	34- 3/4	212.04
829-916F*	24X16	47- 1/8	26- 1/16	17-11/16	27- 1/8	184.82
829-918F*	24X18	39	26- 1/16	19- 7/8	18	157.05
829-920F*	24X20	30- 5/8	26- 1/16	22- 1/16	8- 5/8	119.89

[1] Outlet-sized with Bushing
* Fabricated

Coupling - Eccentric Reducer

Socket x Socket



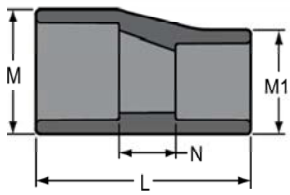
Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
829-101FE*	3/4X1/2	3-7/16	1- 3/8	1- 1/8	1-7/16	.07
829-130FE*	1X1/2	4-1/16	1- 5/8	1- 1/8	1-13/16	.11
829-131FE*	1X3/4	4	1- 5/8	1-1/8	1- 3/4	.12
829-168FE*	1-1/4X1	4-5/8	2	1-11/16	1-7/8	.24
829-209FE[2]*	1-1/2X1/2	8	2- 1/4	1- 1/8	5-1/2	.33
829-210FE[2]*	1-1/2X3/4	7-15/16	2- 1/4	1- 3/8	5-7/16	.33
829-211FE*	1-1/2X1	5-5/16	2-1/4	1-11/16	2-9/16	.24
829-212FE*	1-1/2X1-1/4	4-9/16	2- 5/16	2- 1/16	1-9/16	.26
829-249FE*	2X1	6- 1/8	2- 3/4	1-11/16	3- 1/8	.38
829-250FE*	2X1-1/4	6- 1/8	2- 3/4	2- 1/16	2- 7/8	.39
829-251FE*	2X1-1/2	5-9/16	2- 3/4	2- 5/16	2-5/16	.33
829-289FE[2]*	2-1/2X1	10-3/8	3-5/16	1-11/16	7-1/8	.88
829-290FE[2]*	2-1/2X1-1/4	10-3/8	3- 5/16	2- 1/16	6-7/8	.90
829-291FE[2]*	2-1/2X1-1/2	9-13/16	3- 5/16	2- 5/16	6-5/16	.90
829-292FE*	2-1/2X2	6-5/8	3- 5/16	2-13/16	2-7/8	.68
829-335FE[2]*	3X1	11- 7/8	3-15/16	1-11/16	8- 3/8	1.11
829-336FE[2]*	3X1-1/4	11- 7/8	3-15/16	2- 1/16	8- 1/8	1.22
829-337FE[2]*	3X1-1/2	11-5/16	3-15/16	2- 5/16	7-9/16	1.21
829-338E	3X2	5-7/8	4-5/32	2-7/8	2-15/32	1.00
829-338FE*	3X2	8- 1/8	3-15/16	2-13/16	4- 1/8	1.00
829-339FE*	3X2-1/2	7- 1/4	4- 1/16	3- 7/16	3	1.11
829-417FE[3]*	4X1	17	5- 1/8	1-11/16	13- 1/2	2.37
829-418FE[3]*	4X1-1/4	17	5- 1/8	2- 1/16	13- 1/4	2.31
829-419FE[3]*	4X1-1/2	16-7/16	5- 1/8	2- 5/16	12-11/16	2.37
829-420FE[2]*	4X2	13- 1/4	5- 1/8	2-13/16	9- 1/4	2.09
829-421FE[2]*	4X2-1/2	12- 3/8	5- 1/8	3- 7/16	8- 1/8	2.40
829-422FE*	4X3	8- 3/4	5- 1/8	4- 1/8	4- 1/4	1.69
829-490FE*	5X4	10	6-1/4	5-3/16	4-3/4	2.75
829-528FE[3]*	6X2	20- 7/8	7- 5/16	2-13/16	15- 7/8	4.84
829-529FE[3]*	6X2-1/2	20	7- 5/16	3- 7/16	14- 3/4	4.94
829-530FE[2]*	6X3	16- 3/8	7- 5/16	4- 1/8	10- 7/8	4.57
829-532FE*	6X4	11- 1/8	7- 5/16	5- 3/16	5- 5/8	3.39
829-533FE*	6X5	11- 1/4	7- 3/8	6- 5/16	5	4.31
829-575FE[5]*	8X1	34-3/8	9-1/2	1-11/16	28-7/8	13.09
829-577FE[5]*	8X1-1/2	34-1/4	9-1/2	2-5/16	28-1/2	11.56
829-578FE[4]*	8X2	30- 5/8	9- 1/2	2-13/16	24- 5/8	11.40
829-580FE[3]*	8X3	26- 1/8	9- 1/2	4- 1/8	19- 5/8	11.01
829-582FE[2]*	8X4	20- 7/8	9- 1/2	5- 3/16	14- 3/8	10.24
829-583FE[2]*	8X5	21	9- 1/2	6- 5/16	13- 3/4	10.77

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Coupling - Eccentric Reducer

(Continued)

Socket x Socket



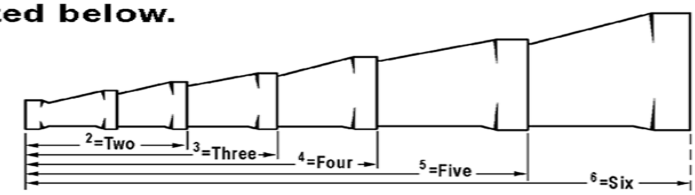
Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
829-585FE*	8X6	15- 1/4	9- 1/2	7- 1/2	7- 3/4	8.40
829-624FE3*	10X4	32	11- 3/4	5- 3/16	24- 1/2	21.03
829-625FE3*	10X5	32- 1/8	11- 3/4	6- 5/16	23- 7/8	22.82
829-626FE2*	10X6	26- 1/2	11- 3/4	7- 1/2	18	18.61
829-628FE*	10X8	18- 1/16	11- 3/4	9- 5/8	8- 9/16	13.81
829-664FE4*	12X4	43- 1/2	13-15/16	5- 3/16	35	37.53
829-666FE3*	12X6	37- 7/8	13-15/16	7- 1/2	28- 3/8	36.64
829-668FE2*	12X8	29- 9/16	13-15/16	9- 5/8	19- 1/16	32.09
829-670FE*	12X10	20- 5/8	13-15/16	11-15/16	9- 1/8	23.62
829-696FE3*	14X6	41- 3/8	15- 3/16	7- 1/2	31- 1/8	41.01
829-698FE2*	14X8	33- 1/16	15- 3/16	9- 5/8	21-13/16	35.00
829-700FE*	14X10	24- 1/8	15- 3/16	11-15/16	11- 7/8	29.88
829-702FE*	14X12	20- 1/8	15- 3/8	14- 1/8	6- 7/8	30.11
829-756FE4*	16X6	54- 1/4	17- 1/2	7- 1/2	43	73.56
829-758FE3*	16X8	45-15/16	17- 1/2	9- 5/8	33-11/16	69.73
829-760FE2*	16X10	37	17- 1/2	11-15/16	23- 3/4	59.25
829-762FE2*	16X12	33	17- 1/2	14- 1/8	18- 3/4	64.09
829-764FE*	16X14	24- 5/8	17- 1/2	15- 1/2	9- 5/8	46.25
829-786FE5*	18X6	69- 1/4	19-11/16	7- 1/2	57	121.36
829-788FE4*	18X8	60-15/16	19-11/16	9- 5/8	47-11/16	121.91
829-790FE3*	18X10	52	19-11/16	11-15/16	37- 3/4	109.42
829-792FE3*	18X12	48	19-11/16	14- 1/8	32- 3/4	109.80
829-794FE2*	18X14	39- 5/8	19-11/16	15- 1/2	23- 5/8	97.05
829-796FE*	18X16	28- 5/8	19-11/16	17-11/16	11- 5/8	66.92

* Fabricated

Eccentric Reducer Coupling Footnotes

Multi-Step Configurations

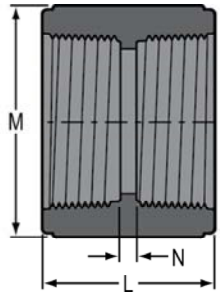
The number after the part number denotes steps listed below.



Example: 829-626FE2 (2= 2 Step)

Coupling

Fipt x Fipt

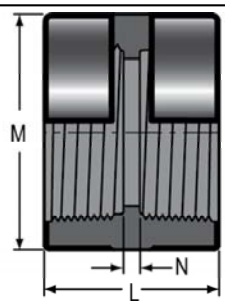


Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
830-002	1/4	1-11/32	13/16	5/32	.02
830-003	3/8	1-15/32	1	9/32	.03
830-005	1/2	1- 5/8	1- 9/32	1/4	.06
830-007	3/4	1-11/16	1- 5/8	3/32	.08
830-010	1	2- 3/32	1-15/16	1/8	.14
830-012	1-1/4	2- 3/16	2- 9/32	3/16	.20
830-015	1-1/2	2- 7/32	2- 5/8	3/16	.28
830-020	2	2- 7/32	3	7/32	.33
830-025	2-1/2	3- 5/16	3- 9/16	1/8	.67
830-030	3	3-15/32	4- 3/8	21/32	1.12
830-040	4	3-21/32	5- 9/16	3/16	1.49
830-060F*	6	3- 3/4	7- 3/16	3/4	1.64
830-080F*	8	4- 1/2	9- 3/8	1- 1/16	2.84
830-100F*	10	5	11-9/16	1-1/8	4.91

* Fabricated

Coupling - Special Reinforced

SR Fipt x SR Fipt - Stainless Steel Collar

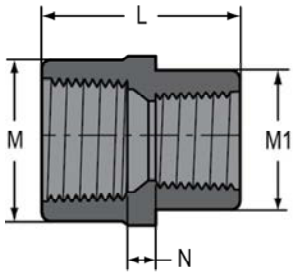


Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
830-005SR	1/2	1-19/32	1- 7/32	9/32	.06
830-007SR	3/4	1- 5/8	1- 3/8	1/8	.07
830-010SR	1	1-15/16	1-23/32	1/16	.13
830-012SR	1-1/4	2- 1/16	2- 1/16	5/16	.18
830-015SR	1-1/2	2- 5/32	2- 7/16	11/32	.27
830-020SR	2	2- 1/4	3- 1/32	1/4	.40

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Coupling - Reducer

Fipt x Fipt

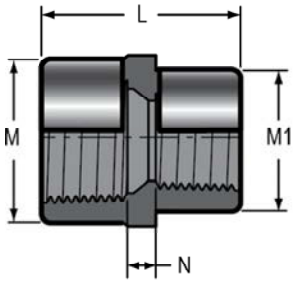


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
830-072[1]	1/2X1/4	1-31/32	1-5/16	1-5/32	5/8	.07
830-073[1]	1/2X3/8	1-29/32	1- 7/32	1- 7/32	19/32	.06
830-101	3/4X1/2	1-23/32	1- 3/8	1- 7/32	7/32	.06
830-211[1]	1-1/2X1	2- 7/8	2-11/32	2-11/32	1- 1/32	.34

[1] Sized with Bushing

Coupling - Special Reinforced Reducer

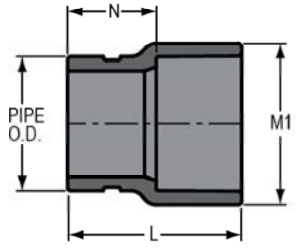
SR Fipt x SR Fipt - Stainless Steel Collar



Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
830-101SR	3/4X1/2	1-3/4	1- 3/8	1- 7/32	1/4	.08
830-130SR	1X1/2	2- 1/4	1-23/32	1- 7/32	21/32	.16
830-131SR	1X3/4	2-13/32	1-23/32	1- 3/8	23/32	.16
830-210SR	1-1/2X3/4	2- 7/8	2- 7/16	1- 3/8	1- 7/32	.29
830-211SR	1-1/2X1	2-15/16	2- 7/16	1-11/16	7/16	.34
830-212SR	1-1/2X1-1/4	2- 7/8	2- 1/2	2- 3/32	15/16	.33
830-249SR	2X1	3- 3/16	3	1-23/32	1-17/32	.48
830-251SR	2X1-1/2	3- 1/4	3	2- 7/16	1- 7/16	.50

Grooved Coupling Adapter

Groove x Socket

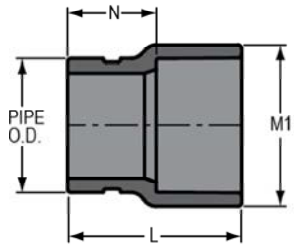


Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
833-012	1-1/4	2-13/16	2- 1/16	1- 9/16	.17
833-015	1-1/2	2-29/32	2-11/32	1- 1/2	.18
833-020	2	3- 1/16	2- 7/8	1- 9/16	.28
833-025	2-1/2	3- 3/8	3- 1/2	1- 5/8	.49
833-030	3	3- 9/16	4- 3/16	1-11/16	.68

Grooved Coupling Adapter

(Continued)

Groove x Socket

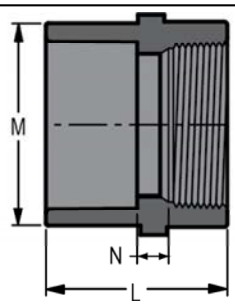


Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
833-040	4	4-17/32	5- 1/4	2- 9/32	1.27
833-050F*	5	7	6- 5/16	4	2.48
833-060	6	5- 5/16	7- 9/16	2- 5/16	2.78
833-080F*	8	8- 3/16	9- 5/8	3-15/16	5.70
833-100F*	10	9- 7/8	11-15/16	4- 5/8	10.35
833-120F*	12	10- 7/8	14- 1/8	4- 5/8	16.21

* Fabricated

Female Adapter

Socket x Fipt



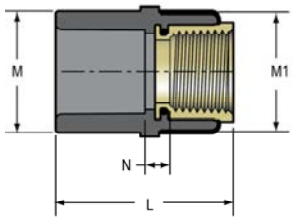
Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
835-002	1/4	1-11/32	27/32	3/32	.02
835-003	3/8	1-15/32	1	3/32	.03
835-098	3/4X1/4	1-15/16	1-13/32	13/32	.05
835-005	1/2	1-23/32	1- 5/32	3/32	.04
835-007	3/4	1-27/32	1-13/32	3/32	.06
835-010	1	2- 1/8	1-23/32	3/32	.11
835-012	1-1/4	2- 5/16	2- 3/32	3/32	.17
835-015	1-1/2	2- 1/2	2-11/32	3/32	.20
835-020	2	2-11/16	3	1/4	.40
835-025	2-1/2	3- 1/4	3- 9/16	7/32	.63
835-030	3	3-15/32	4- 1/4	3/16	.74
835-040	4	3-31/32	5- 7/32	1/4	1.21
835-060	6	4-31/32	7-21/32	5/16	3.08
835-080	8	6- 5/32	9-23/32	1/4	5.22
835-080F*	8	8- 9/16	9- 5/8	2- 9/16	6.18
835-100F*	10	10- 1/4	11-15/16	3	10.50
835-120F*	12	11- 1/8	14- 1/8	2- 5/8	14.09

* Fabricated

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Female Adapter - Brass Transition

Socket x Fipt With Brass Thread Insert

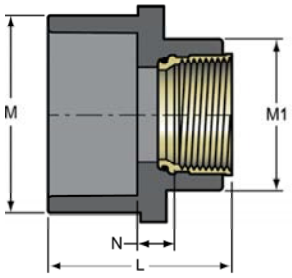


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
835-005BR	1/2	1-25/32	1- 5/32	1- 7/32	5/8	.11
835-007BR	3/4	2	1-13/32	1- 3/8	3/8	.15
835-010BR	1	2- 7/32	1- 3/4	1-11/16	13/32	.24
835-012BR	1-1/4	2- 3/8	2- 3/32	2- 1/16	3/8	.34
835-015BR	1-1/2	2-17/32	2-13/32	2- 7/16	13/32	.45
835-020BR	2	2-25/32	2- 7/8	3- 3/16	7/16	1.02

Not intended to convey or dispense water for human consumption through drinking or cooking

Female Adapter - Brass Transition Reducing

Socket x Fipt With Brass Thread Insert

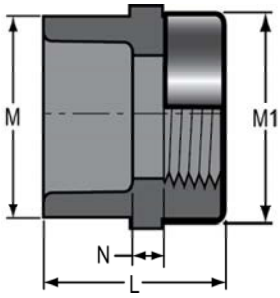


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
835-101BR	3/4X1/2	2- 1/32	1- 7/16	1- 3/16	15/32	.13
835-131BR	1X3/4	2-5/16	1-11/16	1-3/8	9/16	.18

Not intended to convey or dispense water for human consumption through drinking or cooking

Female Adapter - Special Reinforced

Socket x SR Fipt - Stainless Steel Collar

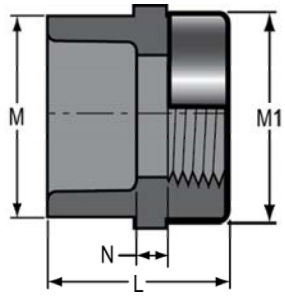


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
835-002SR	1/4	1-13/32	27/32	27/32	3/32	.02
835-003SR	3/8	1-15/32	15/16	31/32	3/32	.03
835-005SR	1/2	1-23/32	1- 5/32	1- 3/16	3/32	.06
835-007SR	3/4	1- 7/8	1-13/32	1- 3/8	3/32	.09
835-010SR	1	2- 1/8	1-23/32	1-11/16	3/32	.12
835-012SR	1-1/4	2- 5/16	2- 3/32	2- 1/16	3/32	.18
835-015SR	1-1/2	2- 7/16	2-13/32	2- 7/16	7/32	.26
835-020SR	2	2-23/32	3	3- 1/32	1/4	.42

Female Adapter - Special Reinforced

(Continued)

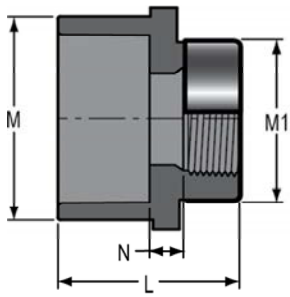
Socket x SR Fipt - Stainless Steel Collar



Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
835-025SR	2-1/2	3- 1/4	3- 9/16	3- 9/16	11/32	.67
835-030SR	3	3- 1/2	4- 1/4	4- 9/32	7/32	.96
835-040SR	4	3-31/32	5- 7/32	5- 1/4	7/32	1.28
835-060SR	6	4-31/32	7- 5/8	7-21/32	1/4	3.03

Female Adapter - Special Reinforced Reducing

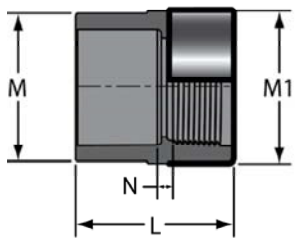
Socket x SR Fipt - Stainless Steel Collar



Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
835-074SR	1/2X3/4	1- 3/4	1- 3/16	1- 3/8	7/32	.07
835-098SR	3/4X1/4	1-15/16	1-13/32	27/32	13/32	.06
835-101SR	3/4X1/2	1- 7/8	1- 3/8	1- 3/16	3/16	.07
835-102SR	3/4X1	2- 1/16	1- 7/16	1-11/16	7/32	.12
835-130SR	1X1/2	2	1-11/16	1- 3/16	7/32	.10
835-131SR	1X3/4	2- 3/32	1- 3/4	1- 3/8	1/4	.12

Female Adapter - Encapsulated Special Reinforced

Socket x ESR Fipt

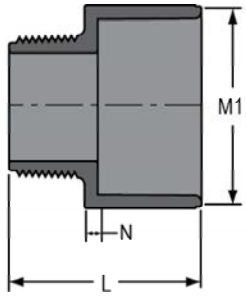


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
835-002ESR	1/4	1- 1/2	27/32	29/32	3/32	.03
835-003ESR	3/8	1-17/32	15/16	1- 1/32	3/16	.03
835-005ESR	1/2	1- 7/8	1- 3/16	1- 9/32	9/32	.07
835-007ESR	3/4	2	1-13/32	1-15/32	1/8	.10
835-010ESR	1	2- 1/4	1- 3/4	1-13/16	1/8	.14
835-012ESR	1-1/4	2- 7/16	2- 1/8	2- 5/32	3/16	.20
835-015ESR	1-1/2	2- 9/16	2-13/32	2- 1/2	1/4	.29
835-020ESR	2	2-27/32	3	3- 3/32	13/32	.46

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Male Adapter

Mipt x Socket

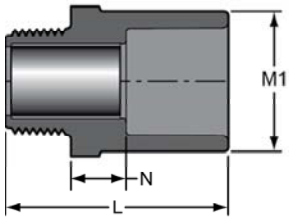


Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
836-053	3/8X1/2	1-11/16	1- 3/16	1/4	.03
836-005	1/2	1-23/32	1- 5/32	3/16	.03
836-007	3/4	1-27/32	1- 7/16	7/32	.05
836-102	3/4X1	2- 9/32	1- 3/4	17/32	.09
836-131	1X3/4	2- 1/16	1-13/32	1/4	.06
836-010	1	2- 5/32	1-23/32	7/32	.09
836-012	1-1/4	2- 1/4	2- 1/8	9/32	.14
836-015	1-1/2	2-11/16	2- 3/8	9/32	.18
836-251[1]	2X1-1/2	3- 3/32	2-29/32	19/32	.42
836-020	2	2- 7/8	2- 7/8	5/16	.28
836-025	2-1/2	3-21/32	3-17/32	11/32	.52
836-030	3	3- 7/8	4- 1/4	3/8	.74
836-040	4	4-13/32	5- 5/16	13/32	1.14
836-050F*	5	6	6- 5/16	1- 5/8	2.07
836-060	6	5- 1/2	7- 9/16	19/32	2.88
836-080F*	8	8- 3/16	9- 5/8	2- 3/16	4.54
836-100F*	10	10- 3/8	11-15/16	3- 3/16	11.95
836-120F*	12	11- 1/8	14- 1/8	2- 3/4	20.94

[1] Sized With Bushing
* Fabricated

Male Adapter - Internal Reinforced

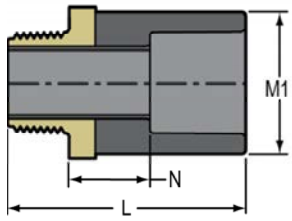
Mipt x Socket - Stainless Steel Sleeve
NSF® Certified Lead Free



Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
836-005R	1/2	2- 3/32	1- 5/32	9/16	.05
836-007R	3/4	2- 1/4	1- 3/8	9/16	.08
836-010R	1	2-21/32	1-23/32	11/16	.14

Male Adapter - PVC Lined Brass Transition

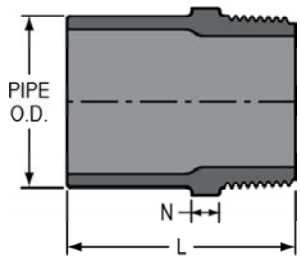
Brass Mipt x Socket
NSF® Certified Lead Free



Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
836-005BR	1/2	2-13/32	1- 9/32	27/32	.19
836-007BR	3/4	2-17/32	1-13/32	13/16	.25
836-010BR	1	2-15/16	1-23/32	29/32	.42
836-012BR	1-1/4	3- 1/8	2- 3/32	31/32	.65
836-015BR	1-1/2	3- 9/32	2-11/32	1	.79
836-020BR	2	3- 7/16	2-27/32	31/32	1.05

Male Spigot Adapter

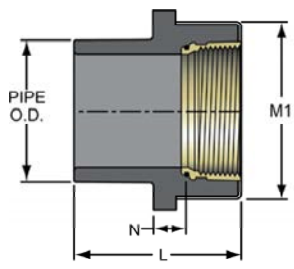
Spigot x Mipt



Part Number	Size	L	N	Approx. Wt. (Lbs.)
861-005	1/2	1-13/16	5/16	.02
861-007	3/4	1-31/32	5/16	.04
861-010	1	2- 3/32	1/4	.07
861-131	1X3/4	2	1/4	.06
861-012	1-1/4	2- 9/32	1/8	.11
861-015	1-1/2	2- 5/8	11/32	.14
861-020	2	2-13/16	13/32	.22

Female Spigot Adapter - Brass Transition

Spigot x Fipt With Brass Thread Insert



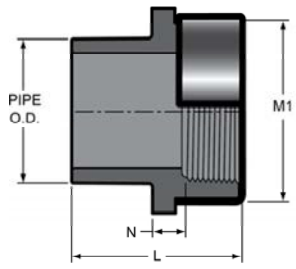
Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
878-005BR	1/2	1-15/16	1- 3/16	1/2	.11
878-007BR	3/4	2- 5/32	1- 3/8	17/32	.14
878-010BR	1	2- 9/32	1-23/32	13/32	.22

Not intended to convey or dispense water for human consumption through drinking or cooking

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Female Spigot Adapter - Special Reinforced

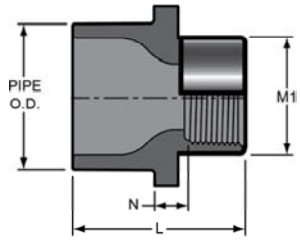
Spigot x SR Fipt - Stainless Steel Collar



Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
878-005SR	1/2	1- 3/4	1- 3/16	5/32	.05
878-007SR	3/4	1-15/16	1- 3/8	3/16	.07
878-010SR	1	2- 1/4	1-11/16	7/32	.11
878-012SR	1-1/4	2-15/32	2- 1/16	1/4	.17
878-015SR	1-1/2	2-21/32	2- 7/16	13/32	.24
878-020SR	2	2-13/16	3	3/8	.37
878-030SR	3	3-27/32	4- 9/32	5/16	.91
878-040SR	4	4- 3/8	5- 1/4	5/8	1.36

Female Spigot Adapter - Special Reinforced Reducing

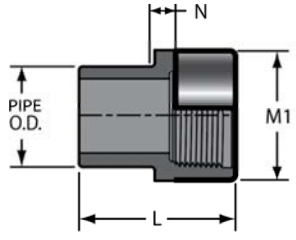
Spigot x SR Fipt - Stainless Steel Collar



Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
878-072SR	1/2X1/4	1-13/32	27/32	3/16	.02
878-098SR	3/4X1/4	1-27/32	27/32	7/32	.05
878-128SR	1X1/4	2- 3/8	27/32	21/32	.08

Female Spigot Adapter - Encapsulated Special Reinforced, Spigot

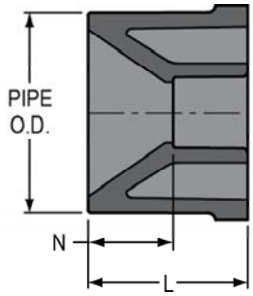
Spigot x ESR Fipt



Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
878-005ESR	1/2	1- 7/8	1- 9/32	3/16	.06
878-007ESR	3/4	2- 1/16	1-15/32	3/8	.08
878-010ESR	1	2- 3/8	1-25/32	11/32	.12
878-012ESR	1-1/4	2-19/32	2- 5/32	5/16	.19
878-015ESR	1-1/2	2- 3/4	2- 1/2	13/32	.27
878-020ESR	2	2-15/16	3- 3/32	5/16	.40

Reducer Bushing
Flush Style

Spigot x Socket



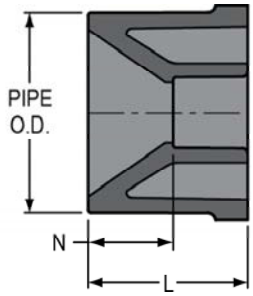
Part Number	Size	L	N	Approx. Wt. (Lbs.)
837-052	3/8X1/4	31/32	5/16	.02
837-072	1/2X1/4	1- 3/32	13/32	.01
837-073	1/2X3/8	1- 1/8	11/32	.01
837-101	3/4X1/2	1- 7/32	11/32	.02
837-129[1]	1X3/8	1- 5/8	27/32	.06
837-130	1X1/2	1-11/32	11/32	.05
837-131	1X3/4	1-11/32	5/16	.03
837-166	1-1/4X1/2	1- 1/2	5/8	.11
837-167	1-1/4X3/4	1- 1/2	1/2	.09
837-168	1-1/4X1	1-19/32	15/32	.06
837-209	1-1/2X1/2	1-23/32	13/16	.14
837-210	1-1/2X3/4	1- 5/8	5/8	.15
837-211	1-1/2X1	1- 9/16	13/32	.12
837-212	1-1/2X1-1/4	1- 9/16	9/32	.05
837-247	2X1/2	1-25/32	7/8	.23
837-248	2X3/4	1-29/32	21/32	.22
837-249	2X1	1-25/32	5/8	.23
837-250	2X1-1/4	1-11/16	7/16	.19
837-251	2X1-1/2	1- 3/4	11/32	.14
837-287[1]	2-1/2X1/2	2- 1/2	1- 1/2	.41
837-288[1]	2-1/2X3/4	2-17/32	1-15/32	.39
837-289	2-1/2X1	2- 1/32	29/32	.35
837-290	2-1/2X1-1/4	2- 5/32	13/32	.38
837-291	2-1/2X1-1/2	2- 5/32	3/4	.37
837-292	2-1/2X2	2- 1/16	17/32	.21
837-333	3X1/2	2-3/16	1-5/16	.61
837-334[1]	3X3/4	2- 9/16	1-17/32	.62
837-335	3X1	2- 9/32	1- 1/8	.59
837-336	3X1-1/4	2- 1/4	1	.62
837-337	3X1-1/2	2- 9/32	7/8	.58
837-338	3X2	2-7/32	9/16	.46
837-339	3X2-1/2	2-7/32	7/16	.37
837-415[1]	4X1/2	3- 1/16	2- 5/32	1.24
837-416[1]	4X3/4	2-27/32	1-27/32	1.22
837-417[1]	4X1	3- 1/16	1- 1/8	1.24
837-418[1]	4X1-1/4	3- 9/16	1-11/16	1.07
837-419	4X1-1/2	2-19/32	1- 3/16	1.01
837-420	4X2	2-21/32	1- 5/32	1.00
837-421	4X2-1/2	2-17/32	25/32	1.01
837-422	4X3	2- 9/16	11/16	.83
837-490	5X4	2-31/32	23/32	1.31
837-490F[*]	5X4	3	3/4	1.25
837-524[1]	6X3/4	4- 1/2	3- 1/2	3.09

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Reducer Bushing
Flush Style

Spigot x Socket

(Continued)

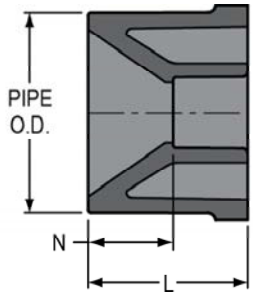


Part Number	Size	L	N	Approx. Wt. (Lbs.)
837-525[1]	6X1	3-31/32	2-13/16	3.11
837-526[1]	6X1-1/4	3-25/32	2-17/32	3.06
837-527[1]	6X1-1/2	3- 3/4	2-11/32	3.01
837-528	6X2	3-17/32	2- 1/32	2.87
837-529	6X2-1/2	3-29/32	2- 5/32	3.37
837-530	6X3	3-17/32	2- 1/8	2.83
837-532	6X4	3- 9/16	1- 1/4	2.67
837-533F*	6X5	3	7/16	1.54
837-534	6X5	3-17/32	7/8	1.92
837-578[1]	8X2	4-15/16	3- 3/8	6.21
837-580[1]	8X3	5- 1/8	3- 1/4	6.04
837-582[1]	8X4	4- 1/2	2- 1/4	5.20
837-585	8X6	4- 3/8	1- 3/8	5.12
837-624[1]	10X4	6	3- 3/4	12.98
837-626	10X6	5- 5/16	2-5/16	10.30
837-628	10X8	5-11/32	1-5/16	10.10
837-666[1]	12X6	7	4	20.19
837-666F[1*]	12X6	6- 7/16	3- 3/8	19.03
837-668	12X8	6- 7/8	2- 7/16	15.07
837-670	12X10	6- 11/32	1-9/32	14.16
837-670F*	12X10	6	1	11.03
837-696F*	14X6	7- 3/4	4-11/16	29.55
837-698F*	14X8	7-5/16	3-5/16	24.43
837-700F*	14X10	7- 7/16	2- 7/16	22.30
837-702F*	14X12	7	1	9.36
837-754F*	16X4	8-13/16	6-13/16	51.58
837-756F*	16X6	8- 3/4	5-11/16	48.05
837-758F*	16X8	8-5/16	4-5/16	42.93
837-760F*	16X10	8-5/16	3-5/16	41.03
837-762F*	16X12	8	2	27.86
837-764F*	16X14	8	1	18.50
837-788F*	18X8	9-5/16	5-5/16	66.60
837-790F*	18X10	9-5/16	4-5/16	65.69
837-792F*	18X12	9	3	51.82
837-794F*	18X14	9	2	42.16
837-796F*	18X16	9	1	23.66
837-816F*	20X6	10-7/16	7-3/8	104.29
837-818F*	20X8	10-5/16	6-5/16	97.42
837-820F*	20X10	10-5/16	5-5/16	96.50
837-822F*	20X12	10	4	82.64

Reducer Bushing
Flush Style

Spigot x Socket

(Continued)

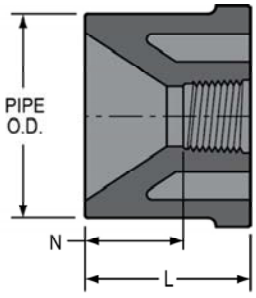


Part Number	Size	L	N	Approx. Wt. (Lbs.)
837-824F*	20X14	10	3	72.98
837-826F*	20X16	10	2	54.48
837-828F*	20X18	10	1	30.81
837-910F*	24X10	12- 7/16	7- 7/16	176.99
837-912F*	24X12	12	6	167.17
837-914F*	24X14	12	5	153.76
837-916F*	24X16	12	4	134.56
837-918F*	24X18	12	3	112.53
837-920F*	24X20	12	2	80.48

[1] Sized with Bushing
* Fabricated

Reducer Bushing
Flush Style

Spigot x Fipt



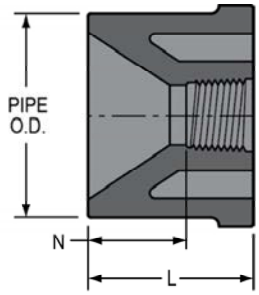
Part Number	Size	L	N	Approx. Wt. (Lbs.)
838-052	3/8X1/4	31/32	3/8	.01
838-071	1/2X1/8	1	9/16	.01
838-072	1/2X1/4	1	7/8	.02
838-073	1/2X3/8	1- 3/32	17/32	.01
838-098	3/4X1/4	1- 7/32	5/8	.03
838-099	3/4X3/8	1- 1/4	21/32	.03
838-101	3/4X1/2	1- 1/4	7/16	.02
838-127	1X1/8	1-13/32	29/32	.07
838-128	1X1/4	1-13/32	25/32	.06
838-129	1X3/8	1-13/32	19/32	.06
838-130	1X1/2	1-11/32	21/32	.06
838-131	1X3/4	1- 3/8	21/32	.04
838-166	1-1/4X1/2	1-15/32	23/32	.11
838-167	1-1/4X3/4	1- 7/16	23/32	.09
838-168	1-1/4X1	1-17/32	5/8	.07
838-206	1-1/2X1/8	1-11/16	1- 1/4	.14
838-207	1-1/2X1/4	1- 9/16	1- 3/16	.12
838-209	1-1/2X1/2	1-11/16	31/32	.16
838-210	1-1/2X3/4	1- 9/16	27/32	.13
838-211	1-1/2X1	1-23/32	13/16	.14

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Reducer Bushing
Flush Style

Spigot x Fipt

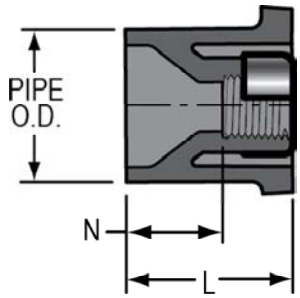
(Continued)



Part Number	Size	L	N	Approx. Wt. (Lbs.)
838-212	1-1/2X1-1/4	1- 1/2	9/16	.09
838-247	2X1/2	1-29/32	1- 5/32	.25
838-248	2X3/4	1- 7/8	1- 5/32	.25
838-249	2X1	1-29/32	1	.25
838-250	2X1-1/4	1-19/32	21/32	.18
838-251	2X1-1/2	1- 9/16	5/8	.18
838-287	2-1/2X1/2	2- 3/8	1-21/32	.41
838-288	2-1/2X3/4	2- 7/16	1- 5/8	.44
838-289	2-1/2X1	2- 5/32	1- 1/4	.38
838-290	2-1/2X1-1/4	2-13/32	1- 3/8	.42
838-291	2-1/2X1-1/2	2- 3/8	1-13/32	.47
838-292	2-1/2X2	2- 1/16	1- 1/16	.25
838-334	3X3/4	2- 9/32	1- 1/2	.59
838-335	3X1	2- 9/32	1-11/32	.61
838-336	3X1-1/4	2- 1/4	1- 3/8	.58
838-337	3X1-1/2	2- 1/4	1- 5/8	.59
838-338	3X2	2- 3/16	1- 7/32	.55
838-339	3X2-1/2	2- 3/8	3/4	.45
838-419	4X1-1/2	3- 3/16	2- 5/16	1.19
838-420	4X2	2-11/16	1-21/32	1.10
838-421	4X2-1/2	2-21/32	1- 1/16	1.07
838-422	4X3	2- 5/8	1	.86
838-528	6X2	3-17/32	2- 1/2	2.92
838-530	6X3	3-17/32	2- 1/8	2.98
838-532	6X4	3-17/32	2- 1/32	2.53

Special Reinforced Reducer Bushing
Flush Style

Spigot x SR Fipt - Stainless Steel Collar

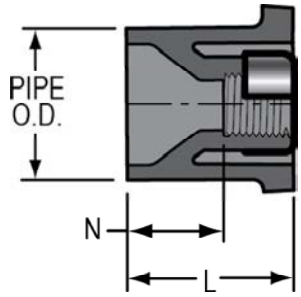


Part Number	Size	L	N	Approx. Wt. (Lbs.)
838-128SR	1X1/4	1-13/32	25/32	.07
838-207SR	1-1/2X1/4	1- 9/16	1	.12
838-166SR	1-1/4X1/2	1- 7/16	3/4	.11
838-209SR	1-1/2X1/2	1-23/32	31/32	.17
838-210SR	1-1/2X3/4	1- 9/16	13/16	.14
838-247SR	2X1/2	1-29/32	1- 5/32	.25

Special Reinforced Reducer Bushing Flush Style

(Continued)

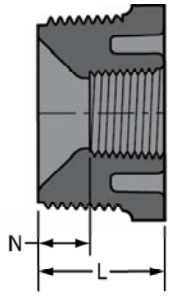
Spigot x SR Fipt - Stainless Steel Collar



Part Number	Size	L	N	Approx. Wt. (Lbs.)
838-248SR	2X3/4	1-29/32	1- 5/32	.26
838-249SR	2X1	1- 7/8	31/32	.26
838-334SR	3X3/4	2- 9/32	1-17/32	.58
838-335SR	3X1	2- 9/32	1-11/32	.59
838-336SR	3X1-1/4	2- 1/4	1- 5/16	.59
838-337SR	3X1-1/2	2- 1/4	1- 3/8	.61
838-528SR	6X2	3- 1/2	2- 9/16	2.60
838-530SR	6X3	3-17/32	2- 1/8	2.93
838-532SR	6X4	3-17/32	2	2.62

Reducer Bushing (T.T.) Flush Style

Mipt x Fipt



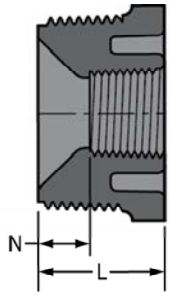
Part Number	Size	L	N	Approx. Wt. (Lbs.)
839-041	1/4X1/8	23/32	11/32	.01
839-052	3/8X1/4	13/16	1/8	.01
839-072	1/2X1/4	29/32	9/32	.01
839-073	1/2X3/8	15/16	11/32	.01
839-098	3/4X1/4	1- 1/32	7/16	.03
839-099	3/4X3/8	1- 1/32	7/16	.02
839-101	3/4X1/2	15/16	3/16	.01
839-128	1X1/4	1- 1/8	17/32	.04
839-129	1X3/8	1- 7/32	5/8	.05
839-130	1X1/2	1- 1/16	5/16	.04
839-131	1X3/4	1- 1/8	13/32	.03
839-166	1-1/4X1/2	1- 5/16	9/16	.09
839-167	1-1/4X3/4	1- 9/32	9/16	.08
839-168	1-1/4X1	1- 3/16	9/32	.06
839-209	1-1/2X1/2	1-11/32	19/32	.12
839-210	1-1/2X3/4	1-11/32	19/32	.12
839-211	1-1/2X1	1-11/32	13/32	.10
839-212	1-1/2X1-1/4	1-11/32	13/32	.06
839-247	2X1/2	1- 3/8	21/32	.15
839-248	2X3/4	1- 3/8	5/8	.16
839-249	2X1	1- 3/8	15/32	.18
839-250	2X1-1/4	1- 3/8	7/16	.15

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Reducer Bushing (T.T.) Flush Style

(Continued)

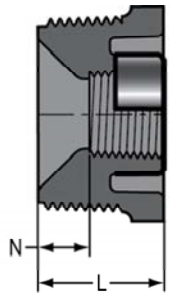
Mipt x Fipt



Part Number	Size	L	N	Approx. Wt. (Lbs.)
839-251	2X1-1/2	1- 3/8	13/32	.11
839-292	2-1/2X2	1-29/32	7/8	.21
839-337	3X1-1/2	1-15/16	29/32	.49
839-338	3X2	1-15/16	15/16	.44
839-339	3X2-1/2	1-15/16	5/8	.37
839-420	4X2	2- 1/8	1- 1/8	.82
839-422	4X3	2- 1/8	1/2	.71
839-532	6X4	3-17/32	1- 13/16	2.53

Reducer Bushing - Special Reinforced

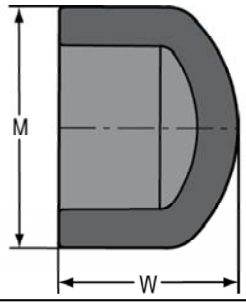
Mipt x SR Fipt - Stainless Steel Collar



Part Number	Size	L	N	Approx. Wt. (Lbs.)
839-128SR	1X1/4	1- 1/8	17/32	.05
839-209SR	1-1/2X1/2	1-11/32	19/32	.12
839-210SR	1-1/2X3/4	1-11/32	19/32	.12
839-247SR	2X1/2	1- 3/8	21/32	.17
839-248SR	2X3/4	1- 3/8	5/8	.19
839-249SR	2X1	1- 3/8	15/32	.19
839-420SR	4X2	2- 1/8	1- 1/8	.87

Cap

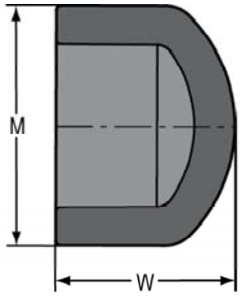
Socket



Part Number	Size	M	W	Approx. Wt. (Lbs.)
847-002	1/4	13/16	15/16	.01
847-003	3/8	31/32	1- 1/8	.02
847-005	1/2	1- 3/16	1- 7/32	.03

Cap
Socket

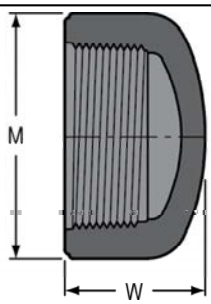
(Continued)



Part Number	Size	M	W	Approx. Wt. (Lbs.)
847-007	3/4	1- 3/8	1-13/32	.04
847-010	1	1-23/32	1- 5/8	.07
847-012	1-1/4	2- 3/32	1-27/32	.12
847-015	1-1/2	2-11/32	2	.16
847-020	2	2-7/8	2- 1/4	.25
847-025	2-1/2	3-17/32	2- 5/8	.48
847-030	3	4- 5/32	3- 1/32	.70
847-040	4	5- 1/4	3-19/32	1.16
847-050F*	5	6- 1/2	4- 7/16	1.85
847-060	6	7- 1/2	4- 7/8	3.11
847-080	8	9-23/32	6- 3/8	6.30
847-100F*	10	12- 1/4	5-15/16	7.89
847-120F*	12	14- 1/4	7- 1/8	11.29
847-140F*	14	15- 1/2	7- 3/8	13.19
847-160F*	16	17- 7/8	9	24.27
847-180F*	18	19-15/16	9- 1/4	32.09
847-200F*	20	22	14-1/4	49.04
847-240F*	24	26- 3/8	17- 1/4	89.38

* Fabricated

Cap
Fipt



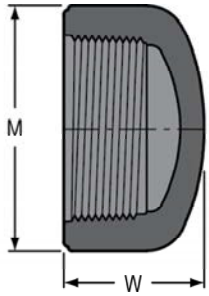
Part Number	Size	M	W	Approx. Wt. (Lbs.)
848-002	1/4	29/32	15/16	.01
848-003	3/8	31/32	29/32	.01
848-005	1/2	1- 3/16	1- 1/16	.03
848-007	3/4	1- 3/8	1- 7/32	.04
848-010	1	1-27/32	1- 7/16	.10
848-012	1-1/4	2- 7/32	1-17/32	.14
848-015	1-1/2	2-17/32	1- 5/8	.19
848-020	2	3- 5/32	1-25/32	.28
848-025	2-1/2	3- 5/8	2- 7/16	.53
848-030	3	4- 3/8	2- 7/16	.75
848-040	4	5- 7/16	3- 1/16	1.28

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Cap

Fipt

(Continued)

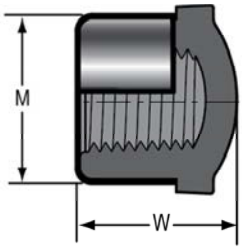


Part Number	Size	M	W	Approx. Wt. (Lbs.)
848-060F*	6	7- 3/16	4- 3/8	2.07
848-080F*	8	9- 3/8	4- 3/8	3.53
848-100F*	10	11-7/8	5-3/4	7.42
848-120F*	12	13-13/16	6-3/16	10.24

* Fabricated

Cap - Special Reinforced

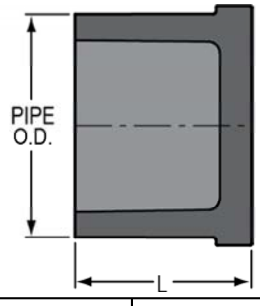
SR Fipt - Stainless Steel Collar



Part Number	Size	M	W	Approx. Wt. (Lbs.)
848-002SR	1/4	27/32	27/32	.01
848-003SR	3/8	31/32	29/32	.02
848-005SR	1/2	1- 3/16	1- 1/8	.04
848-007SR	3/4	1- 3/8	1- 3/32	.05
848-030SR	3	4- 9/32	2- 7/16	.79

Plug

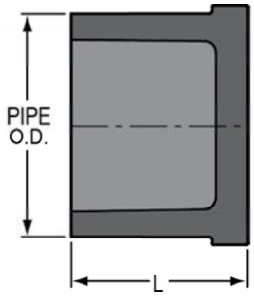
Spigot



Part Number	Size	L	Approx. Wt. (Lbs.)
849-005	1/2	1- 1/8	.02
849-007	3/4	1- 1/4	.03
849-010	1	1- 3/8	.06
849-012	1-1/4	1-17/32	.09
849-015	1-1/2	1-11/16	.13
849-020	2	1- 7/8	.21
849-025F[4*]	2-1/2	5- 3/8	1.03

Plug
Spigot

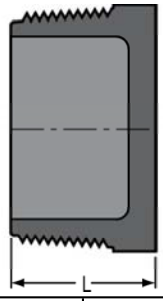
(Continued)



Part Number	Size	L	Approx. Wt. (Lbs.)
849-030F[4*]	3	5- 5/8	1.51
849-040F[4*]	4	6- 1/2	2.37
849-060F[4*]	6	9	6.71
849-080F[4*]	8	12	12.72
849-100F[4*]	10	11-15/16	19.14
849-120F[4*]	12	14- 1/8	26.34

[4] Plug fabricated using Cap and pipe spigot.
* Fabricated

Plug
Mipt



Part Number	Size	L	Approx. Wt. (Lbs.)
850-002	1/4	23/32	.01
850-003	3/8	13/16	.01
850-005	1/2	13/16	.01
850-007	3/4	7/8	.02
850-010	1	1- 1/4	.04
850-012	1-1/4	1- 9/32	.07
850-015	1-1/2	1-11/32	.09
850-020	2	1- 3/8	.15
850-025	2-1/2	1-25/32	.28
850-030	3	1- 7/8	.41
850-040	4	2- 3/32	.76
850-060	6	2- 3/32	1.73
850-080	8	2-3/8	3.25
850-080F[4*]	8	8- 5/8	11.43
850-100F[4*]	10	8- 7/16	12.90

[4] Plug fabricated using Cap and threaded pipe.
* Fabricated

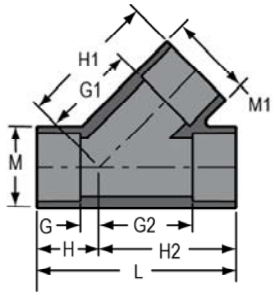
Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Spears® Manufacturing Company

Wye

Socket x Socket x Socket

1/2" - 2" - 235 psi Maximum Internal Pressure Rating @ 73°F (23°C) 2-1/2" - 6" - 150 psi Maximum Internal Pressure Rating @ 73°F (23° C) 8" - Larger & All Fabricated Sizes - 80 psi Maximum Internal Pressure Rating @ 73°F (23° C)



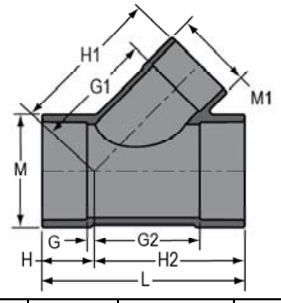
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
875-005	1/2	1/4	1-3/16	1-3/16	1- 1/8	2- 1/16	2-1/16	3- 3/16	1- 5/32	1- 5/32	.12
875-007	3/4	5/16	1- 3/8	1- 3/8	1- 5/16	2- 3/8	2- 3/8	3-23/32	1- 3/8	1- 3/8	.18
875-010	1	5/16	1- 3/4	1- 3/4	1- 7/16	2-29/32	2- 7/8	4-11/32	1-11/16	1-11/16	.30
875-012	1-1/4	13/32	2- 5/32	2- 5/32	1-21/32	3-13/32	3-13/32	5- 3/32	2- 1/16	2- 1/16	.50
875-015	1-1/2	17/32	2- 1/2	2- 1/2	1-29/32	3- 7/8	3- 7/8	5-13/16	2- 5/16	2- 5/16	.68
875-020	2	5/8	3- 7/32	3- 7/32	2- 5/32	4- 7/8	4- 7/8	6- 7/8	2- 7/8	2- 7/8	1.20
875-025[1]	2-1/2	27/32	3-31/32	3-31/32	2-19/32	5-23/32	5-23/32	8- 5/16	3- 1/2	3- 1/2	2.00
875-030	3	31/32	4- 3/4	4-25/32	2-27/32	6- 5/8	6-21/32	9- 1/2	4- 3/16	4- 3/16	2.99
875-040	4	1- 1/4	6- 1/32	6- 1/32	3- 1/2	8- 9/32	8- 9/32	11-25/32	5- 1/4	5- 1/4	5.16
875-050F[2*]	5	5- 1/8	10-11/16	10-11/16	8- 1/8	13-11/16	13-11/16	21-13/16	6- 5/16	6- 5/16	15.44
875-060	6	1- 5/32	8-25/32	8- 3/16	4- 3/16	11-25/32	11- 3/16	15- 3/8	7- 9/16	7- 9/16	12.00
875-080	8	1-15/16	11-11/32	11-11/32	5-31/32	15-11/32	15-11/32	21- 5/16	9- 3/4	9- 3/4	26.25
875-080F[*]	8	5- 1/16	15- 7/8	13-11/16	9- 5/16	20- 1/8	17-15/16	27- 1/4	9- 5/8	9- 5/8	36.27
875-100F[2*]	10	6- 1/2	18- 7/8	17- 1/4	11- 3/4	24- 1/8	22- 1/2	34- 1/4	11-15/16	11-15/16	64.85
875-120F[2*]	12	7- 1/8	21-13/16	19- 7/8	13- 3/8	28- 1/16	26- 1/8	39- 1/2	14- 1/8	14- 1/8	105.25
875-140F[2*]	14	9-13/16	23-13/16	23-13/16	16-13/16	30-13/16	30-13/16	47- 5/8	15- 1/2	15- 1/2	139.07
875-160F[2*]	16	10- 1/8	26- 1/8	26- 1/8	18- 1/8	34- 1/8	34- 1/8	52- 1/4	17-11/16	17-11/16	187.13
875-180F[2*]	18	10	29- 3/8	28	19	38- 3/8	37	56	19- 7/8	19- 7/8	255.22
875-200F[2*]	20	11- 5/8	31- 5/8	31- 5/8	21- 5/8	41- 5/8	41- 5/8	63- 1/4	22- 1/16	22- 1/16	350.00
875-240F[2*]	24	14- 1/4	38- 1/4	38- 1/4	26- 1/4	50- 1/4	50- 1/4	76- 1/2	26- 7/16	26- 7/16	617.50

[1] Sized with Bushing
[2] Fiberglass reinforced.
[*] Fabricated

Wye - Reducing

Socket x Socket x Socket

1/2" - 2" - 235 psi Maximum Internal Pressure Rating @ 73°F (23°C) 3" - 6" - 150 psi Maximum Internal Pressure Rating @ 73°F (23°C) 8" - Larger & All Fabricated Sizes - 80 psi Maximum Internal Pressure Rating @ 73°F (23°C)



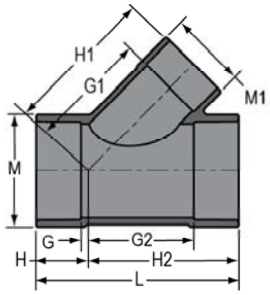
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
875-131[1]	1X3/4	1/4	2- 7/32	1-27/32	1- 3/8	2-31/32	2-31/32	4-11/32	1-11/16	1-11/16	.34
875-167[1]	1-1/4X3/4	3/8	2- 3/4	2- 1/4	1- 5/8	3- 3/4	3- 1/2	5- 1/8	2- 1/16	2- 1/16	.59
875-168[1]	1-1/4X1	3/8	2- 5/8	2- 1/4	1- 5/8	3- 3/4	3- 1/2	5- 1/8	2- 1/16	2- 1/16	.56
875-210[1]	1-1/2X3/4	1/2	3- 1/2	2- 9/16	1- 7/8	4- 1/2	3-15/16	5-13/16	2-11/32	2-11/32	.84
875-211[1]	1-1/2X1	1/2	3	2- 9/16	1- 7/8	4- 5/32	3-15/16	5-13/16	2-11/32	2-11/32	.81
875-212[1]	1-1/2X1-1/4	1/2	3- 1/4	2- 9/16	1- 7/8	4- 1/2	3-15/16	5-13/16	2-11/32	2-11/32	.74
875-248[1]	2X3/4	5/8	4- 5/32	3- 7/32	2- 5/32	5- 5/32	4- 7/8	6- 7/8	2- 7/8	2- 7/8	1.42
875-250[1]	2X1-1/4	5/8	3- 5/16	3- 3/8	2- 5/32	5	4- 3/4	6- 7/8	2- 7/8	2- 7/8	1.39

Wye - Reducing

(Continued)

Socket x Socket x Socket

1/2" - 2" - 235 psi Maximum Internal Pressure Rating @ 73°F (23°C) 3" - 6" - 150 psi Maximum Internal Pressure Rating @ 73°F (23°C) 8" - Larger & All Fabricated Sizes - 80 psi Maximum Internal Pressure Rating @ 73°F (23°C)



Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
875-291[1]	2-1/2X1-1/2	1	6-1/4	4-9/16	3-1/16	7-5/8	6-5/8	9-11/16	4-3/16	4-3/16	2.37
875-292[1]	2-1/2X2-1/2X2	1/2	3- 3/4	4- 3/4	2- 1/2	6- 7/8	6- 1/2	9- 3/8	4- 1/4	4- 1/4	2.22
875-335[1]	3X1	11/16	5- 7/8	4- 7/32	2- 9/16	6-15/16	6- 1/8	8-23/32	4- 3/16	4- 3/16	3.58
875-336[1]	3X1-1/4	7/8	5- 3/4	4- 1/8	2- 3/4	7	6	8- 3/4	4- 3/16	4- 3/16	3.62
875-337[1]	3X1-1/2	2- 5/8	5- 1/2	4- 1/4	2- 5/8	6- 7/8	6- 1/8	8- 3/4	4- 3/16	4- 3/16	3.58
875-338[1]	3X2	1	5-11/32	4- 3/4	2- 7/8	6-31/32	6- 5/8	9- 1/2	4- 3/16	4- 3/16	3.46
875-339[1]	3X2-1/2	7/8	4- 1/8	4-21/32	2- 3/4	6- 3/4	6	8- 3/4	4- 3/16	4- 3/16	3.36
875-419[1]	4X1-1/2	1	6-5/8	5-1/4	3-1/4	8-13/16	7-1/2	10-3/4	5-1/4	5-3/16	3.06
875-420	4X2	-3/16	4-31/32	4-15/32	2-1/16	6-15/32	6-23/32	8-25/32	5-1/4	2-29/32	2.92
875-420F[2*]	4X2	3-3/4	7-7/8	8-1/4	6	9-5/8	10-1/2	16-1/2	5-3/16	2-13/16	6.92
875-421F[2*]	4X2-1/2	4- 9/16	8-13/16	9- 1/16	6-13/16	10- 1/2	11- 5/16	18- 1/8	5- 1/4	3- 1/2	8.63
875-422[1]	4X3	1/2	5- 7/16	5- 7/32	2- 3/4	7- 5/16	7-15/32	10- 7/32	5- 1/4	4- 3/16	4.07
875-528[1]	6X2	1/16	8-13/16	6- 9/16	3- 1/16	10- 5/16	9- 9/16	12- 5/8	7- 9/16	5- 7/16	9.66
875-528F[2*]	6X2	1-15/16	9- 3/16	8- 9/16	5- 3/16	10-15/16	11-13/16	17	7- 1/2	2-13/16	11.67
875-530[1]	6X3	1/16	8- 3/8	6-11/16	3	10- 1/4	9-11/16	12- 5/8	7- 9/16	5- 3/8	9.49
875-530F[2*]	6X3	2-15/16	10- 5/16	9- 9/16	6- 3/16	12- 9/16	12-13/16	19	7- 1/2	4- 1/8	13.92
875-532	6X4	31/32	6- 9/16	5-11/16	3-15/16	8-27/32	8-23/32	12-21/32	7- 9/16	5- 7/16	8.65
875-578[1]	8X2	2	14-15/16	11- 1/4	6	16- 9/16	16- 7/16	21- 1/4	9-11/16	9-11/16	15.32
875-578F[2*]	8X2	7/8	10- 1/2	9- 1/2	5- 1/8	12- 1/4	13- 3/4	18- 7/8	9- 5/8	2-13/16	17.95
875-579F[2*]	8X2-1/2	1- 7/16	10-15/16	10- 1/16	5-11/16	12-15/16	14- 5/16	20	9- 5/8	3- 7/16	12.16
875-580F[2*]	8X3	1-15/16	11- 5/8	10- 9/16	6- 3/16	13- 7/8	14-13/16	21	9- 5/8	4- 1/8	21.91
875-582	8X4	-11/16	9- 1/8	8-1/4	3- 5/16	11- 3/8	12-1/4	15-9/16	9-3/4	5- 1/4	14.31
875-582F[2*]	8X4	2-15/16	11- 7/8	11- 9/16	7- 3/16	14- 1/8	15-13/16	23	9- 5/8	5- 3/16	23.96
875-585[1]	8X6	2	12-15/16	11- 1/4	6	15-15/16	15- 1/4	21- 1/4	9-11/16	9-11/16	31.37
875-585F[2*]	8X6	4-15/16	13-15/16	13- 9/16	9- 3/16	17- 3/16	17-13/16	27	9- 5/8	7- 1/2	32.96
875-621F[2*]	10X2	1/4	11- 7/8	10- 1/2	5	13- 5/8	15- 3/4	20- 3/4	11-15/16	2-13/16	27.04
875-622F[2*]	10X2-1/2	1/8	12- 5/16	10- 7/8	5- 3/8	14- 5/16	16- 1/8	21- 1/2	11-15/16	3- 7/16	24.96
875-623[1]	10X3	7/8	12-7/8	11-5/8	6-1/8	15-1/4	16-7/8	23	12	4-1/8	31.04
875-623F[2*]	10X3	3/4	13	11- 1/2	6	15- 1/4	16- 3/4	22- 3/4	11-15/16	4- 1/8	31.80
875-624F[2*]	10X4	1- 3/4	13- 1/4	12- 1/2	7	15- 1/2	17- 3/4	24- 3/4	11-15/16	5- 3/16	34.36
875-626	10X6	-3/16	12	11	4-13/16	15	16	20- 25/32	12- 1/16	7-21/32	28.20
875-626F[2*]	10X6	3- 3/4	15- 5/16	14- 1/2	9	18- 9/16	19- 3/4	28- 3/4	11-15/16	7- 1/2	42.68
875-628	10X8	1-7/8	12-5/8	11-15/16	6-15/16	16-5/8	16-15/16	23-13/16	12- 1/32	9-3/4	35.44
875-628F[2*]	10X8	5- 1/4	17- 1/4	16	10- 1/2	21- 1/2	21- 1/4	31- 3/4	11-15/16	9- 5/8	55.18
875-661F[2*]	12X2	1- 5/16	13- 3/16	11- 7/16	4-15/16	14-15/16	17-11/16	22- 5/8	14- 1/8	2-13/16	37.57
875-662F[2*]	12X2-1/2	15/16	13- 5/8	11-13/16	5- 5/16	15- 5/8	18- 1/16	23- 3/8	14- 1/8	3- 7/16	35.96
875-663F[2*]	12X3	1/8	14- 5/16	12- 7/8	6- 3/8	16- 9/16	19- 1/8	25- 1/2	14- 1/8	4- 1/8	43.39
875-664F[2*]	12X4	5/8	14- 9/16	13- 3/8	6- 7/8	16-13/16	19- 5/8	26- 1/2	14- 1/8	5- 3/16	49.09
875-666F[2*]	12X6	2- 5/8	16- 5/8	15- 3/8	8- 7/8	19- 7/8	21- 5/8	30- 1/2	14- 1/8	7- 1/2	64.51
875-668F[2*]	12X8	4- 1/4	18- 9/16	17	10- 1/2	22-13/16	23- 1/4	33- 3/4	14- 1/8	9- 5/8	71.03

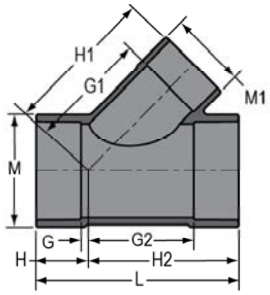
Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Wye - Reducing

(Continued)

Socket x Socket x Socket

1/2" - 2" - 235 psi Maximum Internal Pressure Rating @ 73°F (23°C) 3" - 6" - 150 psi Maximum Internal Pressure Rating @ 73°F (23°C) 8" - Larger & All Fabricated Sizes - 80 psi Maximum Internal Pressure Rating @ 73°F (23°C)



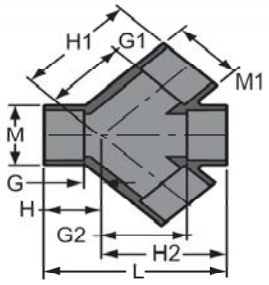
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
875-670F[2*]	12X10	5- 3/4	20- 3/16	18- 1/2	12	25- 7/16	24- 3/4	36- 3/4	14- 1/8	11-15/16	71.00
875-694F[2*]	14X4	1- 1/4	15- 5/16	15- 1/4	8- 1/4	17- 9/16	22- 1/4	30- 1/2	15- 1/2	5- 3/16	63.85
875-696F[2*]	14X6	2	17- 3/8	16	9	20- 5/8	23	32	15- 1/2	7- 1/2	70.63
875-698F[2*]	14X8	4- 1/4	19- 5/16	18- 1/4	11- 1/4	23- 9/16	25- 1/4	36- 1/2	15- 1/2	9- 5/8	90.50
875-700F[2*]	14X10	5- 3/4	20-15/16	19- 3/4	12- 3/4	26- 3/16	26- 3/4	39- 1/2	15- 1/2	11-15/16	98.23
875-702F[2*]	14X12	7- 1/4	22- 9/16	21- 1/4	14- 1/4	28-13/16	28- 1/4	42- 1/2	15- 1/2	14- 1/8	108.22
875-754F[2*]	16X4	1- 1/8	16- 5/8	17- 1/8	9- 1/8	18- 7/8	25- 1/8	34- 1/4	17-11/16	5- 3/16	82.75
875-756F[2*]	16X6	1- 5/8	18-11/16	17- 5/8	9- 5/8	21-15/16	25- 5/8	35- 1/4	17-11/16	7- 1/2	88.42
875-758F[2*]	16X8	3- 5/8	20- 5/8	19- 5/8	11- 5/8	24- 7/8	27- 5/8	39- 1/4	17-11/16	9- 5/8	113.88
875-760F[2*]	16X10	5- 1/8	22- 1/4	21- 1/8	13- 1/8	27- 1/2	29- 1/8	42- 1/4	17-11/16	11-15/16	127.70
875-762F[2*]	16X12	6- 1/2	23- 7/8	22- 1/2	14- 1/2	30- 1/8	30- 1/2	45	17-11/16	14- 1/8	142.79
875-764F[2*]	16X14	7- 7/8	25- 1/8	23- 7/8	15- 7/8	32- 1/8	31- 7/8	47- 3/4	17-11/16	15- 1/2	89.03
875-784F[2*]	18X4	0	17- 7/8	18	9	20- 1/8	27	36	19- 7/8	5- 3/16	116.62
875-786F[2*]	18X6	3/8	20- 1/8	18- 9/16	9- 3/8	23- 3/8	27- 9/16	36-15/16	19- 7/8	7- 1/2	123.45
875-788F[2*]	18X8	3	21- 7/8	21	12	26- 1/8	30	42	19- 7/8	9- 5/8	131.07
875-790F[2*]	18X10	4- 1/2	23- 1/2	22- 1/2	13- 1/2	28- 3/4	31- 1/2	45	19- 7/8	11-15/16	164.27
875-792F[2*]	18X12	6	25- 1/8	24	15	31- 3/8	33	48	19- 7/8	14- 1/8	184.55
875-794F[2*]	18X14	7	26- 3/8	25	16	33- 3/8	34	50	19- 7/8	15- 1/2	202.86
875-796F[2*]	18X16	8- 1/2	27- 3/8	26- 1/2	17- 1/2	35- 3/8	35- 1/2	53	19- 7/8	17-11/16	209.59
875-814F[2*]	20X4	1	19- 3/16	19	9	21- 7/16	29	38	22- 1/16	5- 3/16	142.56
875-816F[2*]	20X6	1/8	21- 1/4	19- 7/8	9- 7/8	24- 1/2	29- 7/8	39- 3/4	22- 1/16	7- 1/2	161.16
875-818F[2*]	20X8	2- 5/8	23- 3/16	22- 5/8	12- 5/8	27- 7/16	32- 5/8	45- 1/4	22- 1/16	9- 5/8	184.53
875-820F[2*]	20X10	4- 1/8	24-13/16	24- 1/8	14- 1/8	30- 1/16	34- 1/8	48- 1/4	22- 1/16	11-15/16	192.38
875-822F[2*]	20X12	5- 5/8	26- 7/16	25- 5/8	15- 5/8	32-11/16	35- 5/8	51- 1/4	22- 1/16	14- 1/8	214.03
875-824F[2*]	20X14	7- 1/8	27-11/16	27- 1/8	17- 1/8	34-11/16	37- 1/8	54- 1/4	22- 1/16	15- 1/2	243.74
875-826F[2*]	20X16	8- 1/2	28-11/16	28- 1/2	18- 1/2	36-11/16	38- 1/2	57	22- 1/16	17-11/16	252.79
875-828F[2*]	20X18	10- 1/8	30-11/16	30- 1/8	20- 1/8	39-11/16	40- 1/8	60- 1/4	22- 1/16	19- 7/8	255.61
875-904F[2*]	24X4	3	21- 3/4	21	9	24	33	42	26- 7/16	5- 3/16	220.69
875-906F[2*]	24X6	7/8	23-13/16	23- 1/8	11- 1/8	27- 1/16	35- 1/8	46- 1/4	26- 7/16	7- 1/2	248.39
875-908F[2*]	24X8	1- 3/4	25- 3/4	25- 3/4	13- 3/4	30	37- 3/4	51- 1/2	26- 7/16	9- 5/8	274.98
875-910F[2*]	24X10	3- 1/4	27- 3/8	27- 1/4	15- 1/4	32- 5/8	39- 1/4	54- 1/2	26- 7/16	11-15/16	299.39
875-912F[2*]	24X12	4- 3/4	29	28- 3/4	16- 3/4	35- 1/4	40- 3/4	57- 1/2	26- 7/16	14- 1/8	311.44
875-914F[2*]	24X14	6- 1/4	30- 1/4	30- 1/4	18- 1/4	37- 1/4	42- 1/4	60- 1/2	26- 7/16	15- 1/2	343.67
875-916F[2*]	24X16	7- 3/4	31- 1/4	31- 3/4	19- 3/4	39- 1/4	43- 3/4	63- 1/2	26- 7/16	17-11/16	395.00
875-918F[2*]	24X18	9- 1/4	33- 1/4	33- 1/4	21- 1/4	42- 1/4	45- 1/4	66- 1/2	26- 7/16	19- 7/8	255.61
875-920F[2*]	24X20	9- 5/8	34- 3/16	33- 5/8	21- 5/8	44- 3/16	45- 5/8	67- 1/4	26- 7/16	22- 1/16	372.55

[1] Sized with Bushing
[2] Fiberglass reinforced.
* Fabricated

Double Wye

Socket x Socket x Socket x Socket

100 psi Maximum Internal Pressure Rating @ 73° F (23°C)



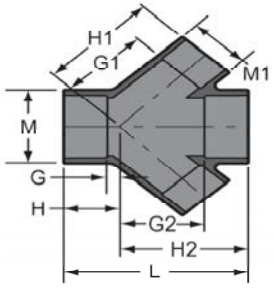
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
876-020F*	2	3- 7/8	6- 1/4	6- 1/4	5- 7/16	7-13/16	7-13/16	13- 3/16	2- 7/8	2- 7/8	4.38
876-030F*	3	4-3/4	8-1/4	8-1/4	6-5/8	10-3/16	10-3/16	16-13/16	4- 3/16	4- 3/16	9.72
876-040F*	4	4-11/16	9- 3/16	9- 3/16	6-15/16	11- 7/16	11- 7/16	18- 3/8	5- 3/16	5- 3/16	12.44
876-060F*	6	4-15/16	12- 5/8	11- 9/16	8- 3/16	15- 7/8	14-13/16	23	7- 1/2	7- 1/2	28.50
876-080F*	8	5- 1/16	15- 7/8	13-11/16	9- 5/16	20- 1/8	17-15/16	27- 1/4	9- 5/8	9- 5/8	48.34
876-100F*	10	6- 1/2	18- 7/8	17- 1/4	11- 3/4	24- 1/8	22- 1/2	34- 1/4	11-15/16	11-15/16	90.83
876-120F*	12	7- 1/8	21-13/16	19- 7/8	13- 3/8	28- 1/16	26- 1/8	39- 1/2	14- 1/8	14- 1/8	130.08

* Fabricated

Double Wye - Reducing

Socket x Socket x Socket x Socket

Size 3" is 150 psi, all Fabricated Sizes- 100 psi Maximum Internal Pressure Rating @ 73°F (23° C)



Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
876-338	3X2	3/16	4- 1/4	4	2-16	5- 3/4	5-7/8	7-15/16	4- 3/16	2- 7/8	2.27
876-421F2*	4X2-1/2	4- 9/16	8-13/16	9- 1/16	6-13/16	10- 1/2	11- 5/16	18- 1/8	5- 1/4	3- 1/2	8.64
876-422F2*	4X3	4-11/16	10	9- 3/16	6-15/16	11-13/16	11- 7/16	18- 3/8	5- 3/16	5- 3/16	15.12
876-528F2*	6X2	1-15/16	9- 3/16	8- 9/16	5- 3/16	10-15/16	11-13/16	17	7- 1/2	2-13/16	12.53
876-529F2*	6X2-1/2	2- 7/16	9- 5/8	9- 1/16	5-11/16	11- 5/8	12- 5/16	18	7- 1/2	3- 7/16	10.51
876-530F2*	6X3	2-15/16	10- 5/16	9- 9/16	6- 3/16	12- 9/16	12-13/16	19	7- 1/2	4- 1/8	15.11
876-532F2*	6X4	3-15/16	10- 9/16	10- 9/16	7- 3/16	12-13/16	13-13/16	21	7- 1/2	5- 3/16	19.72
876-578F2*	8X2	7/8	10- 1/2	9- 1/2	5- 1/8	12- 1/4	13- 3/4	18- 7/8	9- 5/8	2-13/16	11.33
876-579F2*	8X2-1/2	1- 7/16	10-15/16	10- 1/16	5-11/16	12-15/16	14- 5/16	20	9- 5/8	3- 7/16	13.21
876-580F2*	8X3	1-15/16	11- 5/8	10- 9/16	6- 3/16	13- 7/8	14-13/16	21	9- 5/8	4- 1/8	23.37
876-582F2*	8X4	2-15/16	11- 7/8	11- 9/16	7- 3/16	14- 1/8	15-13/16	23	9- 5/8	5- 3/16	26.78
876-585F2*	8X6	4-15/16	13-15/16	13- 9/16	9- 3/16	17- 3/16	17-13/16	27	9- 5/8	7- 1/2	38.76
876-621F2*	10X2	1/4	11- 7/8	10- 1/2	5	13- 5/8	15- 3/4	20- 3/4	11-15/16	2-13/16	23.16
876-622F2*	10X2-1/2	1/8	12- 5/16	10- 7/8	5- 3/8	14- 5/16	16- 1/8	21- 1/2	11-15/16	3- 7/16	25.15
876-623F2*	10X3	3/4	13	11- 1/2	6	15- 1/4	16- 3/4	22- 3/4	11-15/16	4- 1/8	26.75
876-624F2*	10X4	1- 3/4	13- 1/4	12- 1/2	7	15- 1/2	17- 3/4	24- 3/4	11-15/16	5- 3/16	30.54
876-626F2*	10X6	3- 3/4	15- 5/16	14- 1/2	9	18- 9/16	19- 3/4	28- 3/4	11-15/16	7- 1/2	51.27
876-628F2*	10X8	5- 1/4	17- 1/4	16	10- 1/2	21- 1/2	21- 1/4	31- 3/4	11-15/16	9- 5/8	64.95
876-661F2*	12X2	1- 5/16	13- 3/16	11- 7/16	4-15/16	14-15/16	17-11/16	22- 5/8	14- 1/8	2-13/16	34.75
876-662F2*	12X2-1/2	15/16	13- 5/8	11-13/16	5- 5/16	15- 5/8	18- 1/16	23- 3/8	14- 1/8	3- 7/16	37.01

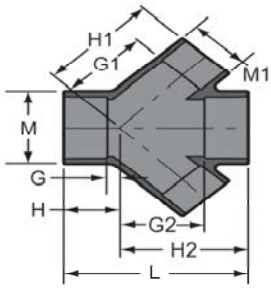
Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Double Wye - Reducing

(Continued)

Socket x Socket x Socket x Socket

Size 3" is 150 psi, all Fabricated Sizes- 100 psi Maximum Internal Pressure Rating @ 73°F (23° C)



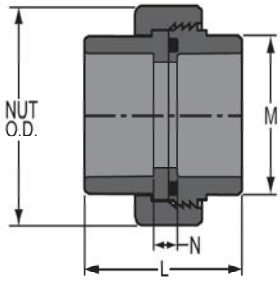
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
876-663F[2*]	12X3	1/8	14-15/16	12- 7/8	6- 3/8	16- 9/16	19- 1/8	25- 1/2	14- 1/8	4- 1/8	40.72
876-664F[2*]	12X4	5/8	14- 9/16	13- 3/8	6- 7/8	16-13/16	19- 5/8	26- 1/2	14- 1/8	5- 3/16	50.88
876-666F[2*]	12X6	2- 5/8	16- 5/8	15- 3/8	8- 7/8	19- 7/8	21- 5/8	30- 1/2	14- 1/8	7- 1/2	68.01
876-668F[2*]	12X8	4- 1/4	18- 9/16	17	10- 1/2	22-13/16	23- 1/4	33- 3/4	14- 1/8	9- 5/8	80.90
876-670F[2*]	12X10	5- 3/4	20- 3/16	18- 1/2	12	25- 7/16	24- 3/4	36- 3/4	14- 1/8	11-15/16	89.92

[2] Fiberglass reinforced.
* Fabricated

Union 2000 - Socket/FKM

Socket x Socket with FKM O-ring Seal

Dimensions Also Applicable to 8097-XXX EPDM O-Ring Seals



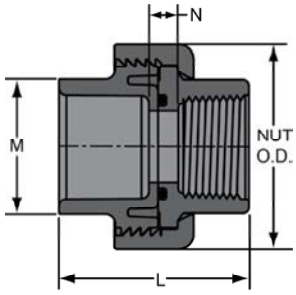
Pressure Rating
1/2" - 4" 235 psi @ 73°F
6" 150 PSI @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
857-002	1/4	1-15/16	15/16	5/8	1-21/32	.09
857-003	3/8	2- 5/32	1- 1/32	19/32	1-25/32	.11
8057-005	1/2	2- 3/32	1- 3/16	11/32	1- 7/8	.12
8057-007	3/4	2- 3/8	1-13/32	3/8	2- 9/32	.19
8057-010	1	2-11/16	1-23/32	7/16	2- 9/16	.26
8057-012	1-1/4	2-15/16	2- 3/32	7/16	3- 3/32	.39
8057-015	1-1/2	3- 1/4	2- 3/8	1/2	3- 1/2	.52
8057-020	2	3-17/32	2- 7/8	17/32	4- 9/32	.86
8057-025	2-1/2	4- 7/32	3- 1/2	25/32	6- 5/32	2.13
8057-030	3	4- 1/4	4- 3/16	1/2	6- 5/32	2.18
8057-040	4	5- 1/8	5- 1/4	5/8	7- 3/4	3.83
8057-060	6	6-27/32	7- 1/2	25/32	11- 5/8	11.46

Union 2000 - Socket/Fipt/FKM

Socket x Fipt with FKM O-ring Seal

Dimensions Also Applicable to
8099-XXX EPDM O-Ring Seals



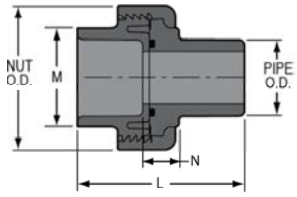
Pressure Rating
1/2" - 4" 235 psi @ 73°F
6" 150 PSI @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
859-002	1/4	1-15/16	15/16	21/32	1-21/32	.09
859-003	3/8	2- 5/32	1- 1/32	3/4	1-25/32	.11
8059-005	1/2	1- 7/8	1- 3/16	5/16	1- 7/8	.12
8059-007	3/4	2- 1/16	1-13/32	5/16	2- 9/32	.18
8059-010	1	2-13/32	1-23/32	13/32	2- 9/16	.26
8059-012	1-1/4	2-19/32	2- 3/32	13/32	3- 1/8	.38
8059-015	1-1/2	2-13/16	2- 3/8	1/2	3- 1/2	.51
8059-020	2	2-31/32	2- 7/8	13/32	4- 9/32	.84
8059-025	2-1/2	3-15/32	3- 1/2	13/32	6- 3/16	2.15
8059-030	3	3-25/32	4- 3/16	17/32	6- 5/32	2.18
8059-040	4	4- 3/8	5- 1/4	5/8	7- 3/4	3.70
8059-060	6	6-27/32	7- 1/2	1- 1/2	11- 5/8	11.43

Union 2000 - Socket/Spigot/FKM

Socket x Spigot with FKM O-ring Seal

Dimensions Also Applicable to
8096-XXX EPDM O-Ring Seals



Pressure Rating
1/2" - 4" 235 psi @ 73°F
6" 150 PSI @ 73°F

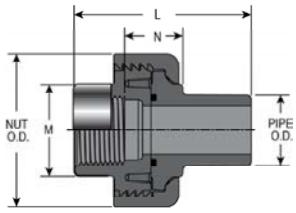
Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
8056-005	1/2	2- 5/16	1- 3/16	9/16	1- 7/8	.12
8056-007	3/4	2- 5/8	1- 3/8	21/32	2- 9/32	.20
8056-010	1	2-15/16	1-23/32	5/8	2- 9/16	.27
8056-012	1-1/4	3- 7/32	2- 3/32	11/16	3- 3/16	.40
8056-015	1-1/2	3- 1/2	2- 3/8	11/16	3- 9/16	.53
8056-020	2	3- 3/4	2- 7/8	3/4	4- 5/16	.81
8056-025	2-1/2	4-21/32	3-15/32	1- 5/32	6- 5/32	2.20
8056-030	3	4-25/32	4- 5/32	7/32	6- 5/32	2.24
8056-040	4	5- 5/8	5- 1/4	1- 1/8	7-23/32	3.91
8056-060	6	7- 3/4	7- 9/16	1- 1/2	11-11/16	11.46

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Union 2000 - Special Reinforced Fipt/Spigot/FKM

SR Fipt x Spigot with FKM O-ring Seal

Dimensions Also Applicable to
8095-XXXSR EPDM O-Ring Seals



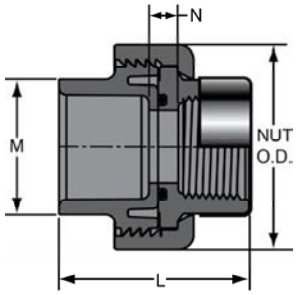
Pressure Rating
1/2" - 4" 235 psi @ 73°F
6" 150 PSI @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
8055-005SR	1/2	2-3/8	1-3/16	3/4	1-15/16	.14
8055-007SR	3/4	2-5/8	1-3/8	7/8	2-3/8	.21
8055-010SR	1	3	1-11/16	1-1/16	2-5/8	.30
8055-012SR	1-1/4	3-1/4	2-1/16	1-1/16	3-3/16	.44
8055-015SR	1-1/2	3-1/2	2-13/32	1-1/8	3-5/8	.59
8055-020SR	2	3-31/32	3-1/32	1-7/16	4-5/16	.90
8055-025SR	2-1/2	4-7/8	3-9/16	1-13/16	6-3/16	2.38
8055-030SR	3	5-1/8	4-1/4	1-13/16	6-3/16	2.49
8055-040SR	4	5-15/16	5-1/4	2-3/16	7-3/4	4.12
8055-060SR	6	7-5/8	7-11/16	2-7/8	11-5/8	12.39

Union 2000 - Socket/Special Reinforced Fipt/FKM

Socket x SR Fipt w/FKM O-ring Seal - Stainless Steel Collar

Dimensions Also Applicable to
8099-XXXSR EPDM O-Ring Seals



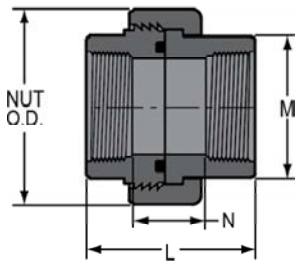
Pressure Rating
1/2" - 4" 235 psi @ 73°F
6" 150 PSI @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
8059-005SR	1/2	1-29/32	1- 3/16	11/32	1- 7/8	.12
8059-007SR	3/4	2- 5/32	1-13/32	13/32	2- 9/32	.20
8059-010SR	1	2- 7/16	1-23/32	7/16	2- 9/16	.27
8059-012SR	1-1/4	2- 5/8	2- 3/32	7/16	3- 1/8	.40
8059-015SR	1-1/2	2-13/16	2- 3/8	1/2	3- 1/2	.54
8059-020SR	2	3	2- 7/8	7/16	4- 7/32	.88
8059-025SR	2-1/2	3-27/32	3-15/32	27/32	6- 3/16	2.19
8059-030SR	3	3- 3/4	4- 3/16	1/2	6- 9/32	2.24
8059-040SR	4	4- 3/8	5- 1/4	5/8	7- 3/4	3.76
8059-060SR	6	6-27/32	7- 1/2	2- 5/32	11- 5/8	11.12

Union 2000 - Fipt/FKM

Fipt x Fipt with FKM O-ring Seal

Dimensions Also Applicable to
8098-XXX EPDM O-Ring Seals



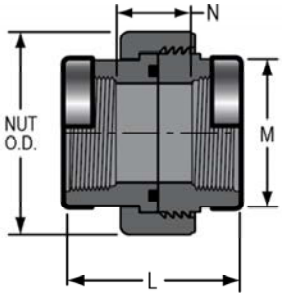
Pressure Rating
1/2" - 4" 235 psi @ 73°F
6" 150 PSI @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
858-002	1/4	1-15/16	15/16	11/16	1-21/32	.09
858-003	3/8	2- 5/32	1- 1/32	15/16	1-25/32	.12
8058-005	1/2	1-29/32	1- 3/16	17/32	1- 7/8	.12
8058-007	3/4	2- 1/16	1- 3/8	9/16	2- 9/32	.18
8058-010	1	2-17/32	1-11/16	25/32	2- 9/16	.28
8058-012	1-1/4	2-21/32	2- 1/32	3/4	3- 1/8	.40
8058-015	1-1/2	2-25/32	2- 3/8	29/32	3- 1/2	.54
8058-020	2	3- 1/8	3	1- 3/16	4- 7/32	.90
8058-025	2-1/2	4- 1/32	3- 9/16	1-15/32	6- 5/32	2.28
8058-030	3	4- 5/32	4- 9/32	1-13/32	6- 5/32	2.37
8058-040	4	4-21/32	5- 1/4	1-21/32	7- 3/4	3.88
8058-060	6	6- 1/8	7-21/32	2-13/16	11-19/32	12.22

Union 2000 - Special Reinforced Fipt/FKM

SR Fipt x SR Fipt w/FKM O-ring Seal - Stainless Steel Collar

Dimensions Also Applicable to
8098-XXXSR EPDM O-Ring Seals



Pressure Rating
1/2" - 4" 235 psi @ 73°F
6" 150 PSI @ 73°F

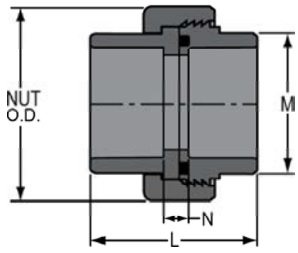
Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
8058-005SR	1/2	2	1- 3/16	5/8	1- 7/8	.14
8058-007SR	3/4	2- 5/32	1- 3/8	21/32	2- 9/32	.21
8058-010SR	1	2- 9/16	1-11/16	13/16	2- 9/16	.31
8058-012SR	1-1/4	2-23/32	2- 1/32	13/16	3- 1/8	.44
8058-015SR	1-1/2	2-27/32	2-13/32	29/32	3-17/32	.60
8058-020SR	2	3- 7/32	3- 1/32	1- 3/16	4- 7/32	.97
8058-025SR	2-1/2	4- 3/32	3- 9/16	1-15/32	6- 5/32	2.37
8058-030SR	3	4- 3/16	4- 9/32	1- 3/8	6- 5/32	2.49
8058-040SR	4	4-23/32	5- 1/4	3/4	7-3/4	3.96
8058-060SR	6	6- 3/16	7-11/16	2-13/16	11- 5/8	12.05

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Union (Old Style) - Socket/FKM

Socket x Socket with FKM O-ring Seal

Dimensions Also Applicable to
897-XXX EPDM O-Ring Seals



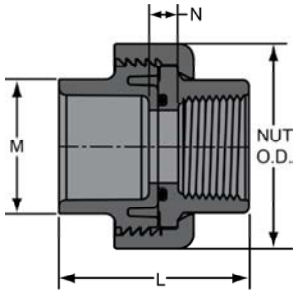
Pressure Rating
235 psi @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
857-005	1/2	2- 3/32	1- 9/32	11/32	1-31/32	.15
857-007	3/4	2- 3/8	1-17/32	11/32	2- 1/2	.26
857-010	1	2- 9/16	1-27/32	3/8	2- 7/8	.37
857-012	1-1/4	2- 7/8	2- 7/32	3/8	3- 5/16	.50
857-015	1-1/2	3- 3/32	2- 9/16	15/32	3- 9/16	.62
857-020	2	3- 5/8	3- 1/32	9/16	4- 3/16	.98
857-025	2-1/2	4- 3/8	3- 5/8	15/16	4- 7/8	1.50
857-030	3	5	4- 3/8	1- 3/16	5- 3/4	2.35
857-040	4	5- 7/8	5-13/32	1- 3/8	7- 1/16	3.77

Union (Old Style) - Socket/Fipt/FKM

Socket x Fipt with FKM O-ring Seal

Dimensions Also Applicable to
899-XXX EPDM O-Ring Seals

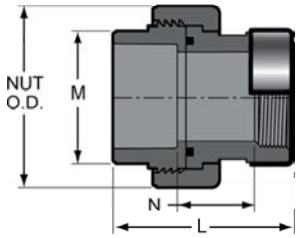


Pressure Rating
235 psi @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
859-005	1/2	2- 3/32	1- 9/32	15/32	1-31/32	.15
859-007	3/4	2- 3/8	1-17/32	9/16	2- 1/2	.27
859-010	1	2- 9/16	1-27/32	13/32	2- 7/8	.38
859-012	1-1/4	2- 7/8	2- 7/32	5/8	3- 5/16	.52
859-015	1-1/2	3- 1/8	2-19/32	27/32	3- 9/16	.64
859-020	2	3- 5/8	3- 1/32	1- 1/16	4- 3/16	1.02
859-025	2-1/2	4- 3/8	3- 5/8	1-13/32	4- 7/8	1.58
859-030	3	5- 1/16	4- 3/8	1- 1/2	5- 3/4	2.46
859-040	4	5- 7/8	5- 7/16	1- 7/8	7- 1/16	3.91

Union (Old Style) - Special Reinforced Fipt/FKM

Socket x SR Fipt w/FKM O-ring Seal - Stainless Steel Collar
Dimensions Also Applicable to
899-XXXSR EPDM O-Ring Seals

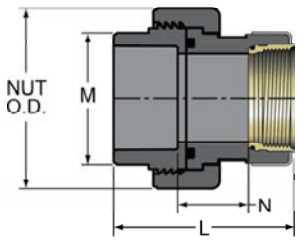


Pressure Rating
235 psi @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
859-002SR	1/4	2- 1/16	15/16	25/32	1-21/32	.12
859-003SR	3/8	2- 9/32	1- 1/32	7/8	1-25/32	.13
859-005SR	1/2	2- 9/32	1- 9/32	21/32	1-31/32	.16
859-007SR	3/4	2-19/32	1-17/32	25/32	2- 1/2	.28
859-010SR	1	2-15/16	1-27/32	25/32	2- 7/8	.39
859-012SR	1-1/4	3- 5/32	2- 7/32	29/32	3- 5/16	.55
859-015SR	1-1/2	3-13/32	2- 9/16	1- 1/32	3- 9/16	.68
859-020SR	2	4- 3/32	3- 1/32	1-19/32	4- 3/16	1.12
859-030SR	3	5- 1/4	4- 3/8	1-11/16	5- 3/4	2.55
859-040SR	4	5- 7/8	5-13/32	2- 1/8	7- 3/32	3.96

Union - Socket/Brass Fipt/FKM

Socket x Fipt with Brass Thread Insert & FKM O-ring Seal
Dimensions Also Applicable to
899-XXXBR EPDM O-Ring Seals



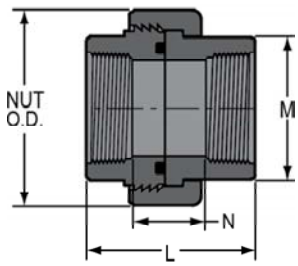
Pressure Rating
235 psi @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
859-007BR	3/4	2-11/16	1-17/32	15/16	2- 1/2	.35
859-010BR	1	2-13/16	1- 7/8	1- 1/32	2- 7/8	.50
859-012BR	1-1/4	3- 9/32	2- 7/32	1- 1/16	3- 5/16	.73
859-015BR	1-1/2	3- 1/2	2- 9/16	1- 3/32	3-17/32	.91
859-020BR	2	3- 5/8	2- 7/8	1- 1/4	4- 5/16	1.59

Not intended to convey or dispense water for human consumption through drinking or cooking

Union (Old Style) - Fipt/FKM

Fipt x Fipt with FKM O-ring Seal
Dimensions Also Applicable to
898-XXX EPDM O-Ring Seals



Pressure Rating
235 psi @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
858-002	1/4	1-15/16	15/16	11/16	1-21/32	.09
858-003	3/8	2- 5/32	1- 1/32	15/16	1-25/32	.12

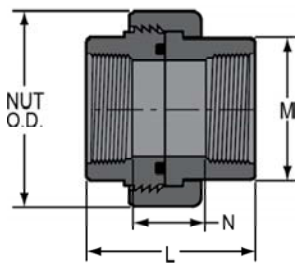
Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Union (Old Style) - Fipt/FKM

(Continued)

Fipt x Fipt with FKM O-ring Seal

Dimensions Also Applicable to
898-XXX EPDM O-Ring Seals



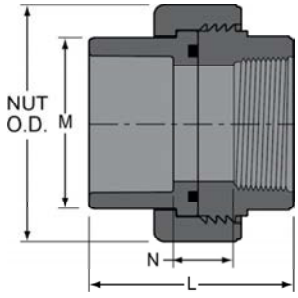
Pressure Rating
235 psi @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
858-005	1/2	2- 3/32	1- 9/32	19/32	1-31/32	.16
858-007	3/4	2- 3/8	1-17/32	3/4	2- 1/2	.28
858-010	1	2- 9/16	1-27/32	7/16	2- 7/8	.39
858-012	1-1/4	2- 7/8	2- 7/32	7/8	3- 5/16	.56
858-015	1-1/2	3- 3/32	2- 9/16	1- 5/32	3- 9/16	.66
858-020	2	3- 5/8	3- 1/32	1-11/16	4- 3/16	1.07
858-025	2-1/2	4- 3/8	3- 5/8	1- 7/8	4- 7/8	1.66
858-030	3	5- 1/16	4- 3/8	1-13/16	5- 3/4	2.55
858-040	4	5- 7/8	5- 7/16	2- 3/8	7- 1/16	4.07

Union -Transition JIS to ASTM/FKM

JIS (mm) Socket x ASTM (in.) Fipt with FKM O-ring Seal

Dimensions Also Applicable to
8298-XXX EPDM O-Ring Seals

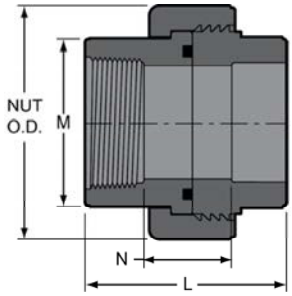


Pressure Rating
235 psi @ 73°F
(PN 16 @ 22°C)

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
8258-016	16 DN X 1/2	2- 3/32	1- 9/32	19/32	1-31/32	.12
8258-020	20 DN X 3/4	2- 3/8	1-17/32	3/4	2- 1/2	.20
8258-025	25 DN X 1	2-25/32	1-23/32	13/16	2-21/32	.29
8258-030	30 DN X 1-1/4	2- 7/8	2- 7/32	7/8	3- 5/16	.43
8258-040	40 DN X 1-1/2	3- 1/8	2-17/32	25/32	3-17/32	.55
8258-050	50 DN X 2	3-11/16	2- 7/8	1- 7/32	4- 9/32	.92
8258-075	75 DN X 3	5- 1/16	4- 3/8	1-13/16	5- 3/4	2.42
8258-100	100 DN X 4	5- 7/8	5- 7/16	2- 3/8	7- 1/16	3.95

Union - Transition
BSP to ASTM/FKM

BSP Thread (in.) x ASTM (in.) Socket with FKM O-ring Seal
Dimensions Also Applicable to
8399-XXX EPDM O-Ring Seals

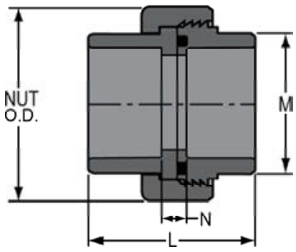


Pressure Rating
235 psi @ 73°F
(PN 16 @ 22°C)

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
8359-005	1/2	1-29/32	1- 3/16	13/32	1-15/16	.12
8359-007	3/4	2- 3/8	1-17/32	9/16	2- 1/2	.18
8359-010	1	2- 9/16	1-27/32	13/32	2- 7/8	.26
8359-012	1-1/4	2- 5/8	2- 1/4	7/16	3- 3/16	.37
8359-015	1-1/2	3- 3/32	2- 9/16	23/32	3- 9/16	.51
8359-020	2	3- 1/32	3	17/32	4- 5/16	.84
8359-030	3	5	4- 3/8	1-11/16	5-25/32	2.42
8359-040	4	5- 7/8	5- 7/16	1- 7/8	7- 1/16	3.84

Union - Transition
DIN to ASTM/FKM

DIN (mm) Socket x ASTM (in.) Socket with FKM O-ring Seal
Dimensions Also Applicable to
8697-XXX EPDM O-Ring Seals

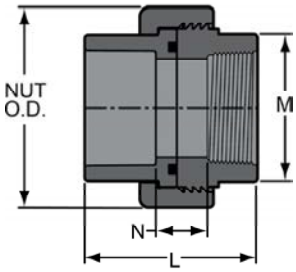


Pressure Rating
235 psi @ 73°F
(PN 16 @ 22°C)

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
8657-020	20 d X 1/2	2- 1/16	1- 9/32	5/16	1-31/32	.12
8657-025	25 d X 3/4	2-11/32	1-17/32	11/32	2- 1/2	.20
8657-032	32 d X1	2- 9/16	1-27/32	3/8	2- 7/8	.27
8657-040	40 d X 1-1/4	2- 7/8	2- 7/32	3/8	3- 5/16	.40
8657-050	50 d X 1-1/2	3- 1/8	2- 9/16	5/16	3- 9/16	.51
8657-063	63 d X 2	3- 5/8	3- 1/32	9/16	4- 3/16	.83
8657-090	90 d X 3	5- 1/16	4- 3/8	1- 3/16	5- 3/4	2.30
8657-110	110 d X 4	5- 7/8	5- 7/16	1- 3/8	7- 1/16	3.90

Union - Transition
DIN to ASTM/FKM

DIN (mm) Socket x ASTM (in.) Fipt with FKM O-ring Seal
Dimensions Also Applicable to
8698-XXX EPDM O-Ring Seals



Pressure Rating
235 psi @ 73°F
(PN 16 @ 22°C)

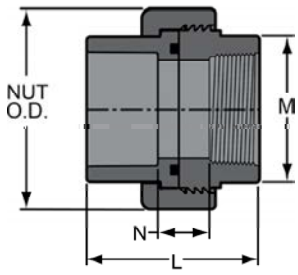
Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
8658-020	20 d X 1/2	2- 3/32	1- 9/32	19/32	1-31/32	.13
8658-025	25 d X 3/4	2- 3/8	1-17/32	3/4	2- 1/2	.20

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Union - Transition
DIN to ASTM/FKM

(Continued)

DIN (mm) Socket x ASTM (in.) Fipt with FKM O-ring Seal
Dimensions Also Applicable to
8698-XXX EPDM O-Ring Seals

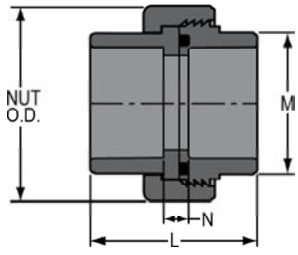


Pressure Rating
235 psi @ 73°F
(PN 16 @ 22°C)

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
8658-032	32 d X1	2- 9/16	1-27/32	7/16	2- 7/8	.28
8658-040	40 d X 1-1/4	2- 7/8	2- 7/32	7/8	3- 5/16	.42
8658-050	50 d X 1-1/2	3- 3/32	2- 9/16	1- 5/32	3- 9/16	.54
8658-063	63 d X 2	3- 9/16	3- 1/32	1- 5/8	4- 3/16	.89
8658-090	90 d X 3	5- 1/16	4- 3/8	1-13/16	5- 3/4	2.39
8658-110	110 d X 4	5- 7/8	5- 7/16	2- 3/8	7- 1/16	4.06

Union -Transition
JIS to ASTM/FKM

JIS (mm) Socket x ASTM (in.) Socket with FKM O-ring Seal
Dimensions Also Applicable to
8297-XXX EPDM O-Ring Seals

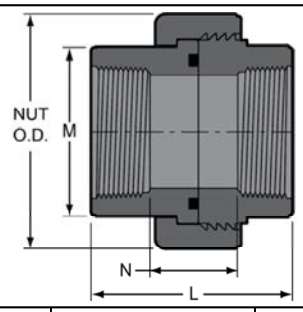


Pressure Rating
235 psi @ 73°F
(PN 16 @ 22°C)

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
8257-016	16 DN X 1/2	2- 1/16	1- 9/32	5/16	1-31/32	.12
8257-020	20 DN X 3/4	2- 3/8	1-17/32	5/16	2- 1/2	.19
8257-025	25 DN X1	2- 9/16	1-27/32	3/8	2- 7/8	.27
8257-030	30 DN X 1-1/4	2-15/16	2- 3/32	7/16	3- 3/16	.41
8257-040	40 DN X 1-1/2	3- 1/8	2- 9/16	5/16	3- 9/16	.52
8257-050	50 DN X 2	3-17/32	2- 7/8	17/32	4- 5/16	.86
8257-075	75 DN X 3	5- 1/16	4- 3/8	1- 3/16	5- 3/4	2.33
8257-100	100 DN X 4	5- 7/8	5-13/32	1-11/32	7- 1/8	3.79

Union - Transition
BSP to ASTM/FKM

BSP Thread (in.) x ASTM (in.) Fipt with FKM O-ring Seal
Dimensions Also Applicable to
8398-XXX EPDM O-Ring Seals

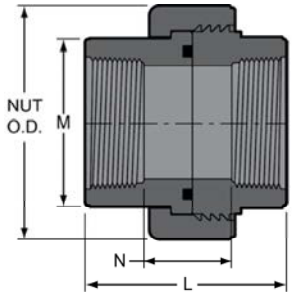


Pressure Rating
235 psi @ 73°F
(PN 16 @ 22°C)

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
8358-005	1/2	2- 3/32	1- 9/32	19/32	1-31/32	.12
8358-007	3/4	2- 3/8	1-17/32	27/32	2- 1/2	.18
8358-010	1	2- 9/16	1-27/32	7/16	2- 7/8	.27
8358-012	1-1/4	2-23/32	2- 1/32	27/32	3- 3/16	.39

Union - Transition
BSP to ASTM/FKM

BSP Thread (in.) x ASTM (in.) Fipt with FKM O-ring Seal
Dimensions Also Applicable to
8398-XXX EPDM O-Ring Seals



(Continued)

Pressure Rating
235 psi @ 73°F
(PN 16 @ 22°C)

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
8358-015	1-1/2	3- 3/32	2- 9/16	1- 5/32	3- 9/16	.54
8358-020	2	3- 9/16	3- 1/32	1- 5/8	4- 3/16	.90
8358-030	3	5- 1/32	4-11/32	1-15/16	5-25/32	2.51
8358-040	4	5- 7/8	5- 7/16	2- 3/8	7- 1/16	4.00



Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Tank Adapters (Bulkhead Fittings)

Designed to facilitate connections through tank or bulkhead walls. Available in PVC or CPVC with socket x socket, socket x thread or SR thread, thread x thread or thread x SR thread, and spigot end connections. Plus, special Self-Aligning style.

New Style Tank Adapters are designed with Spears® patented Special Reinforced (SR) Female Plastic threads for improved adapter connection strength, even when transitioned to metal pipe (Patent No. 5,582,439). In addition, these Tank Adapters in sizes through 4" are designed for use with Nut & Body Spanner Wrench Sets (purchased separately) on the outside connection to aid both installation and in make-up of external threaded connections. Pressure rated to 150 psi @ 73°F (23°C).

Easy Assembly to Tank:

1. Locate and cut designated hole size in tank (see Minimum Hole Size in appropriate chart below).

2. Remove the nut and insert Tank Adapter through hole from inside; leave gasket in place. **Note: Body and Gasket must be installed on the inside of the tank. (except spigot style in which gasket goes on outside of tank).**

3. Tighten Nut clockwise while holding body from inside tank or on outside with use of spanner wrench.

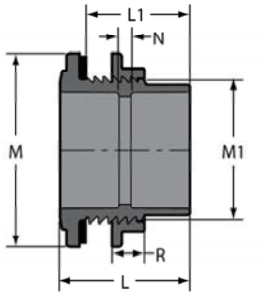
NOTE: A sound, leak-tight seal can be made on curved surfaces providing the curve on the surface will allow for full and equal 360° pressure contact of the sealing gasket against the tank wall surface. (Refer to Minimum Tank Radius below).

Tank Adapters, PVC New Style Standard with Neoprene Gaskets

Socket x Socket

150 psi Maximum Internal Pressure Rating @ 73° F (23°C)

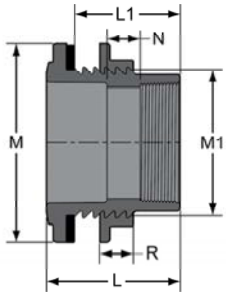
Dimensions Also Applicable to 8170E-XXX & 8170V-XXX



Part Number	Size	L	L1	M	M1	N	R	Min Hole Size	Approx. Wt. (Lbs.)
8170-002	1/4	2- 1/2	1-13/16	1- 1/2	1- 1/16	1- 3/16	1/2	1-1/16	.11
8170-003	3/8	2- 1/2	1-27/32	1- 5/8	31/32	7/8	1/2	1-3/16	.11
8170-005	1/2	2-15/16	2- 3/16	2- 1/16	1-15/32	1- 1/8	5/8	1-1/2	.20
8170-007	3/4	2-15/16	2- 3/16	2- 1/4	1- 5/8	15/16	5/8	1-3/4	.23
8170-010	1	3- 5/16	2- 9/16	2- 5/8	2	1- 1/16	5/8	2	.36
8170-012	1-1/4	3- 7/16	2- 5/8	3- 1/8	2- 5/16	15/16	5/8	2-3/8	.45
8170-015	1-1/2	3- 5/8	2-13/16	3- 5/8	2-11/16	13/16	5/8	2-3/4	.64
8170-020	2	4- 1/8	3- 1/4	4- 7/8	3- 1/4	1- 1/16	3/4	3-3/8	1.22
8170-025	2-1/2	4-27/32	3- 7/8	5- 1/4	3- 9/16	29/32	1	3-7/8	2.13
8170-030	3	5- 1/2	4- 1/2	6	4- 9/16	1-11/16	1	4-5/8	2.50
8170-040	4	5	4	7- 1/2	5- 1/2	7/16	1- 1/4	5-1/2	3.12
8170-060	6	5	4	10-3/32	8	1/8	1-1/4	8	5.59
8170-080	8	8- 5/8	7	12-15/16	10- 1/4	1/2	1- 1/2	10-3/8	16.24

Tank Adapters, PVC New Style Standard with Neoprene Gaskets

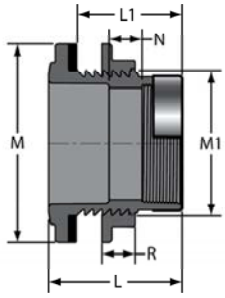
Socket x Fipt
150 psi Maximum Internal Pressure Rating @ 73° F (23°C)
Dimensions Also Applicable to 8171E-XXX & 8171V-XXX



Part Number	Size	L	L1	M	M1	N	R	Min Hole Size	Approx. Wt. (Lbs.)
8171-002	1/4	2- 1/2	1-13/16	1- 1/2	1- 1/16	1- 1/4	1/2	1-1/16	.11
8171-003	3/8	2- 1/2	1-13/16	1- 5/8	1- 3/16	1- 3/16	1/2	1-3/16	.11
8171-005	1/2	2-15/16	2- 3/16	2- 1/16	1-15/32	1- 1/4	5/8	1-1/2	.21
8171-007	3/4	2-15/16	2-15/32	2- 1/4	1- 5/8	1- 3/16	5/8	1-3/4	.24
8171-010	1	3- 5/16	2-13/16	2- 5/8	1-31/32	1- 1/4	5/8	2	.36
8171-012	1-1/4	3-13/32	2-27/32	3- 3/32	2- 5/16	1-17/32	5/8	2-3/8	.48
8171-015	1-1/2	3- 5/8	2-13/16	3- 5/8	2-11/16	1- 1/4	5/8	2-3/4	.68
8171-020	2	4- 1/8	3- 1/4	4- 7/8	3- 1/4	1- 5/8	3/4	3-3/8	1.26
8171-025	2-1/2	4- 7/8	7/8	5- 1/4	3-13/16	1-13/16	1	3-7/8	2.22
8171-030	3	5- 1/2	4- 1/2	6	4- 9/16	2- 3/16	1	4-5/8	2.64
8171-040	4	5	4	7- 1/2	5- 1/2	1- 1/4	1- 1/4	5-1/2	3.24
8171-060	6	4-31/32	4- 1/16	10- 1/16	7-11/16	1/16	1- 1/4	8	5.59

Tank Adapters, PVC New Style Special Reinforced (SR) Threaded with Neoprene Gaskets

Socket x SR Fipt - Stainless Steel Collar
150 psi Maximum Internal Pressure Rating @ 73° F (23°C)
Dimensions Also Applicable to 8171E-XXXSR & 8171V-XXXSR

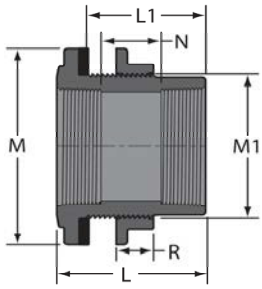


Part Number	Size	L	L1	M	M1	N	R	Min Hole Size	Approx. Wt. (Lbs.)
8171-002SR	1/4	2- 1/2	1-13/16	1- 1/2	1- 1/16	1- 1/4	1/2	1-1/16	.11
8171-003SR	3/8	2- 1/2	1-13/16	1- 5/8	1- 3/16	1- 3/16	1/2	1-3/16	.12
8171-005SR	1/2	2-15/16	2- 1/4	2- 1/16	1-15/32	1- 9/32	5/8	1-1/2	.22
8171-007SR	3/4	2-15/16	2- 3/16	2- 1/4	1- 5/8	1- 1/4	5/8	1-3/4	.25
8171-010SR	1	3- 5/16	2-13/16	2- 5/8	1-31/32	1- 1/4	5/8	2	.38
8171-012SR	1-1/4	3-13/32	2- 5/8	3- 3/32	2- 5/16	1-17/32	5/8	2-3/8	.51
8171-015SR	1-1/2	3- 5/8	2-13/16	3- 5/8	2-11/16	1- 1/4	5/8	2-3/4	.69
8171-020SR	2	4- 1/8	3- 1/4	4- 7/8	3- 1/4	1- 5/8	3/4	3-3/8	1.31
8171-025SR	2-1/2	4- 7/8	3- 7/8	5- 1/4	3-13/16	1-11/16	1	3-7/8	2.26
8171-030SR	3	5- 1/2	4- 1/2	6	4- 9/16	2- 3/16	1	4-5/8	2.70
8171-040SR	4	5	4	7- 1/2	5- 1/2	1- 1/4	1- 1/4	5-1/2	3.36
8171-060SR	6	4-31/32	4- 1/16	10- 1/16	7-11/16	1/16	1- 1/4	8	9.11

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Tank Adapters, PVC New Style Standard with Neoprene Gaskets

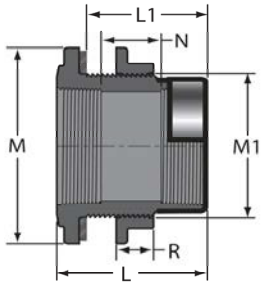
Fipt x Fipt
150 psi Maximum Internal Pressure Rating @ 73° F (23°C)
Dimensions Also Applicable to 8172E-XXX & 8172V-XXX



Part Number	Size	L	L1	M	M1	N	R	Min Hole Size	Approx. Wt. (Lbs.)
8172-002	1/4	2- 1/2	1-13/16	1- 1/2	1- 1/16	1- 5/16	1/2	1-1/16	.11
8172-003	3/8	2- 1/2	1-13/16	1- 5/8	1- 3/16	1- 3/8	1/2	1-3/16	.13
8172-005	1/2	2-15/16	2- 3/16	2- 1/16	1-15/32	1-13/32	5/8	1-1/2	.22
8172-007	3/4	2-15/16	2-15/32	2- 1/4	1- 5/8	1- 1/2	5/8	1-3/4	.25
8172-010	1	3- 5/16	2-13/16	2- 5/8	1-31/32	1- 1/4	5/8	2	.37
8172-012	1-1/4	3-13/32	2-27/32	3- 3/32	2- 5/16	1-17/32	5/8	2-3/8	.50
8172-015	1-1/2	3-19/32	3- 1/16	3-19/32	2-21/32	1-11/16	5/8	2-3/4	.69
8172-020	2	4- 1/8	3- 1/4	4- 7/8	3- 1/4	2- 3/16	3/4	3-3/8	1.30
8172-025	2-1/2	4- 7/8	3- 7/8	5- 1/4	3-13/16	2- 1/4	1	3-7/8	2.27
8172-030	3	5- 1/2	4- 1/2	6	4- 9/16	2-11/16	1	4-5/8	2.77
8172-040	4	5	4	7- 1/2	5- 1/2	2	1- 1/4	5-1/2	3.53
8172-060	6	5	4- 3/16	9- 7/8	7-31/32	1- 5/32	1- 1/4	8	5.94

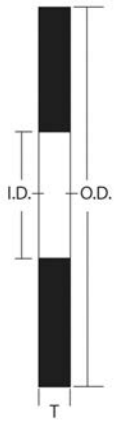
Tank Adapters, PVC New Style Special Reinforced (SR) Threaded with Neoprene Gaskets

Fipt x SR Fipt - Stainless Steel Collar
150 psi Maximum Internal Pressure Rating @ 73° F (23°C)
Dimensions Also Applicable to 8172E-XXXSR & 8172V-XXXSR



Part Number	Size	L	L1	M	M1	N	R	Min Hole Size	Approx. Wt. (Lbs.)
8172-002SR	1/4	2- 1/2	1- 7/8	1- 9/16	1- 1/16	1- 5/16	1/2	1-1/16	.12
8172-003SR	3/8	2- 1/2	1-13/16	1- 5/8	1- 3/16	1- 3/8	1/2	1-3/16	.12
8172-005SR	1/2	2-15/16	2- 3/16	2- 1/16	1-15/32	1-13/32	5/8	1-1/2	.22
8172-007SR	3/4	2-15/16	2-15/32	2- 1/4	1- 5/8	1- 3/16	5/8	1-3/4	.26
8172-010SR	1	3-15/16	2-19/32	2- 5/8	1-31/32	1- 1/4	5/8	2	.39
8172-012SR	1-1/4	3-13/32	2-27/32	3- 3/32	2- 5/16	1-17/32	5/8	2-3/8	.52
8172-015SR	1-1/2	3- 5/8	2-13/16	3- 5/8	2-11/16	1- 3/4	5/8	2-3/4	.72
8172-020SR	2	4- 1/8	3- 1/4	4-27/32	3- 1/32	2- 1/8	3/4	3-3/8	1.33
8172-025SR	2-1/2	4- 7/8	3- 7/8	5- 1/4	3-13/16	2- 1/4	1	3-7/8	2.38
8172-030SR	3	5-15/32	4-17/32	5-31/32	4-17/32	2-21/32	1	4-5/8	2.84
8172-040SR	4	5	4	7- 1/2	5- 1/2	2	1- 1/4	5-1/2	3.60
8172-060SR	6	5	4-3/16	9-7/8	7-31/32	1-5/32	1-1/4	8	9.46

Schedule 80 Tank Adapters

TANK ADAPTER GASKET SECTION	SIZE	O.D.*	I.D.*	T
	1/4	1.49	0.99	1/4
	3/8	1.62	1.12	1/4
	1/2	1.98	1.41	1/4
	3/4	2.20	1.57	1/4
	1	2.60	1.90	1/4
	1-1/4	3.04	2.23	1/4
	1-1/2	3.54	2.57	1/4
	2	4.763	3.15	1/4
	2-1/2	5.13	3.70	1/4
	3	5.86	4.39	1/4
	4	7.34	5.31	1/4
	6	9.85	7.95	3/16
	8	12.70	9.94	3-8

New Style Tank Adapter Gasket & Hole Size Requirements

Tank Adapter Size	Recommended Minimum Hole Size	Minimum Inside Curvature Radius (inches)	Maximum Tank Wall Thickness (inches)
1/4	1-1/16	2.50	.50
3/8	1-3/16	3.00	.50
1/2	1-1/2	4.00	.75
3/4	1-3/4	5.00	.75
1	2	7.00	.86
1-1/4	2-3/8	9.50	.86
1-1/2	2-3/4	12.00	.86
2	3-3/8	18.50	1.19
2-1/2	3-7/8	23.50	1.50
3	4-5/8	32.50	2.00
4	5-1/2	43.50	1.25
6	8	79.50	2.06
8	10-3/8	98.00	4.25

* Both outside and inside dimensions are +/- .01 to .03 shore hardness 50-60

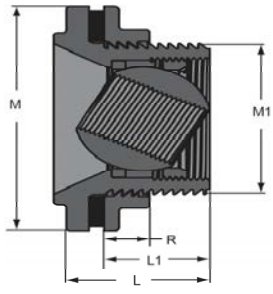
New Style Tank Adapters
Optional Wrench Sets
(Nut & Body Wrench)

Part No.	TA Size	Part No.	TA Size
TAW-002	1/4	TAW-012	1-1/4
TAW-003	3-8	TAW-015	1-1/2
TAW-005	1/2	TAW-020	2
TAW-007	3/4	TAW-030	3
TAW-010	1	TAW-040	4

Tank Adapter, PVC Self Aligning with Neoprene Gasket

Fipt
75 psi Maximum Internal Pressure Rating @ 73°F (23°C)

Dimensions Also Applicable to
8172ESA-XXX & 8172VSA-XXX



Part Number	Size	L	L1	M	M1	R	Approx. Wt. (Lbs.)
8172SA-010	1	2- 9/16	1- 3/4	4- 7/8	3- 1/4	3/4	1.64
8172SA-020	2	2-11/16	1- 3/4	6	4- 9/16	1	1.71
8172SA-030	3	3- 1/4	2- 1/4	7- 1/2	5- 1/2	1- 1/4	3.07

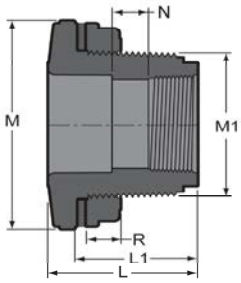
Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Tank Adapter, PVC Old Style with Neoprene Gasket

Socket x Fipt

150 psi Maximum Internal Pressure Rating @ 73° F (23°C)

Dimensions Also Applicable to 871E-XXX EPDM Gasket



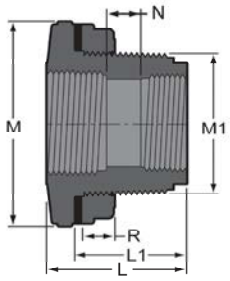
Part Number	Size	L	L1	M	M1	N	R	Approx. Wt. (Lbs.)
871-005	1/2	2-27/32	2-11/32	2- 9/32	1- 9/32	1- 3/8	5/8	.24
871-007	3/4	2-23/32	2- 7/32	2- 1/2	1- 5/8	29/32	5/8	.29
871-010	1	2-25/32	2- 1/8	2-13/16	1- 7/8	25/32	21/32	.33
871-012	1-1/4	3- 1/8	2- 7/16	3-29/32	2-11/32	27/32	5/8	.65
871-015	1-1/2	3- 5/32	2-21/32	3-29/32	2-11/32	3/4	5/8	.54
871-020	2	3- 3/16	2-17/32	4-31/32	3-15/32	13/16	3/4	1.33
871-030	3	4-19/32	3-13/16	6- 7/16	4-15/32	31/32	1- 3/16	2.46
871-040	4	4- 7/16	3-23/32	7- 7/16	5- 1/2	1/2	1- 1/4	3.16

Tank Adapter, PVC Old Style with Neoprene Gasket

Fipt x Fipt

150 psi Maximum Internal Pressure Rating @ 73° F (23°C)

Dimensions Also Applicable to 872E-XXX EPDM Gasket

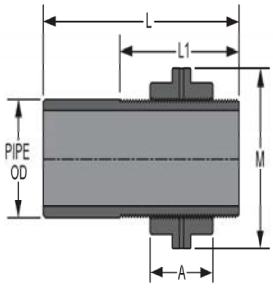


Part Number	Size	L	L1	M	M1	N	R	Approx. Wt. (Lbs.)
872-005	1/2	2-27/32	2-11/32	2- 9/32	1- 9/32	1-13/32	5/8	.24
872-007	3/4	2-23/32	2- 1/4	2- 1/2	1- 5/8	1- 5/32	5/8	.30
872-010	1	2-25/32	2- 5/16	2-13/16	1- 7/8	25/32	5/8	.34
872-012	1-1/4	3- 1/8	2- 5/8	3-27/32	2-11/32	1- 1/8	5/8	.66
872-015	1-1/2	3- 1/8	2- 5/8	3-29/32	2-11/32	1- 1/16	5/8	.57
872-020	2	3- 5/32	2- 3/8	5- 1/16	3- 7/16	1- 5/32	3/4	1.37
872-030	3	4-19/32	3-13/16	6- 7/16	4-15/32	1-11/32	1- 3/16	2.55
872-040	4	4- 7/16	3- 1/2	7- 1/2	5- 1/2	15/16	1- 1/4	3.34

Tank Adapter, Spigot PVC with EPDM Gasket

Spigot

150 psi Maximum Internal Pressure Rating @ 73° F (23°C)

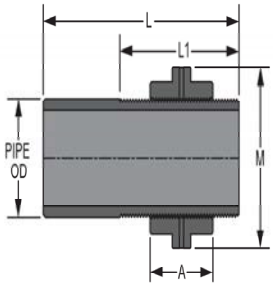


Part Number	Size	A	L	L1	M	Approx. Wt. (Lbs.)
8173E-005	1/2	1-3/16	3	1-3/4	1-1/2	.11
8173E-007	3/4	1-1/4	3	2	1-11/16	.14

Tank Adapter, Spigot PVC with EPDM Gasket

(Continued)

Spigot
150 psi Maximum Internal Pressure Rating @ 73° F (23°C)



Part Number	Size	A	L	L1	M	Approx. Wt. (Lbs.)
8173E-010	1	1-3/8	4-1/16	2-3/8	2-3/16	.28
8173E-015	1-1/2	1-5/8	5-1/16	3-1/8	2-7/8	.53
8173E-020	2	1-7/8	5-3/4	3-1/2	3-5/8	.89

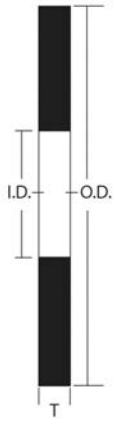
Install with threaded end, gasket and one nut inside tank. Use thread sealant on internal nut.

Size	A-MAX	Minimum Inside Curvature Radius (inches)	Hole Saw Size
1-2	9-16	4-1/2	7/8
3/4	3/4	6	1-1/16
1	1	9-1/2	1-3/8
1-1/2	10-1/2	16	2
2	1-5/8	26	2-1/2



Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Schedule 80 Tank Adapters

TANK ADAPTER GASKET SECTION	SIZE	O.D.*	I.D.*	T
	1/2	2.25	1.33	3/16
	3/4	2.49	1.69	3/16
	1	2.79	1.94	3/16
	1-1/4	3.81	2.39	3/16
	1-1/2	3.81	2.39	3/16
	2	4.89	3.51	3/16
	3	6.30	4.49	3/16
	4	7.33	5.50	3/16

Old Style Tank Adapter Gasket & Hole Size Requirements

Tank Adapter Size	Recommended Minimum Hole Size	Minimum Inside Curvature Radius (inches)	Maximum Tank Wall Thickness (inches)
1/2	1-3/8	3.88	1.06
3/4	1-3/4	5.00	1.06
1	2	6.12	1.06
1-1/4	2-7/16	10.75	1.34
1-1/2	2-7/16	10.75	1.34
2	3-9/16	18.50	1.16
3	4-9/16	31.00	1.75
4	5-9/16	42.75	1.81

*** Both outside and inside dimensions are +/- .03 shore hardness 65-70**

Self-Aligning Tank Adapters

Swivel Ball design permits straight-pipe connections with up to a 27° angle off vertical pipe centerline in any direction. Aids installation in domed top tanks and provides easy adjustment to compensate for tank curvature in making system connections. The self-aligning tank adapter is not suitable for use on tank sidewalls or tank bottoms. Pressure rated to 75 psi @ 73°F (23°C)

Easy Installation

1. Locate and cut designated hole size in tank
2. Remove Nut and insert Self-Aligning Tank Adapter through hole from inside. **Note: Body and Gasket must be installed on the inside of tank.**
3. Tighten Nut (clockwise) while holding body from inside tank.
4. Install threaded pipe into ball.
5. Position angular offset as desired and tighten lock ring (clockwise) against ball.

Self Aligning Tank Adapter Installation Requirements

Tank Adapter Size	Minimum Hole Size	Minimum Tank Inside Curvature-Radius (in.)	Maximum Tank Wall Thickness
1	3-3/8	18.5	1-5/16
2	4-5/8	32.5	1-5/16
3	5-1/2	43.5	1-11/16

Nut Wrenches

While not required for installation, Self-Aligning Tank Adapters can use certain nut wrenches produced for use on Spears® regular Tank Adapters (New Style). While designated wrench sizes do not directly correspond, the following chart shows specific regular Tank Adapter Nut Wrench to use with each Self-Aligning size. Body wrenches are not currently available.

Self-Aligning Tank Adapter Size	Regular Tank Adapter Nut Wrench to Use	
	Part Number	Comment
1"	TAW2-020	Regular 2" wrench fits Self-Aligning 1" nut
2"	TAW2-030	Regular 3" wrench fits Self-Aligning 2" nut
3"	TAW2-040	Regular 4" wrench Self-Aligning 3" nut

Schedule 80 CPVC Fittings, Unions & Tank Adapters



ENGINEERING GUIDE

Contact Spears® for any Information not found.

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

CPVC Performance Engineered and Tested



SPEARS® Schedule 80 CPVC pipe and fitting designs combine years of proven experience with computer generated stress analysis to yield the optimum physical structure and performance for each fitting. Material reinforcement is uniformly placed in stress concentration areas for substantially improved pressure handling capability. Resulting products are subjected to numerous verification tests to assure the very best CPVC piping products available.

1/4" Through 24" Availability

Spears® comprehensive line of CPVC fittings offers a variety of configurations in Schedule 80 sizes 1/4" through 24".

Exceptional Chemical & Corrosion Resistance

Unlike metal, CPVC fittings never rust, scale or pit, and will provide many years of maintenance-free service and extended system life.

Higher Temperature Ratings

High Temperature CPVC Thermoplastics can handle fluids at service temperatures up to 200°F, allowing a wide range of process applications, including hot corrosive liquids.

Higher Flow Capacity

Smooth interior walls result in lower pressure loss and higher volume than conventional metal fittings.

Lower Installation Costs

Substantially lower material costs than steel alloys or lined steel, combined with lighter weight and ease of installation, can reduce installation costs by as much as 60% over conventional metal systems.

SPEARS® Schedule 80 14" Through 24" Fittings & Flanges

Schedule 80 CPVC 14" through 24" fittings are a special engineered product by Spears® Manufacturing Company, where no applicable ASTM specifications exist. Available in a variety of injection molded and fabricated configurations including Flanges, Couplings, Elbows, Bushings and Tees, plus custom fabrication to virtually any configuration.

1/8" Through 24" Industrial Pipe Availability

Spears® premium quality Industrial CPVC pipe is offered in Schedule 80 sizes 1/8" through 24". Schedule 40 CPVC pipe is also available.

American Bureau of Shipping (ABS) Type Approval

Spears® Schedule 40 and Schedule 80 CPVC pipe and fittings are ABS Type Approved for marine and offshore applications in nominal pipe sizes through 12". Type Approval details and restrictions are specified in ABS Certificate # 10-HS539421-1-PDA available on the ABS website at www.eagle.org.

CPVC Sample Engineering Specifications

All CPVC Schedule 80 fittings shall be produced by Spears® Manufacturing Company from CPVC materials, cell classification 23447 conforming to ASTM Standard D 1784. All injection molded fittings through 12" shall be manufactured in compliance to ASTM F 439 and all pipe through 16" shall be manufactured in compliance to ASTM F 441. Pipe and fittings shall be Certified by NSF International for use with potable water service. All 14" through 24" and fabricated fittings shall be produced in accordance with Spears® Specifications. All CPVC flanges shall be designed and manufactured to meet CL150 bolt pattern per ANSI Standard B16.5.

The information contained in this publication is based on current information and product design at the time of publication and is subject to change without notification. Our ongoing commitment to product improvement may result in some variation. No representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or results to be obtained therefrom. For verification of technical data or additional information not contained herein, please contact Spears® Technical Services Department [West Coast: (818) 364-1611 - East Coast: (678) 985-1263].

General Information

Recommendations for Installers and Users

Plastic piping systems should be **ENGINEERED, INSTALLED** and **OPERATED** in accordance with **ESTABLISHED DESIGN AND ENGINEERING STANDARDS AND PROCEDURES** for plastic piping systems. Suitability for the intended service application should be determined by the installer and/or user prior to installation of a plastic piping system. **PRIOR TO ASSEMBLY, all piping system components should be inspected for damage or irregularities. Mating components should be checked to assure that tolerances and engagements are compatible. Do not use any components that appear irregular or do not fit properly. Contact the appropriate manufacturer of the component product in question to determine usability. Consult all applicable codes and regulations for compliance prior to installation.**

Solvent Weld Connections - Use quality solvent cements and primers formulated for the intended service application, pipe size and type of joint. While the pipe and fitting materials may be compatible with the intended medium, the solvent cement may not be. Consult the manufacturers for suitability of use. Read and follow the cement and primer manufacturers' applications and cure time instructions thoroughly. Be sure to use the correct size applicator.

Threaded Connections - Use a quality grade thread sealant. **WARNING: SOME PIPE JOINT COMPOUNDS OR PTFE PASTES MAY CONTAIN SUBSTANCES THAT COULD CAUSE STRESS CRACKING TO PLASTIC.** Spears® Manufacturing company recommends the use of Spears® **BLUE 75™** Thread Sealant which has been tested for compatibility with Spears® products. Please follow the sealant manufacturers' application/installation instructions. Choice of an appropriate thread sealant other than those listed above is at the discretion of the installer. 1 to 2 turns beyond **FINGER TIGHT** is generally all that is required to make a sound plastic threaded connection. Unnecessary **OVERTIGHTENING** will cause **DAMAGE TO BOTH PIPE AND FITTING.**

Standards and Specifications

Molded Schedule 80 CPVC products are manufactured to ASTM F 439 for use with pipe manufactured to ASTM F 441. Certain products carry reduced pressure handling capability and have maximum internal pressure ratings at 73°F noted.

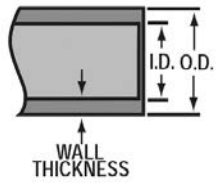
Schedule 80 CPVC fabricated fittings for use with pipe manufactured to ASTM F 441. See publication FAB-7, General Specifications for Standard Fabricated Fittings for additional information.

All specified Schedule 80 CPVC products are manufactured from materials certified by NSF® for use in potable water service.

"Lead Free" low lead certification - unless otherwise specified, all Spears® Schedule 80 fittings specified here-in are certified by NSF International to ANSI/NSF® Standard 61, Annex G and is in compliance with California's Health & Safety Code Section 116825 (commonly known as AB1953) and Vermont Act 193. Weighted average lead content <=0.25%. Spears® PVC and CPVC Pipe, Fittings and Valves have always been lead-free and Certified by NSF International for use in potable water systems. Spears® offers a wide range of lead-free specialty fittings and transition adapters for plumbing applications. However, certain brass threaded adapter fittings for applications that are not intended to convey water for human consumption through drinking or cooking are still produced and available.

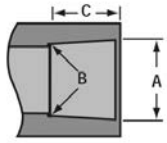
ASTM STANDARD DIMENSIONS

SCHEDULE 80 PIPE DIMENSIONS ASTM D 1785



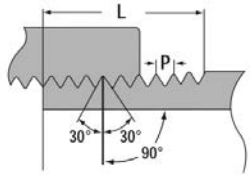
Nominal Pipe Size In.	Mean Outside Diameter In.	O. D. Tolerance In.	Minimum Wall Thickness In.
1/8	0.405	± 0.004	0.095
1/4	0.540	± 0.004	0.119
3/8	0.675	± 0.004	0.126
1/2	0.840	± 0.004	0.147
3/4	1.050	± 0.004	0.154
1	1.315	± 0.005	0.179
1-1/4	1.660	± 0.005	0.191
1-1/2	1.900	± 0.006	0.200
2	2.375	± 0.006	0.218
2-1/2	2.875	± 0.007	0.276
3	3.500	± 0.008	0.300
4	4.500	± 0.009	0.337
5	5.563	± 0.010	0.375
6	6.625	± 0.011	0.432
8	8.625	± 0.015	0.500
10	10.750	± 0.015	0.593
12	12.750	± 0.015	0.687

SCHEDULE 80 SOCKET DIMENSIONS ASTM D 2467



Nominal Size In.	Diameter			Socket Length Minimum C
	Entrance A	Bottom B	Tolerance A	
1/8	0.417	0.401	± 0.004	0.500
1/4	0.552	0.536	± 0.004	0.625
3/8	0.687	0.671	± 0.004	0.750
1/2	0.848	0.836	± 0.004	0.875
3/4	1.058	1.046	± 0.004	1.000
1	1.325	1.310	± 0.005	1.125
1-1/4	1.670	1.655	± 0.005	1.250
1-1/2	1.912	1.894	± 0.006	1.375
2	2.387	2.369	± 0.006	1.500
2-1/2	2.889	2.868	± 0.007	1.750
3	3.516	3.492	± 0.008	1.875
4	4.518	4.491	± 0.009	2.250
5	5.583	5.553	± 0.010	2.625
6	6.647	6.614	± 0.011	3.000
8	8.655	8.610	± 0.015	4.000
10	10.780	10.735	± 0.015	5.000
12	12.780	12.735	± 0.015	6.000
14	14.030	13.985	± 0.015	7.000

AMERICAN NATIONAL STANDARD TAPER PIPE THREADS (NPT) ANSI B1 .20.1 ASTM F 1498



Nominal Size In.	Threads Per Inch	Effective Thread Length L	Pitch Of Thread P
1/8	27	0.2639	0.03704
1/4	18	0.4018	0.05556
3/8	18	0.4078	0.05556
1/2	14	0.5337	0.07143
3/4	14	0.5457	0.07143
1	11-1/2	0.6828	0.08696
1-1/4	11-1/2	0.7068	0.08696
1-1/2	11-1/2	0.7235	0.08696
2	11-1/2	0.7565	0.08696
2-1/2	8	1.1375	0.12500
3	8	1.2000	0.12500
4	8	1.3000	0.12500
5	8	1.4063	0.12500
6	8	1.5125	0.12500
8	8	1.7125	0.12500

STANDARD COMPARISONS

SPEARS® IPS-to-Metric transition unions are listed by nominal size. The chart below compares nominal and actual* pipe O.D. for each size according to the designated standard.

JIS K6741 (mm)		DIN 8062 (mm)		ASTM D1785 (in.)		NPT-ANSI B1.20.1** Tapered Thread		BSP-BS21,DIN 2999,ISO 7/1 Thread	
Nominal	Actual*	O.D.	Actual*	Nominal	Actual*	Designation	Threads/in.	Designation	Threads/25.4mm
16	22	15	20	1/2	.840	1/2	14	1/2	14
20	26	20	25	3/4	1.050	3/4	14	3/4	14
25	32	25	32	1	1.315	1	11.5	1	11
30	38	38	40	1-1/4	1.660	1-1/4	11.5	1-1/4	11
40	48	40	50	1-1/2	1.900	1-1/2	11.5	1-1/2	11
50	60	50	63	2	2.375	2	11.5	2	11
75	89	80	90	3	3.500	3	8	3	11
100	114	100	110	4	4.500	4	8	4	11

*Specified dimension, certain tolerances apply **NPT and BSP have different thread angles and not compatible.

Schedule 80 CPVC Fittings

Injection Molded Dimension References:

G = (LAYING LENGTH) Intersection of center lines to bottom of socket/thread; 90° elbows, tees, crosses; ± 1/32 inch.
H = Intersection of center lines to face of fitting; 90° elbows tees, crosses; ± 1/32 inch.
J = Intersection of center lines to bottom of socket/thread; 45° elbows; ± 1/32 inch

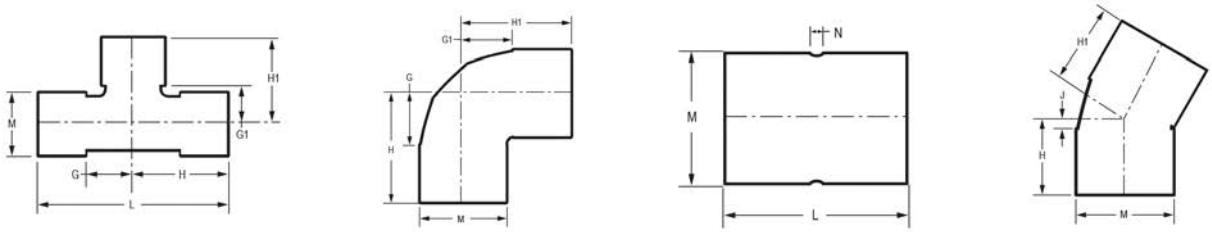
L = Overall length of fittings; ± 1/16 inch.
M = Outside diameter of socket/thread hub; ± 1/16 inch.
N = Socket bottom to socket bottom; couplings; ± 1/16 inch.
W = Height of cap; ± 1/16 inch.

Fabricated Dimension References:

G = (LAYING LENGTH) Intersection of center lines to bottom of socket/thread; 90° elbows, tees, crosses; ± 1/4 inch; 14" & larger ± 1/2 inch.
H = Intersection of center lines to face of fitting; 90° elbows ± 1/4 inch, 14" & larger ± 3/4 inch; wyes ± 1/2 inch; tees, crosses ± 1/4 inch; 14" larger ± 1/2 inch.
J = Intersection of center lines to bottom of socket/thread; 45° elbows; ± 1/4 inch; 14" & larger ± 1/2 inch.

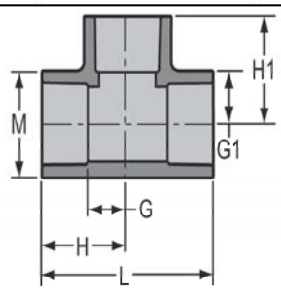
L = Overall length of fittings; ± 1/2 inch.; wyes ± 1 inch; 14" & larger ± 1 inch.
M = Outside diameter of socket/thread hub; ± 1/4 inch.
N = Socket bottom to socket bottom; couplings; ± 1/2 inch.
W = Height of cap; ± 1/4 inch.

Typical Fabricated Dimension References



Tee

Socket x Socket x Socket



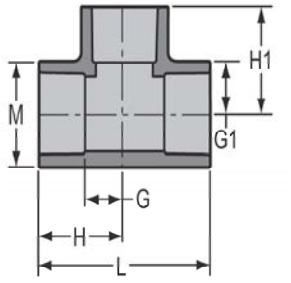
Part Number	Size	G	G1	H	H1	L	M	Approx. Wt. (Lbs.)
801-002C	1/4	11/32	11/32	31/32	31/32	1-31/32	27/32	.03
801-003C	3/8	15/32	15/32	1- 1/4	1- 1/4	2- 1/2	31/32	.06
801-005C	1/2	19/32	19/32	1-15/32	1-15/32	2-15/16	1- 3/16	.11
801-007C	3/4	11/16	11/16	1-11/16	1-11/16	3- 3/8	1-13/32	.16
801-010C	1	27/32	27/32	2	2	4	1-23/32	.29
801-012C	1-1/4	1- 1/32	1- 1/32	2- 9/32	2- 9/32	4-19/32	2- 3/32	.39
801-015C	1-1/2	1- 3/16	1- 3/16	2- 9/16	2- 9/16	5- 1/8	2- 3/8	.53
801-020C	2	1-7/16	1-7/16	2-15/16	2-15/16	5-7/8	2- 7/8	.86
801-025C	2-1/2	1-23/32	1-23/32	3- 1/2	3- 1/2	7	3-15/32	1.68
801-030C	3	2- 1/16	2- 1/16	3-31/32	3-31/32	7-15/16	4- 5/32	2.43
801-040C	4	2- 1/2	2- 1/2	4- 3/4	4- 3/4	9- 1/2	5- 1/4	3.71
801-050C	5	3- 5/32	3- 5/32	5-25/32	5-25/32	11-19/32	6-13/32	6.20
801-050CF*	5	5-1/2	5-1/2	8-1/2	8-1/2	17	6-5/16	9.85
801-060C	6	4- 1/32	4- 1/32	7- 3/32	7- 3/32	14- 5/32	7-19/32	12.18
801-080C	8	4-13/16	4-13/16	8- 7/8	8- 7/8	17- 3/4	9-23/32	21.58
801-100C	10	5- 3/4	5- 3/4	10-13/16	10-13/16	21- 5/8	11-19/32	38.18

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Tee

(Continued)

Socket x Socket x Socket

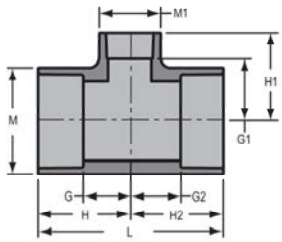


Part Number	Size	G	G1	H	H1	L	M	Approx. Wt. (Lbs.)
801-100CF*	10	9	9	14- 1/4	14- 1/4	28- 1/2	11-15/16	43.27
801-120C	12	6-15/16	6-15/16	12-15/16	12-15/16	25- 7/8	14- 1/4	55.92
801-120CF*	12	11- 1/4	11- 1/4	17- 1/2	17- 1/2	35	14- 1/8	72.57
801-140C	14	7- 1/32	7- 1/32	14- 7/32	14- 1/32	28- 7/16	15-21/32	66.40
801-140CF*	14	12- 1/4	12- 1/4	19- 1/4	19- 1/4	38- 1/2	15- 1/2	102.20
801-160CF*	16	13	13	21	21	42	17-11/16	143.98
801-180CF*	18	13- 3/4	13- 3/4	22- 3/4	22- 3/4	45- 1/2	19- 7/8	187.57
801-200CF*	20	16- 3/8	16- 3/8	26- 3/8	26- 3/8	52- 3/4	22- 1/16	286.74
801-240CF*	24	20- 1/4	20- 1/4	32- 1/4	32- 1/4	64- 1/2	26- 7/16	453.00

* Fabricated

Tee - Reducing

Socket x Socket x Socket

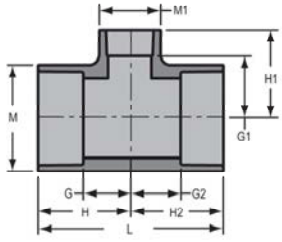


Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
801-101C	3/4X1/2	19/32	23/32	19/32	1-19/32	1-19/32	1-19/32	3- 3/16	1-13/32	1- 3/16	.14
801-130C	1X1/2	19/32	7/8	19/32	1-23/32	1- 3/4	1-23/32	3- 7/16	1- 3/4	1- 3/16	.20
801-131C	1X3/4	11/16	27/32	11/16	1-53/64	1-27/32	1-53/64	3-21/32	1- 3/4	1-13/32	.24
801-157C	1-1/4X1X3/4	23/32	1-1/16	11/16	1-7/8	2-1/16	1-15/16	3-3/4	2-5/32	1-7/16	.32
801-158C	1-1/4X1X1	13/32	15/16	13/32	2- 1/8	1-31/32	1-15/16	4	2- 1/16	1-11/16	.32
801-159C	1-1/4X1X1-1/4	15/16	1- 1/32	7/8	2- 3/16	2- 5/32	2- 1/8	4- 5/16	2- 1/16	2- 1/16	.40
801-166C[1]	1-1/4X1/2	7/8	1-13/32	7/8	2- 3/32	2- 3/8	2- 3/32	4- 7/32	2- 1/8	1- 3/4	.32
801-167C	1-1/4X3/4	5/8	31/32	5/8	1-15/16	1-31/32	1-15/16	3- 7/8	2- 1/8	1-13/32	.29
801-168C	1-1/4X1	27/32	1- 1/32	27/32	2- 3/32	2- 5/32	2- 3/32	4- 7/32	2- 3/32	1- 3/4	.35
801-202C	1-1/2X1-1/4X1	7/8	1- 7/32	7/8	2- 1/4	2-11/32	2- 1/4	4- 1/2	2- 7/16	1-13/16	.42
801-209C	1-1/2X1/2	9/16	1- 1/16	9/16	1-31/32	1-15/16	1-31/32	3-15/16	2- 3/8	1- 3/16	.36
801-210C	1-1/2X3/4	11/16	1- 1/32	11/16	2- 1/16	2- 1/32	2- 1/16	4- 5/32	2-11/32	1-13/32	.37
801-211C	1-1/2X1	27/32	1- 5/32	27/32	2-15/32	2- 5/16	2-15/32	4-15/16	2-11/32	1- 3/4	.43
801-212C	1-1/2X1-1/4	1- 3/16	1- 3/16	1- 3/16	2- 9/16	2- 7/16	2- 9/16	5- 1/8	2- 3/8	2- 1/8	.57
801-247C	2X1/2	9/16	1-13/32	9/16	2- 3/32	2- 9/32	2- 3/32	4- 3/16	2- 7/8	1- 5/32	.45
801-248C	2X3/4	11/16	1-13/32	11/16	2- 3/16	2-13/32	2- 3/16	4- 3/8	2-27/32	1- 3/8	.51
801-249C	2X1	27/32	1- 7/16	27/32	2- 3/8	2- 9/16	2- 3/8	4- 3/4	2- 7/8	1- 3/4	.57
801-250C	2X1-1/4	1-1/32	1-7/16	1-1/32	2-17/32	2-11/16	2-17/32	5-1/16	2-27/32	2-1/16	.65
801-251C	2X1-1/2	1- 5/32	1-7/16	1- 5/32	2-11/16	2-13/16	2-11/16	5- 3/8	2-7/8	2-15/32	.79
801-254C[1]	2X2X4	3-11/16	2-15/32	3-11/16	5- 3/16	4-23/32	5- 3/16	10-11/32	5- 1/4	5- 1/4	5.92

Tee - Reducing

(Continued)

Socket x Socket x Socket



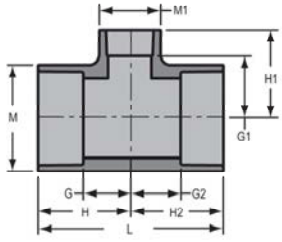
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
801-287C	2-1/2X1/2	19/32	1-19/32	19/32	2- 3/8	2-15/32	2- 3/8	4-23/32	3- 1/2	1- 3/16	.78
801-288C	2-1/2X3/4	21/32	1- 1/2	21/32	2- 7/16	2-17/32	2- 7/16	4-27/32	3-17/32	1-13/32	.83
801-289C	2-1/2X1	27/32	1-23/32	27/32	2- 5/8	2-27/32	2- 5/8	5- 1/4	3-17/32	1-23/32	1.03
801-290C	2-1/2X1-1/4	1- 1/32	1- 3/4	1- 1/32	2-27/32	2-31/32	2-27/32	5-11/16	3- 9/16	2- 3/32	1.16
801-291C	2-1/2X1-1/2	1-5/32	1-23/32	1-5/32	2-31/32	3- 1/8	2-31/32	5-29/32	3-9/16	2-3/8	1.27
801-292C	2-1/2X2	1-13/32	1- 5/8	1-13/32	3- 3/16	3- 1/8	3- 3/16	6-3/8	3- 1/2	2- 7/8	1.34
801-333C[1]	3X1/2	1- 7/16	2- 7/8	1- 7/16	3- 5/16	3- 3/4	3- 5/16	6- 5/8	4- 3/16	2- 7/8	1.35
801-334C[1]	3X3/4	1- 7/16	2-11/16	1- 7/16	3- 5/16	3-11/16	3- 5/16	6- 5/8	4- 3/16	2- 7/8	1.32
801-335C	3X3X1	7/8	2	7/8	2- 3/4	3- 1/8	2- 3/4	5-1/2	4- 7/32	1-3/4	1.28
801-336C[1]	3X1-1/4	1- 5/8	1-15/16	1- 5/8	3- 5/16	3- 5/8	3- 5/16	6- 5/8	4- 3/16	2- 7/8	1.93
801-337C	3X3X1-1/2	1- 5/32	2- 1/16	1- 5/32	3- 1/16	3- 7/16	3- 1/16	6-1/8	4- 3/16	2- 3/8	1.49
801-338C	3X2	1- 7/16	1-13/16	1- 7/16	3- 5/16	3- 5/16	3- 5/16	6- 5/8	4- 7/32	2- 7/8	1.73
801-339C	3X2-1/2	1- 3/4	1-31/32	1- 3/4	3- 5/8	3-11/16	3- 5/8	7- 1/4	4- 3/16	3-17/32	2.11
801-415C[1]	4X1/2	1- 7/16	3-17/32	1- 7/16	3-11/16	4-13/32	3-11/16	7-11/32	5- 1/4	2- 7/8	2.06
801-417C	4X1	27/32	2-19/32	27/32	3-1/8	3-23/32	3-1/8	6-1/4	5-1/4	1-3/4	1.99
801-418C[1]	4X1-1/4	1- 1/8	2-31/32	1- 1/8	3-13/32	4- 7/32	3-13/32	6-25/32	5- 1/4	2- 3/8	2.27
801-419C	4X1-1/2	1- 1/8	2- 9/16	1- 1/8	3- 3/8	3-15/16	3- 3/8	6- 3/4	5- 1/4	2- 3/8	2.20
801-420C	4X2	1- 7/16	2- 1/2	1- 7/16	3-11/16	4	3-11/16	7- 3/8	5- 1/4	2- 7/8	2.41
801-421C[1]	4X2-1/2	2- 1/16	2-11/16	2- 1/16	4- 5/16	4- 3/4	4- 5/16	8- 5/8	5- 1/4	4- 1/8	3.48
801-422C	4X3	2- 1/8	2-23/32	2- 1/8	4- 3/8	4-19/32	4- 3/8	8-25/32	5- 1/4	4- 3/16	3.07
801-488C	5X3	3- 5/32	4- 5/8	3- 5/32	5-13/16	6- 1/2	5-13/16	11-19/32	6-13/32	6-13/32	8.42
801-490C[1]	5X4	3- 5/32	3-29/32	3- 5/32	5-13/16	6- 5/32	5-13/16	11- 5/8	6-13/32	6-13/32	7.56
801-524C[1]	6X3/4	1	4	1	3-7/8	5	3-7/8	7-3/4	7-9/16	1-3/4	4.47
801-486C[1]	5X2	3- 5/32	5- 3/32	3- 5/32	5-13/16	6-19/32	5-13/16	11-19/32	6-13/32	6-13/32	8.66
801-525C	6X1	27/32	3-23/32	27/32	3- 7/8	4-27/32	3- 7/8	7- 3/4	7- 9/16	1- 3/4	4.43
801-526C[1]	6X1-1/4	1- 7/16	4- 3/16	1- 7/16	4- 7/16	5-15/32	4- 7/16	8- 7/8	7-19/32	2- 7/8	5.59
801-527C[1]	6X1-1/2	1- 7/16	4- 3/32	1- 7/16	4- 7/16	5- 1/2	4- 7/16	8- 7/8	7-19/32	2- 7/8	5.54
801-528C	6X2	1- 7/16	3-23/32	1- 7/16	4- 7/16	5- 1/4	4- 7/16	8- 7/8	7-19/32	2- 7/8	5.39
801-529C[1]	6X2-1/2	2- 1/16	3-13/16	2- 1/16	5- 1/16	5- 7/8	5- 1/16	10- 1/8	7- 9/16	4- 1/4	8.81
801-530C[1]	6X3	2- 1/16	3- 3/4	2- 1/16	5- 3/32	5- 5/8	5- 3/32	10- 3/16	7-19/32	4- 1/4	6.70
801-530CF*	6X3	4- 3/4	5- 3/4	4- 3/4	8	8	8	16	7- 1/2	4- 1/8	10.00
801-532C	6X4	2-11/16	3-25/32	2-11/16	5-11/16	6-1/16	5-11/16	11- 3/8	7-9/16	5- 1/4	7.54
801-578C[1]	8X2	3-13/16	6- 5/8	3-13/16	7-13/16	8- 1/8	7-13/16	15- 5/8	9-11/16	7- 9/16	13.37
801-578CF*	8X2	4-11/16	6- 1/8	4-11/16	8-15/16	7- 7/8	8-15/16	17- 7/8	9- 5/8	2-13/16	8.45
801-579CF*	8X2-1/2	4- 7/8	6-15/16	4- 7/8	9- 1/8	8- 5/16	9- 1/8	18- 1/4	9- 5/8	3- 7/16	14.84
801-580C[1]	8X3	3-23/32	6- 1/2	3-23/32	7- 3/4	8- 3/8	7- 3/4	15- 1/2	9-11/16	7- 1/2	13.12
801-580CF*	8X3	5- 3/16	6-11/16	5- 3/16	9- 7/16	8-15/16	9- 7/16	18- 7/8	9- 5/8	4- 1/8	15.44
801-582C[1]	8X4	2- 5/8	4-27/32	2- 5/8	6- 5/8	7- 3/32	6- 5/8	13- 1/4	9- 23/32	5-9/32	12.26
801-582CF*	8X4	5- 3/4	7-11/16	5- 3/4	10	9-15/16	10	20	9- 5/8	5- 3/16	17.51
801-585C	8X6	3- 7/8	4-15/16	3- 7/8	7-29/32	8	7-29/32	15-25/32	9-11/16	7-17/32	15.60
801-621CF*	10X2	4- 3/8	7- 1/8	4- 3/8	9- 5/8	8- 7/8	9- 5/8	19- 1/4	11-15/16	2-13/16	23.87

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Tee - Reducing

(Continued)

Socket x Socket x Socket

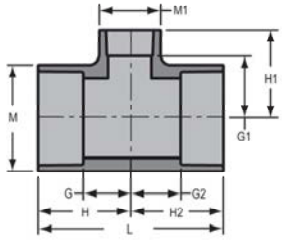


Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
801-622CF*	10X2-1/2	5- 1/4	7- 5/16	5- 1/4	10- 1/2	9- 5/16	10- 1/2	21	11-15/16	3- 7/16	25.70
801-623C[1]	10X3	3-25/32	7-17/32	3-25/32	9-25/64	9- 3/8	9-25/64	18-25/32	12- 1/16	7- 9/16	28.55
801-623CF*	10X3	4- 7/8	7-11/16	4- 7/8	10- 1/8	9-15/16	10- 1/8	20- 1/4	11-15/16	4- 1/8	23.85
801-624C[1]	10X4	3- 7/8	7- 3/16	3- 7/8	9- 3/8	9- 1/2	9- 3/8	18- 3/4	12- 1/16	7- 9/16	28.40
801-624CF*	10X4	5- 3/8	8-11/16	5- 3/8	10- 5/8	10-15/16	10- 5/8	21- 1/4	11-15/16	5- 3/16	26.65
801-626C	10X6	3- 7/8	5-27/32	3- 7/8	9- 3/8	8-27/32	9- 3/8	18- 3/4	12- 1/16	7- 9/16	25.50
801-626CF*	10X6	5- 7/8	9- 1/16	5- 7/8	11- 1/8	12- 5/16	11- 1/8	22- 1/4	11-15/16	7- 1/2	30.18
801-628C[1]	10X8	5-15/16	7- 3/4	5-15/16	11- 7/16	11- 3/4	11- 7/16	22- 7/8	12- 1/16	12- 1/16	48.73
801-628CF*	10X8	8- 1/4	9-15/16	8- 1/4	13- 1/2	14- 3/16	13- 1/2	27	11-15/16	9- 5/8	38.10
801-661CF*	12X2	4- 3/4	8	4- 3/4	11	9- 3/4	11	22	14- 1/8	2-13/16	34.86
801-663CF*	12X3	5- 1/4	8- 9/16	5- 1/4	11- 1/2	10-13/16	11- 1/2	23	14- 1/8	4- 1/8	40.82
801-664C[1]	12X4	4-11/32	10- 1/8	4-11/32	10-15/16	12- 3/8	10-15/16	21- 7/8	14- 1/4	9-23/32	47.53
801-664CF*	12X4	5- 3/4	9- 9/16	5- 3/4	12	11-13/16	12	24	14- 1/8	5- 3/16	42.27
801-666CF*	12X6	7- 1/4	9-15/16	7- 1/4	13- 1/4	13- 3/16	13- 1/4	26- 1/2	14- 1/8	7- 1/2	47.04
801-668C	12X8	4-27/32	7- 1/2	4-27/32	11-13/32	11- 1/8	11-13/32	22-13/16	14- 1/4	9-23/32	42.00
801-668CF*	12X8	8	10-13/16	8	14- 1/4	15- 1/16	14- 1/4	28- 1/2	14- 1/8	9- 5/8	52.66
801-670CF*	12X10	10-1/4	10-13/16	10-1/4	16-1/2	16- 1/16	16-1/2	33	14- 1/8	11-15/16	62.18
801-691CF*	14X2	5- 3/16	8- 9/16	5- 3/16	12- 3/16	10- 5/16	12- 3/16	24- 3/8	15- 1/2	2-13/16	49.11
801-692CF*	14X2-1/2	5- 7/16	8- 3/4	5- 7/16	12- 7/16	10- 3/4	12- 7/16	24- 7/8	15- 1/2	3- 7/16	55.06
801-693CF*	14X3	5- 3/4	9- 1/8	5- 3/4	12- 3/4	11- 3/8	12- 3/4	25- 1/2	15- 1/2	4- 1/8	52.55
801-694CF*	14X4	6- 1/2	10- 1/8	6- 1/2	13- 1/2	12- 3/8	13- 1/2	27	15- 1/2	5- 3/16	54.07
801-696CF*	14X6	8- 1/4	10- 1/2	8- 1/4	15- 1/4	13- 3/4	15- 1/4	30- 1/2	15- 1/2	7- 1/2	64.29
801-698CF*	14X8	9- 1/4	11- 3/8	9- 1/4	16- 1/4	15- 5/8	16- 1/4	32- 1/2	15- 1/2	9- 5/8	71.38
801-700CF*	14X10	10- 1/8	11- 3/8	10- 1/8	17- 1/8	16- 5/8	17- 1/8	34- 1/4	15- 1/2	11-15/16	80.46
801-702C	14X12	7-1/32	7-13/32	7-1/32	14-1/32	13-13/32	14-1/32	28-1/16	15-21/32	14-11/32	65.48
801-702CF*	14X12	11	11- 3/8	11	18	17- 5/8	18	36	15- 1/2	14- 1/8	88.28
801-751CF*	16X2	5- 7/8	9- 1/2	5- 7/8	13- 7/8	11- 1/4	13- 7/8	27- 3/4	17-11/16	2-13/16	72.48
801-752CF*	16X2-1/2	6	9-11/16	6	14	11-11/16	14	28	17-11/16	3- 7/16	78.01
801-753CF*	16X3	6- 5/16	10- 1/16	6- 5/16	14- 5/16	12- 5/16	14- 5/16	28- 5/8	17-11/16	4- 1/8	76.03
801-754CF*	16X4	6- 1/8	11- 1/16	6- 1/8	14- 1/8	13- 5/16	14- 1/8	28- 1/4	17-11/16	5- 3/16	79.03
801-756CF*	16X6	8- 5/8	11- 7/16	8- 5/8	16- 5/8	14-11/16	16- 5/8	33- 1/4	17-11/16	7- 1/2	89.59
801-758CF*	16X8	9- 5/8	12- 5/16	9- 5/8	17- 5/8	16- 9/16	17- 5/8	35- 1/4	17-11/16	9- 5/8	98.00
801-760CF*	16X10	10- 5/8	12- 5/16	10- 5/8	18- 5/8	17- 9/16	18- 5/8	37- 1/4	17-11/16	11-15/16	103.61
801-762CF*	16X12	11- 5/8	12- 5/16	11- 5/8	19- 5/8	18- 9/16	19- 5/8	39- 1/4	17-11/16	14- 1/8	115.74
801-764CF*	16X14	12- 3/4	12-11/16	12- 3/4	20- 3/4	19-11/16	20- 3/4	41- 1/2	17-11/16	15- 1/2	127.09
801-784CF*	18X4	6- 7/8	11-15/16	6- 7/8	15- 7/8	14- 3/16	15- 7/8	31- 3/4	19- 7/8	5- 3/16	105.12
801-786CF*	18X6	8- 1/2	12- 5/16	8- 1/2	17- 1/2	15- 9/16	17- 1/2	35	19- 7/8	7- 1/2	116.61
801-788CF*	18X8	9- 1/2	13- 3/16	9- 1/2	18- 1/2	17- 7/16	18- 1/2	37	19- 7/8	9- 5/8	127.49
801-790CF*	18X10	10- 1/2	13- 3/16	10- 1/2	19- 1/2	18- 7/16	19- 1/2	39	19- 7/8	11-15/16	138.58
801-792CF*	18X12	11- 1/2	13- 3/16	11- 1/2	20- 1/2	19- 7/16	20- 1/2	41	19- 7/8	14- 1/8	159.38

Tee - Reducing

(Continued)

Socket x Socket x Socket



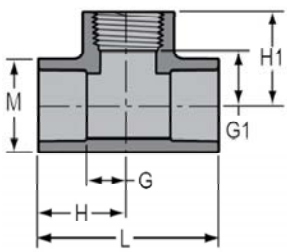
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
801-794CF*	18X14	12- 3/4	13- 9/16	12- 3/4	21- 3/4	20- 9/16	21- 3/4	43- 1/2	19-11/16	15- 1/2	154.48
801-796CF*	18X16	13- 1/2	14- 3/16	13- 1/2	22- 1/2	22- 3/16	22- 1/2	45	19-11/16	17-11/16	172.46
801-814CF*	20X4	7-11/16	12- 7/8	7-11/16	17-11/16	15- 1/8	17-11/16	35- 3/8	22- 1/16	5- 3/16	147.09
801-816CF*	20X6	8- 7/8	13- 1/4	8- 7/8	18- 7/8	16- 1/2	18- 7/8	37- 3/4	22- 1/16	7- 1/2	161.20
801-818CF*	20X8	9- 7/8	14- 1/8	9- 7/8	19- 7/8	18- 3/8	19- 7/8	39- 3/4	22- 1/16	9- 5/8	172.69
801-820CF*	20X10	10- 7/8	14- 1/8	10- 7/8	20- 7/8	19- 3/8	20- 7/8	41- 3/4	22- 1/16	11-15/16	163.27
801-822CF*	20X12	11- 7/8	14- 1/8	11- 7/8	21- 7/8	20- 3/8	21- 7/8	43- 3/4	22- 1/16	14- 1/8	199.57
801-824CF*	20X14	12- 7/8	14- 1/2	12- 7/8	22- 7/8	21- 1/2	22- 7/8	45- 3/4	22- 1/16	15- 1/2	190.94
801-826CF*	20X16	14	15- 1/8	14	24	23- 1/8	24	48	22- 1/16	17-11/16	210.27
801-828CF*	20X18	15	15	15	25	24	25	50	22- 1/16	19- 7/8	226.80
801-904CF*	24X4	9	14-11/16	9	21	16-15/16	21	42	26- 7/16	5- 3/16	250.81
801-906CF*	24X6	9- 1/4	15- 1/16	9- 1/4	21- 1/4	18- 5/16	21- 1/4	42- 1/2	26- 7/16	7- 1/2	253.45
801-908CF*	24X8	10- 1/4	15-15/16	10- 1/4	22- 1/4	20- 3/16	22- 1/4	44- 1/2	26- 7/16	9- 5/8	247.99
801-910CF*	24X10	11- 1/4	15-15/16	11- 1/4	23- 1/4	21- 3/16	23- 1/4	46- 1/2	26- 7/16	11-15/16	255.59
801-912CF*	24X12	12- 1/4	15-15/16	12- 1/4	24- 1/4	22- 3/16	24- 1/4	48- 1/2	26- 7/16	14- 1/8	301.36
801-914CF*	24X14	13- 1/4	16- 5/16	13- 1/4	25- 1/4	23- 5/16	25- 1/4	50- 1/2	26- 1/16	15- 1/2	282.42
801-916CF*	24X16	14- 3/4	16-15/16	14- 3/4	26- 3/4	24-15/16	26- 3/4	53- 1/2	26- 7/16	17-11/16	306.68
801-918CF*	24X18	15- 3/4	16-13/16	15- 3/4	27- 3/4	25-13/16	27- 3/4	55- 1/2	26- 7/16	19- 7/8	246.78
801-920CF*	24X20	16- 3/4	18- 3/16	16- 3/4	28- 3/4	28- 3/16	28- 3/4	57- 1/2	26- 7/16	22- 1/16	351.59

[1] Sized with Bushing

* Fabricated

Tee

Socket x Socket x Fipt



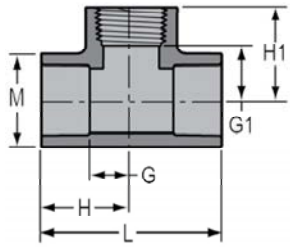
Part Number	Size	G	G1	H	H1	L	M	Approx. Wt. (Lbs.)
802-002C	1/4	5/16	3/8	15/16	15/16	1-29/32	7/8	.05
802-005C	1/2	19/32	21/32	1-15/32	1-11/32	2-15/16	1- 3/16	.14
802-007C	3/4	5/8	5/8	1-19/32	1-13/32	3- 3/16	1-13/32	.14
802-010C	1	11/16	3/4	1-13/16	1- 5/8	3-13/16	1-13/16	.23
802-012C	1-1/4	13/16	1- 1/16	2- 3/32	1-15/16	4- 5/32	2- 3/32	.35
802-015C	1-1/2	29/32	1- 1/4	2-11/32	2- 5/32	4-11/16	2- 3/8	.51
802-020C	2	1-5/16	1-7/16	2-13/16	2-13/32	5-5/8	2-27/32	.74
802-030C	3	1-31/32	2- 1/8	3- 3/4	3-17/32	7-15/32	4- 5/16	2.35
802-040C	4	2-11/32	2-21/32	4- 5/8	4- 5/32	9- 7/32	5- 9/32	3.49

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Tee

(Continued)

Socket x Socket x Fipt

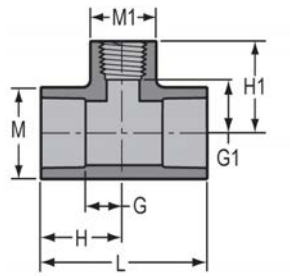


Part Number	Size	G	G1	H	H1	L	M	Approx. Wt. (Lbs.)
802-060CF*	6	4-1/8	9	7-1/8	10-1/2	14-1/4	7-5/8	15.08
802-080CF*	8	4-13/16	10-13/16	8-13/16	12-9/16	17-11/16	9-11/16	28.31

* Fabricated

Tee - Reducing

Socket x Socket x Fipt

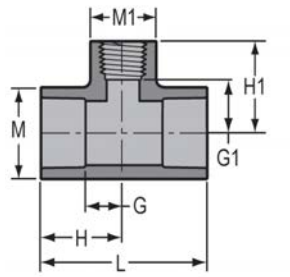


Part Number	Size	G	G1	H	H1	L	M	M1	Approx. Wt. (Lbs.)
802-101C	3/4X1/2	19/32	25/32	1-19/32	1- 7/16	3- 7/32	1-13/32	1- 3/16	.14
802-130C	1X1/2	7/16	29/32	1- 9/16	1- 5/8	3- 1/8	1-23/32	1- 7/16	.19
802-131C	1X3/4	21/32	13/16	1-13/16	1-17/32	3- 5/8	1-23/32	1- 3/8	.24
802-166C	1-1/4X1/2	7/16	1- 1/8	1-11/16	1-27/32	3- 3/8	2- 3/32	1- 3/16	.26
802-167C[1]	1-1/4X3/4	7/8	1-23/32	2- 1/8	2- 7/16	4- 7/32	2- 3/32	1- 3/4	.41
802-168C	1-1/4X1	27/32	1- 1/32	2- 3/32	1-29/32	4- 7/32	2- 3/32	1-11/16	.34
802-209C[1]	1-1/2X1/2	11/16	1-9/16	2-3/32	2- 9/32	4- 5/32	2-11/32	1-13/32	.33
802-210C[1]	1-1/2X3/4	7/8	1-27/32	2- 1/4	2-19/32	4- 1/2	2- 3/8	1-11/16	.49
802-211C[1]	1-1/2X1	27/32	1- 9/32	2- 1/4	2- 3/32	4-15/32	2- 3/8	1-11/16	.66
802-212C	1-1/2X1-1/4	1- 1/32	1- 5/32	2- 7/16	2- 3/32	4-27/32	2- 3/8	2- 1/16	.48
802-247C	2X1/2	1/2	1- 1/2	2	2- 7/32	4	2- 7/8	1- 3/16	.47
802-248C	2X3/4	5/8	1- 3/8	2- 1/8	2- 3/32	4- 1/4	2- 7/8	1- 3/8	.48
802-249C	2X1	27/32	1- 1/2	2-11/32	2-11/32	4-11/16	2- 7/8	1-11/16	.56
802-250C[1]	2X1-1/4	1- 3/16	2- 1/16	2-11/16	3	5- 3/8	2- 7/8	2-13/32	.90
802-251C[1]	2X1-1/2	1- 7/16	2- 5/16	2-15/16	3-11/32	5- 7/8	2- 7/8	2- 7/8	1.06
802-287C	2-1/2X1/2	9/16	1-25/32	2- 5/16	2-15/32	4-19/32	3- 1/2	1- 3/16	.78
802-288C[1]	2-1/2X3/4	27/32	2-11/32	2-21/32	3- 5/32	5- 9/32	3- 9/16	1-13/16	1.09
802-289C[1]	2-1/2X1	1- 3/32	2-11/32	2-27/32	3- 1/4	5-11/16	3- 1/2	2- 1/8	1.25
802-290C[1]	2-1/2X1-1/4	1- 3/16	2-15/32	2-31/32	3-15/32	5-15/16	3- 1/2	2- 3/8	1.37
802-291C[1]	2-1/2X1-1/2	1- 7/16	2- 1/2	3- 3/16	3- 1/2	6- 3/8	3- 1/2	2- 7/8	1.54
802-292C[1]	2-1/2X2	1- 3/4	3-15/16	3- 1/2	2- 7/8	7	3-15/32	3-15/32	1.95
802-333C[1]	3X1/2	7/8	2-11/16	2- 3/4	3- 7/16	5- 1/2	4- 1/8	1-23/32	1.34
802-334C[1]	3X3/4	7/8	2-19/32	2- 3/4	3-11/32	5- 1/2	4- 3/16	1- 3/4	1.34
802-335C[1]	3X1	1- 3/16	2-31/32	3- 1/16	3- 7/8	6- 1/8	4- 1/8	2-11/32	1.65
802-337C[1]	3X1-1/2	1- 7/16	2-23/32	3- 5/16	3-23/32	6- 5/8	4- 1/4	2-29/32	1.93
802-338C[1]	3X2	2- 3/32	3-11/32	3-31/32	4- 3/8	7-15/16	4- 5/32	4- 5/32	3.01

Tee - Reducing

(Continued)

Socket x Socket x Fipt

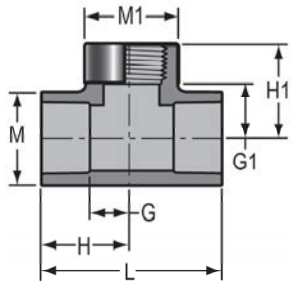


Part Number	Size	G	G1	H	H1	L	M	M1	Approx. Wt. (Lbs.)
802-339C[1]	3X2-1/2	2- 3/32	2- 3/4	3-31/32	4- 5/16	7-15/16	4- 1/8	4- 1/8	2.93
802-415C[1]	4X1/2	1- 7/16	3- 5/8	3-11/16	4- 3/8	7- 3/8	5- 1/4	2- 7/8	2.05
802-416C[1]	4X3/4	1-15/32	3-27/32	3-23/32	4-17/32	7- 7/16	5- 1/4	2- 7/8	2.05
802-417C[1]	4X1	1- 7/16	3-17/32	3-23/32	4-13/32	7-13/32	5- 1/4	2- 7/8	2.36
802-419C[1]	4X1-1/2	3-11/16	3- 1/2	3-11/16	3-31/32	7- 3/8	5- 1/4	2- 7/8	2.61
802-420C[1]	4X2	2- 1/8	4- 1/32	4- 3/8	5- 1/32	8-25/32	5- 1/4	4- 3/16	3.64
802-421C[1]	4X2-1/2	2- 1/8	3-15/32	4- 3/8	5	8-25/32	5- 1/4	4- 3/16	3.57
802-422C[1]	4X3	2- 5/8	3- 5/8	4- 7/8	5- 1/4	9- 3/4	5- 1/4	5- 1/4	4.56
802-525C[1]	6X1	2- 1/16	5- 3/16	5- 3/32	6- 1/16	10- 5/32	7-19/32	4- 1/4	5.66
802-529C[1]	6X2-1/2	2- 1/16	4-21/32	5- 3/32	6- 3/16	10- 5/32	7-19/32	4- 1/4	7.21
802-530C[1]	6X3	2-11/16	4- 3/4	5- 9/16	6- 3/8	11- 1/8	7- 1/2	5- 1/4	8.39

[1] Sized with Bushing

Tee - Special Reinforced

Socket x Socket x SR Fipt - Stainless Steel Collar

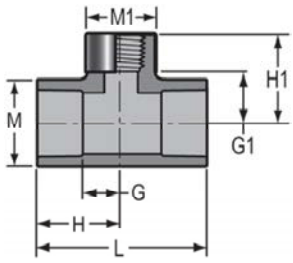


Part Number	Size	G	G1	H	H1	L	M	M1	Approx. Wt. (Lbs.)
802-005CSR	1/2	5/8	5/8	1-15/32	1- 3/8	2-15/16	1- 7/32	1- 7/32	.15
802-007CSR	3/4	19/32	11/16	1-19/32	1-13/32	3- 3/16	1-13/32	1-13/32	.15
802-010CSR	1	21/32	11/16	1-13/16	1- 5/8	3- 5/8	1-23/32	1-11/16	.27
802-012CSR	1-1/4	13/16	1- 1/16	2- 3/32	1-15/16	4- 3/16	2- 3/32	2- 1/16	.38
802-015CSR	1-1/2	15/16	1- 7/32	2-11/32	2- 5/32	4-11/16	2-11/32	2- 7/16	.52
802-020CSR	2	1- 5/16	1- 1/2	2-13/16	2-13/32	5-21/32	2- 7/8	3- 1/32	.83
802-030CSR	3	1-27/32	2- 3/32	3-23/32	3-17/32	7- 7/16	4- 9/32	4- 9/32	2.43
802-040CSR	4	2-11/32	2-21/32	4- 5/8	4- 5/32	9- 7/32	5- 1/4	5- 1/4	3.55

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Tee - Special Reinforced Reducing

Socket x Socket x SR Fipt - Stainless Steel Collar

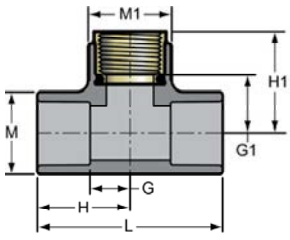


Part Number	Size	G	G1	H	H1	L	M	M1	Approx. Wt. (Lbs.)
802-072CSR	1/2X1/4	7/16	11/16	1- 5/16	1- 7/32	2- 5/8	1- 5/32	27/32	.09
802-098CSR	3/4X1/4	7/16	13/16	1- 7/16	1- 5/16	2- 7/8	1- 3/8	27/32	.12
802-101CSR	3/4X1/2	19/32	25/32	1-19/32	1-7/16	3- 7/32	1-13/32	1- 3/16	.15
802-128CSR[1]	1X1/4	7/8	2- 5/8	2	2-11/16	4	2- 3/32	27/32	.38
802-130CSR	1X1/2	7/16	29/32	1- 9/16	1- 5/8	3- 1/8	1-23/32	1- 3/16	.20
802-131CSR	1X3/4	21/32	7/8	1-13/16	1-19/32	3-19/32	1-23/32	1- 3/8	.22
802-164CSR[1]	1-1/4X1/4	27/32	2-13/16	2- 1/8	3-13/32	4- 7/32	2- 3/32	27/32	.44
802-166CSR	1-1/4X1/2	7/16	1- 1/8	1-11/16	1-27/32	3-13/32	2- 3/32	1- 3/16	.26
802-168CSR	1-1/4X1	27/32	1- 1/32	2- 3/32	1-29/32	4- 7/32	2- 3/32	1-11/16	.36
802-207CSR[1]	1-1/2X1/4	27/32	1-31/32	2- 1/4	2-19/32	4-15/32	2-11/32	1- 3/4	.51
802-211CSR	1-1/2X1	27/32	1- 7/32	2- 1/4	2- 1/8	4-15/32	2- 3/8	1-11/16	.43
802-212CSR	1-1/2X1-1/4	1- 1/32	1- 5/32	2- 7/16	2- 3/32	4-27/32	2- 3/8	2- 1/16	.51
802-247CSR	2X1/2	1/2	1- 1/2	2	2- 1/4	4	2- 7/8	1- 3/16	.48
802-248CSR	2X3/4	19/32	1-13/32	2- 1/8	2- 1/8	4- 1/4	2- 7/8	1- 3/8	.50
802-287CSR	2-1/2X1/2	9/16	1- 3/4	2- 5/16	2- 1/2	4-19/32	3- 1/2	1- 7/32	.79
802-331CSR[1]	3X1/4	1-13/32	4- 1/2	3- 5/16	5- 1/32	6- 9/16	4- 3/16	27/32	1.37
802-413CSR[1]	4X1/4	1- 7/16	5- 3/16	3-11/16	5-25/32	7- 3/8	5- 1/4	27/32	2.07

[1] Sized with Bushing

Tee - Brass Transition

Socket x Socket x Fipt With Brass Thread Insert

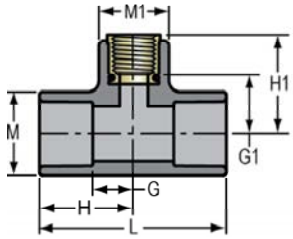


Part Number	Size	G	G1	H	H1	L	M	M1	Approx. Wt. (Lbs.)
802-005CBR	1/2	7/8	31/32	1- 7/16	1-17/32	2- 5/8	1- 5/32	1- 7/32	.16
802-007CBR	3/4	17/32	1- 5/32	1-17/32	1-13/16	3- 1/16	1-13/32	1- 3/8	.22

Not intended to convey or dispense water for human consumption through drinking or cooking

Tee - Brass Transition Reducing

Socket x Socket x Fipt With Brass Thread Insert

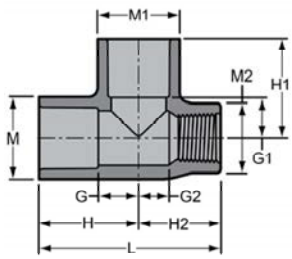


Part Number	Size	G	G1	H	H1	L	M	M1	Approx. Wt. (Lbs.)
802-101CBR	3/4X1/2	7/16	1- 1/32	1- 7/16	1- 5/8	2-29/32	1-13/32	1- 3/16	.19

Not intended to convey or dispense water for human consumption through drinking or cooking

Tee - Reducing

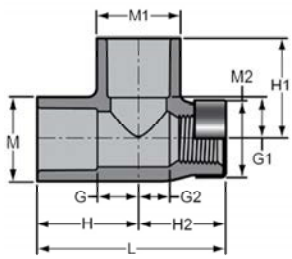
Socket x Fipt x Socket



Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
803-095C	3/4X1/2X3/4	11/16	11/16	11/16	1-11/16	1-11/16	1- 3/8	3- 3/32	1-13/32	1-13/32	.15

Tee - Special Reinforced Reducing

Socket x SR Fipt - Stainless Steel Collar x Socket

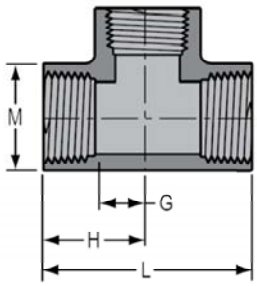


Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
803-095CSR	3/4X1/2X3/4	11/16	11/16	11/16	1-11/16	1-11/16	1-13/32	3- 1/8	1-13/32	1-13/32	.16

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Tee

Fipt x Fipt x Fipt

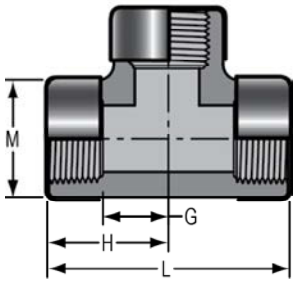


Part Number	Size	G	H	L	M	Approx. Wt. (Lbs.)
805-002C	1/4	1/2	1- 3/32	2- 3/16	27/32	.05
805-003C	3/8	9/16	1- 5/32	2- 5/16	15/16	.07
805-005C	1/2	17/32	1- 1/4	2-15/32	1- 3/16	.11
805-007C	3/4	21/32	1-15/32	2-15/16	1- 1/2	.20
805-010C	1	23/32	1- 3/4	3- 1/2	1-11/16	.28
805-012C	1-1/4	15/16	1-31/32	3-29/32	2- 1/4	.49
805-015C	1-1/2	1- 1/8	2- 3/16	4- 3/8	2-13/32	.62
805-020C	2	1- 5/8	2- 5/8	5- 1/4	3	1.15
805-025C	2-1/2	1- 9/16	3- 1/8	6- 1/4	3-19/32	1.76
805-030C	3	1-15/16	3- 9/16	7- 3/32	4-11/32	2.92
805-040C	4	2-1/2	4- 7/32	8- 7/16	5-7/16	4.35
805-060CF[1*]	6	9	10-1/2	20-15/16	7-3/16	21.55

[1] Sized with Bushing
* Fabricated

Tee - Special Reinforced

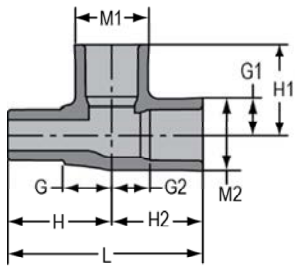
SR Fipt x SR Fipt x SR Fipt - Stainless Steel Collar



Part Number	Size	G	H	L	M	Approx. Wt. (Lbs.)
805-002CSR	1/4	17/32	1- 1/8	2- 1/4	27/32	.06
805-003CSR	3/8	19/32	1- 3/16	2-11/32	31/32	.08
805-005CSR	1/2	1/2	1- 1/4	2- 1/2	1- 3/16	.14
805-007CSR	3/4	19/32	1-11/32	2-11/16	1- 3/8	.16
805-010CSR	1	7/8	1-25/32	3- 9/16	1-11/16	.33
805-015CSR	1-1/2	1- 1/4	2- 3/16	4-13/32	2-13/32	.70
805-020CSR	2	1- 5/8	2- 5/8	5- 1/4	3	1.26

Tee - Street

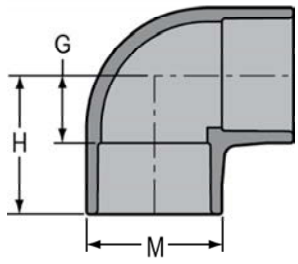
Spigot x Socket x Socket



Part Number	Size	G	G1	G2	H	H1	H2	L	M1	Approx. Wt. (Lbs.)
844-005C	1/2	23/32	23/32	1/2	1-19/32	1-21/32	1-19/32	3- 5/32	1- 3/16	.10
844-007C	3/4	13/16	27/32	7/8	1-13/16	1- 7/8	1-13/16	3- 5/8	1-13/32	.16
844-010C	1	1- 3/32	13/16	13/16	2- 7/32	2	2	4- 7/32	1- 3/4	.26
844-012C	1-1/4	1- 1/4	1- 5/32	1- 1/8	2- 7/16	2- 5/16	2- 7/16	4- 7/8	2- 3/32	.41
844-015C	1-1/2	1-13/16	1- 1/8	1- 1/8	2- 7/8	2- 9/16	2- 9/16	5-11/32	2-11/32	.54
844-020C	2	1-23/32	1- 7/16	1-13/32	3- 1/4	2-15/16	2-15/16	6- 5/32	2- 7/8	.83

90° Ell

Socket x Socket



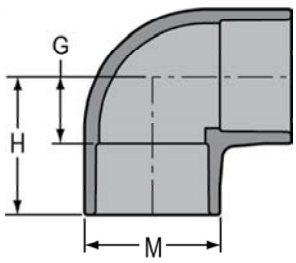
Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
806-002C	1/4	11/32	1	13/16	.03
806-003C	3/8	15/32	1- 1/4	31/32	.04
806-005C	1/2	9/16	1-15/32	1- 3/16	.08
806-007C	3/4	5/8	1-11/16	1- 7/16	.12
806-010C	1	7/8	2	1- 3/4	.20
806-012C	1-1/4	1-1/32	2- 9/32	2-3/32	.31
806-015C	1-1/2	1- 5/32	2- 9/16	2- 3/8	.41
806-020C	2	1-13/32	2-15/16	2- 7/8	.62
806-025C	2-1/2	1- 9/16	3-11/32	3-15/32	1.14
806-030C	3	2-1/16	3-31/32	4- 3/16	1.70
806-040C	4	2-19/32	4-27/32	5- 1/4	2.92
806-050C	5	3	5- 3/4	6- 3/8	4.62
806-050CF*	5	6- 9/16	9- 9/16	6- 5/16	7.40
806-060C	6	3- 3/4	6- 3/4	7-19/32	7.97
806-080C	8	4-25/32	8-25/32	9- 3/4	15.11
806-080CF*	8	9- 1/4	13- 1/2	9- 5/8	21.14
806-100C	10	5-25/32	10-13/16	12-5/32	27.41
806-100CF*	10	11-13/16	17- 1/16	11-15/16	41.40
806-120C	12	6-27/32	12-29/32	14-3/8	45.01
806-120CF*	12	13- 5/8	19- 7/8	14- 1/8	59.42
806-140C	14	7- 1/2	14- 1/2	15-11/16	55.89
806-140CF*	14	16	23	15- 1/2	86.71
806-160CF*	16	18- 7/16	26- 7/16	17-11/16	134.64
806-180CF*	18	20- 7/8	29- 7/8	19- 7/8	175.61

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

90° Ell

(Continued)

Socket x Socket

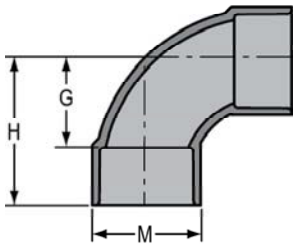


Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
806-200CF*	20	23- 5/16	33- 5/16	22- 1/16	250.00
806-240CF*	24	28- 1/4	40- 1/4	26- 7/16	422.00

* Fabricated

90° Ell - Sweep

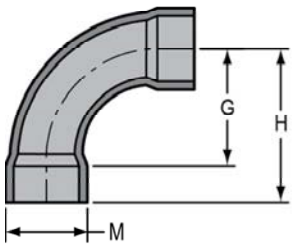
Socket x Socket



Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
806-005SC	1/2	27/32	1-23/32	1- 3/16	.07
806-007SC	3/4	1- 1/32	2- 1/32	1-13/32	.12
806-010SC	1	1- 5/16	2- 7/16	1-23/32	.20
806-012SC	1-1/4	1- 9/16	2-13/16	2- 3/32	.31
806-015SC	1-1/2	1- 3/4	3- 1/8	2-11/32	.40
806-020SC	2	2- 5/16	3-13/16	2- 7/8	.67

90° Ell - Long Sweep

Socket x Socket

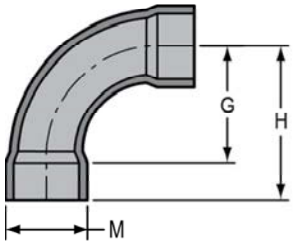


Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
806-005LSCF*	1/2	1- 7/8	2- 3/4	1- 1/8	.15
806-007LSCF*	3/4	2- 7/16	3- 7/16	1- 7/16	.27
806-010LSCF*	1	2- 7/8	4	1-11/16	.41
806-012LSCF*	1-1/4	3- 5/8	4- 7/8	2- 1/16	.56
806-015LSCF*	1-1/2	4- 1/8	5- 1/2	2- 5/16	.65
806-020LSCF*	2	4- 3/4	6- 5/16	2-13/16	1.18
806-025LSCF*	2-1/2	5-3/4	7-3/4	3-7/16	1.70
806-030LSCF*	3	7	9	4- 1/8	2.46

90° Ell - Long Sweep

(Continued)

Socket x Socket

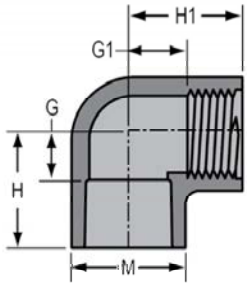


Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
806-040LSCF*	4	9	11- 1/4	5- 3/16	4.85
806-060LSCF*	6	13	16- 1/4	7- 1/2	11.76
806-080LSCF*	8	23-1/2	27-3/4	9-5/8	31.25
806-100LSCF*	10	27	32-1/4	11-15/16	54.83

* Fabricated

90° Ell

Socket x Fipt



Part Number	Size	G	G1	H	H1	M	Approx. Wt. (Lbs.)
807-002C	1/4	5/16	5/16	15/16	15/16	7/8	.03
807-003C	3/8	1/4	3/8	1- 1/32	1- 1/32	1- 1/32	.05
807-005C	1/2	15/32	9/16	1-11/32	1- 9/32	1- 3/16	.08
807-007C	3/4	5/8	5/8	1- 9/16	1- 9/16	1- 3/8	.10
807-010C	1	11/16	25/32	1-13/16	1-11/16	1-23/32	.19
807-012C	1-1/4	23/32	1- 1/32	1-31/32	1-31/32	2- 1/16	.29
807-015C	1-1/2	31/32	1- 7/32	2-11/32	2- 5/32	2-3/8	.40
807-020C	2	1-13/32	1-1/2	2-15/16	2-1/2	3	.84
807-030C	3	1-27/32	2- 7/32	3-23/32	3- 9/16	4- 9/32	1.99
807-040C	4	2- 5/16	2- 7/8	4- 9/16	4- 9/32	5- 1/4	2.94

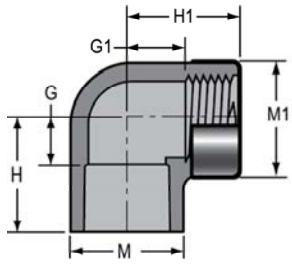




Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

90° Ell - Special Reinforced

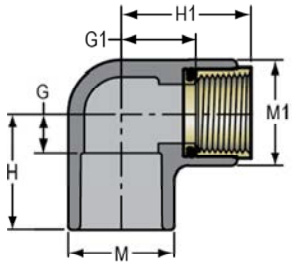
Socket x SR Fipt - Stainless Steel Collar



Part Number	Size	G	G1	H	H1	M	M1	Approx. Wt. (Lbs.)
807-005CSR	1/2	15/32	23/32	1-11/32	1- 9/32	1- 3/16	1- 7/32	.09
807-007CSR	3/4	9/16	21/32	1- 9/16	1-13/32	1- 3/8	1- 3/8	.11
807-010CSR	1	19/32	13/16	1-23/32	1-23/32	1-11/16	1-23/32	.21
807-012CSR	1-1/4	23/32	1- 1/32	1-31/32	1-31/32	2- 1/16	2- 1/16	.31
807-015CSR	1-1/2	31/32	1- 5/32	2- 3/8	2- 1/8	2-11/32	2- 7/16	.42
807-020CSR	2	1-13/32	1- 1/2	2-15/16	2-17/32	3	3-1/32	.87
807-030CSR	3	1-13/16	2- 7/32	3-23/32	3- 9/16	4- 9/32	4- 9/32	1.98
807-040CSR	4	2- 9/32	2-25/32	4- 9/16	4- 7/32	5- 1/4	5- 1/4	3.03

90° Ell - Brass Transition

Socket x Fipt With Brass Thread Insert

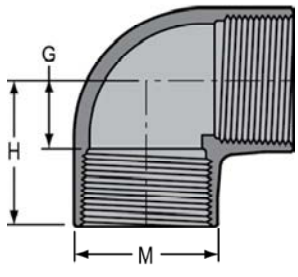


Part Number	Size	G	G1	H	H1	M	M1	Approx. Wt. (Lbs.)
807-005CBR	1/2	13/32	31/32	1- 9/32	1-17/32	1- 5/32	1- 3/16	.14
807-007CBR	3/4	1/2	1- 5/32	1- 1/2	1-25/32	1- 3/8	1-13/32	.21

Not intended to convey or dispense water for human consumption through drinking or cooking

90° Ell

Fipt x Fipt

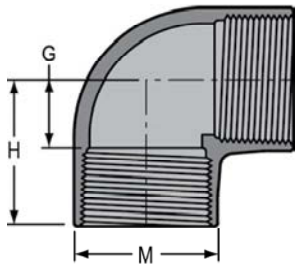


Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
808-002C	1/4	11/32	15/16	7/8	.03
808-003C	3/8	9/16	1- 5/32	15/16	.05
808-005C	1/2	1/2	1- 7/32	1- 9/32	.08
808-007C	3/4	5/8	1- 3/8	1- 3/8	.12
808-010C	1	25/32	1- 5/8	1-23/32	.21
808-012C	1-1/4	7/8	1- 7/8	2- 1/16	.31
808-015C	1-1/2	1- 5/32	2- 3/32	2- 7/16	.47

90° Ell

Fipt x Fipt

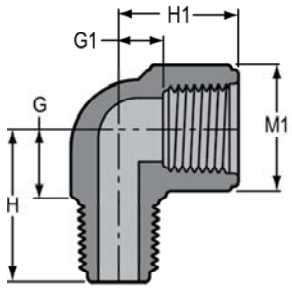
(Continued)



Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
808-020C	2	1- 9/16	2-17/32	3	.89
808-025C	2-1/2	1- 5/8	3- 3/16	3- 9/16	1.25
808-030C	3	1-29/32	3-17/32	4-13/32	2.37
808-040C	4	2-15/32	4-3/16	5-15/32	3.43

90° Street Ell

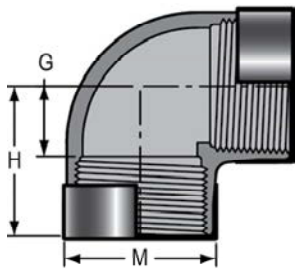
Mipt x Fipt



Part Number	Size	G	G1	H	H1	M1	Approx. Wt. (Lbs.)
812-002C	1/4	17/32	5/16	1- 1/32	29/32	13/16	.02
812-005C	1/2	11/16	13/32	1-11/32	1-5/32	1-3/16	.06
812-007C	3/4	7/8	17/32	1-1/2	1-9/32	1-7/16	.09
812-010C	1	1- 1/32	21/32	1-13/16	1- 9/16	1- 3/4	.16

90° Ell - Special Reinforced

SR Fipt x SR Fipt - Stainless Steel Collar

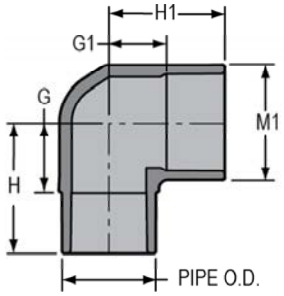


Part Number	Size	G	H	M	Approx. Wt. (Lbs.)
808-003CSR	3/8	9/16	1- 5/32	15/16	.07
808-005CSR	1/2	1/2	1- 7/32	1- 3/16	.10
808-007CSR	3/4	5/8	1- 3/8	1- 3/8	.14
808-010CSR	1	25/32	1-11/16	1-23/32	.24
808-012CSR	1-1/4	15/16	1- 7/8	2- 1/16	.36
808-015CSR	1-1/2	1- 1/32	2- 1/8	2- 7/16	.52
808-020CSR	2	1-19/32	2- 1/2	3	1.04

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

90° Street Ell

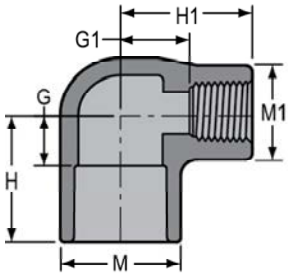
Spigot x Socket



Part Number	Size	G	G1	H	H1	M1	Approx. Wt. (Lbs.)
809-005C	1/2	13/16	7/16	1-21/32	1- 7/16	1- 5/32	.07
809-007C	3/4	29/32	11/16	1-27/32	1-11/16	1- 3/8	.11
809-010C	1	1-3/32	27/32	2- 7/32	2	1-23/32	.20
809-012C	1-1/4	1- 9/32	13/16	2-19/32	2- 1/4	2- 3/32	.31
809-015C	1-1/2	1- 7/16	1- 3/16	2-13/16	2- 9/16	2- 3/8	.42
809-020C	2	1- 3/4	1- 7/16	3- 1/4	2-31/32	2- 7/8	.64
809-025C	2-1/2	2- 1/2	1- 5/8	4- 1/2	3- 3/8	3- 7/16	1.54
809-030C	3	2- 3/8	1-13/16	4- 1/4	3-11/16	4- 3/16	1.70
809-040C	4	3-1/16	2-5/8	5-11/32	4-29/32	5- 1/4	2.94
809-060C	6	5- 1/4	3-11/16	8- 7/16	6- 3/4	7- 9/16	9.27
809-080C	8	7- 1/8	4-25/32	11- 1/8	8-25/32	9- 3/4	17.33
809-100C	10	8- 5/8	5-13/16	14- 5/16	11- 3/8	12- 1/16	34.95
809-120C	12	10-1/4	7	17	13-1/16	14-3/8	57.29
809-140C	14	11-1/16	7-9/16	18-5/16	14-5/8	15-11/16	70.92

90° Ell - Reducing

Socket x Fipt



Part Number	Size	G	G1	H	H1	M	M1	Approx. Wt. (Lbs.)
807-101C	3/4X1/2	1/2	25/32	1-17/32	1-17/32	1-13/32	1- 3/16	.11
807-130C[1]	1X1/2	27/32	1-17/32	1-31/32	2- 1/4	1-23/32	1-23/32	.26
807-131C[1]	1X3/4	7/8	1-17/32	2	2- 1/4	1- 3/4	1- 3/4	.26

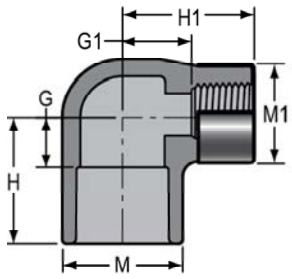
[1] Sized with Bushing





90° Ell - Special Reinforced Reducing

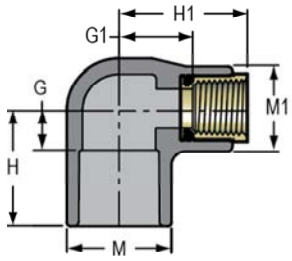
Socket x SR Fipt - Stainless Steel Collar



Part Number	Size	G	G1	H	H1	M	M1	Approx. Wt. (Lbs.)
807-101CSR	3/4X1/2	1/2	13/16	1-17/32	1-17/32	1-13/32	1- 3/16	.11
807-130CSR	1X1/2	9/16	1	1-23/32	1- 5/8	1-23/32	1- 3/16	.13

90° Ell - Brass Transition Reducing

Socket x Fipt With Brass Thread Insert

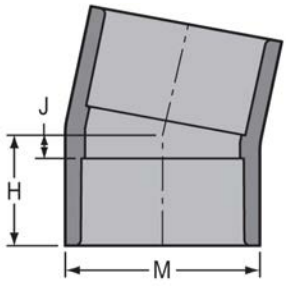


Part Number	Size	G	G1	H	H1	M	M1	Approx. Wt. (Lbs.)
807-101CBR	3/4X1/2	1/2	1- 1/16	1- 1/2	1- 5/8	1-13/32	1- 3/16	.17

Not intended to convey or dispense water for human consumption through drinking or cooking

11-1/4° Ell

Socket x Socket



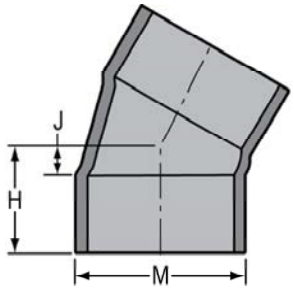
Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
811-015C	1-1/2	1-19/32	7/32	2- 3/8	.25
811-020C	2	1-23/32	7/32	2-27/32	.35
811-025CF*	2-1/2	2-11/16	11/16	3- 7/16	.88
811-030C	3	2- 3/16	5/16	4- 1/8	.91
811-040C	4	2-21/32	13/32	5- 1/4	1.58
811-060CF*	6	4- 1/4	1	7- 1/2	4.68
811-080CF*	8	5- 3/8	1- 1/8	9- 5/8	8.72
811-100CF*	10	6-11/16	1- 7/16	11-15/16	15.81
811-120CF*	12	7-13/16	1- 9/16	14- 1/8	27.52
811-140CF*	14	9	2	15- 1/2	35.90
811-160CF*	16	10- 3/8	2- 3/8	17-11/16	55.59
811-180CF*	18	11- 3/4	2- 3/4	19- 7/8	83.44

* Fabricated

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

30° Ell

Socket x Socket

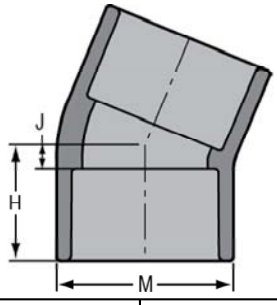


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
815-005CF*	1/2	1- 7/16	7/16	1- 1/8	.07
815-007CF*	3/4	1- 7/16	7/16	1- 3/8	.11
815-010CF*	1	1- 3/4	1/2	1-11/16	.15
815-012CF*	1-1/4	2- 3/16	11/16	2- 1/16	.24
815-015CF*	1-1/2	2- 3/16	11/16	2- 5/16	.37
815-020CF*	2	2- 1/2	3/4	2-13/16	.55
815-025CF*	2-1/2	3	1	3- 7/16	.92
815-030CF*	3	3- 5/16	1- 1/16	4- 1/8	1.43
815-040CF*	4	3- 7/16	1- 3/16	5- 3/16	2.15
815-060C	6	4-13/16	1- 7/8	7- 9/16	5.89
815-080CF*	8	6- 3/16	1-15/16	9- 5/8	10.04
815-100CF*	10	7- 3/4	2- 1/2	11-15/16	17.68
815-120CF*	12	9- 1/16	2-13/16	14- 1/8	30.39
815-140CF*	14	10- 7/16	3- 7/16	15- 1/2	42.92
815-160CF*	16	11-15/16	3-15/16	17-11/16	64.23
815-180CF*	18	13- 7/16	4- 7/16	19- 7/8	92.38

* Fabricated

22-1/2° Ell

Socket x Socket

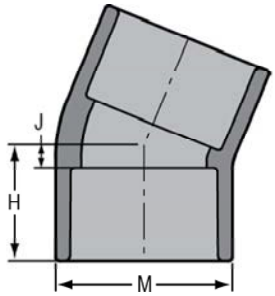


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
816-005C	1/2	1- 1/16	3/16	1- 5/32	.06
816-007C	3/4	1- 3/16	3/16	1- 7/16	.08
816-010C	1	1- 3/8	9/32	1-23/32	.14
816-012C	1-1/4	1- 1/2	5/16	2- 3/32	.20
816-015C	1-1/2	1-21/32	1/4	2- 3/8	.27
816-020C	2	1- 7/8	7/16	2- 7/8	.43
816-025C	2-1/2	2- 7/32	15/32	3- 1/2	.72
816-025CF*	2-1/2	2- 7/8	7/8	3- 7/16	.81
816-030C	3	2-13/32	9/16	4- 5/32	1.00
816-040C	4	2- 7/8	5/8	5- 1/4	1.71
816-060C	6	4- 9/16	1- 3/8	7- 7/16	4.59
816-060CF*	6	4- 5/8	1- 3/8	7- 1/2	5.16

22-1/2° EII

Socket x Socket

(Continued)

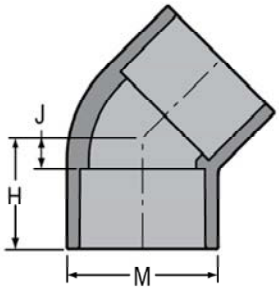


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
816-080C	8	5- 1/16	1- 1/32	9- 3/4	8.59
816-080CF*	8	5- 7/8	1- 5/8	9- 5/8	9.36
816-100CF*	10	7- 5/16	2- 1/16	11-15/16	17.59
816-120CF*	12	8- 9/16	2- 5/16	14- 1/8	29.69
816-140CF*	14	9-13/16	2-13/16	15- 1/2	37.75
816-160CF*	16	11- 5/16	3- 5/16	17-11/16	57.95
816-180CF*	18	12- 3/4	3- 3/4	19- 7/8	86.42

* Fabricated

45° EII

Socket x Socket



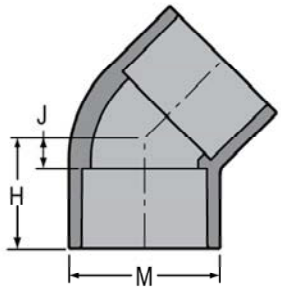
Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
817-002C	1/4	13/16	5/32	27/32	.02
817-003C	3/8	31/32	7/32	1	.03
817-005C	1/2	1- 1/8	1/4	1- 3/16	.06
817-007C	3/4	1- 5/16	5/16	1- 7/16	.09
817-010C	1	1- 7/16	5/16	1-23/32	.16
817-012C	1-1/4	1- 5/8	3/8	2- 1/8	.22
817-015C	1-1/2	1-13/16	7/16	2- 3/8	.31
817-020C	2	2- 1/8	5/8	2- 7/8	.47
817-025C	2-1/2	2-13/32	21/32	3- 1/2	.88
817-030C	3	2-29/32	29/32	4- 5/32	1.21
817-040C	4	3- 5/16	1- 1/16	5- 1/4	2.14
817-050C	5	4	1-11/32	6-13/32	3.30
817-060C	6	4- 3/4	1- 3/4	7-19/32	5.58
817-080C	8	6	2	9- 3/4	10.54
817-100C	10	7-5/8	2-19/32	12-1/8	20.08
817-100CF*	10	8-11/16	3- 7/16	11-15/16	19.37
817-120C	12	9-1/16	3-3/16	15-3/8	32.86
817-120CF*	12	10- 1/8	3- 7/8	14- 1/8	32.40
817-140C	14	10- 5/16	3- 5/16	15- 5/8	41.25
817-140CF*	14	11- 9/16	4- 9/16	15- 1/2	41.37
817-160CF*	16	13- 5/16	5- 5/16	17-11/16	64.66
817-180CF*	18	15	6	19- 7/8	88.48

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

45° Ell

Socket x Socket

(Continued)

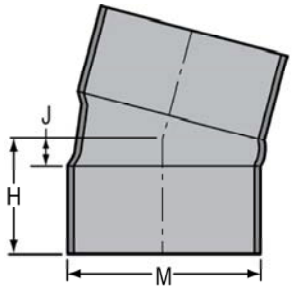


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
817-200CF*	20	16- 3/4	6- 3/4	22- 1/16	124.66
817-240CF*	24	20- 3/16	8- 3/16	26- 7/16	207.66

* Fabricated

15° Ell

Socket x Socket

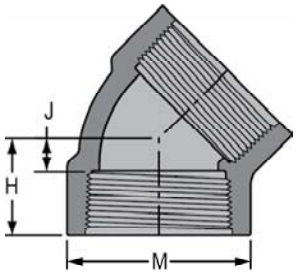


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
818-020CF*	2	2- 5/16	9/16	2-13/16	.48
818-025CF*	2-1/2	2- 3/4	3/4	3- 7/16	.88
818-030CF*	3	3	3/4	4- 1/8	1.25
818-040CF*	4	3- 1/8	7/8	5- 3/16	1.79
818-060CF*	6	4- 3/8	1- 1/8	7- 1/2	4.77
818-080CF*	8	4- 1/2	1- 1/4	9- 5/8	8.81
818-100CF*	10	6-15/16	1-11/16	11-15/16	17.29
818-120CF*	12	8- 1/16	1-13/16	14- 1/8	27.73
818-140CF*	14	9- 5/16	2- 5/16	15- 1/2	40.74
818-160CF*	16	10-11/16	2-11/16	17-11/16	59.47
818-180CF*	18	12- 1/16	3- 1/16	19- 7/8	83.44

* Fabricated

45° Ell

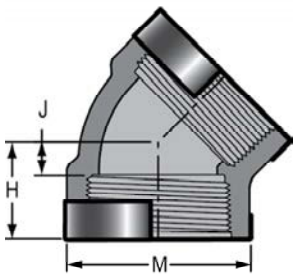
Fipt x Fipt



Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
819-002C	1/4	25/32	3/16	27/32	.03
819-003C	3/8	13/16	3/16	1	.03
819-005C	1/2	31/32	5/16	1- 3/16	.07
819-007C	3/4	1- 3/32	13/32	1- 3/8	.07
819-010C	1	1- 7/32	7/32	1-11/16	.14
819-012C	1-1/4	1- 7/16	7/16	2- 3/16	.25
819-015C	1-1/2	1- 1/2	15/32	2- 1/2	.32
819-020C	2	1-23/32	21/32	3	.48
819-025C	2-1/2	2-17/32	31/32	3- 1/2	1.24
819-030C	3	2-23/32	1	4- 9/32	1.91
819-040C	4	3- 1/4	1- 7/32	5- 1/4	3.33

45° Ell - Special Reinforced

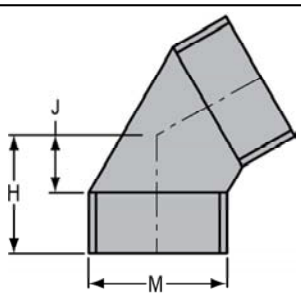
SR Fipt x SR Fipt - Stainless Steel Collar



Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
819-005CSR	1/2	1	5/16	1- 3/16	.09
819-007CSR	3/4	1- 1/8	13/32	1- 3/8	.11
819-010CSR	1	1- 1/4	13/32	1-23/32	.17

60° Ell

Socket x Socket



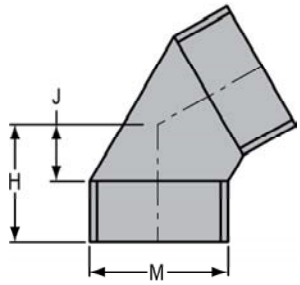
Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
824-005CF*	1/2	1- 5/8	5/8	1- 1/8	.11
824-007CF*	3/4	1-11/16	11/16	1- 3/8	.08
824-010CF*	1	2	3/4	1-11/16	.17

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

60° Ell

(Continued)

Socket x Socket

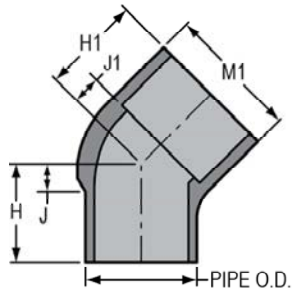


Part Number	Size	H	J	M	Approx. Wt. (Lbs.)
824-012CF*	1-1/4	2- 1/2	1	2- 1/16	.35
824-015CF*	1-1/2	2- 5/8	1- 1/8	1- 3/8	.36
824-020CF*	2	3	1- 1/4	2-13/16	.59
824-025CF*	2-1/2	3- 9/16	1- 9/16	3- 7/16	.94
824-030CF*	3	4	1- 3/4	4- 1/8	1.51
824-040CF*	4	4- 5/16	2- 1/16	5- 3/16	2.31
824-060CF*	6	6- 1/8	2- 7/8	7- 1/2	5.92
824-080CF*	8	7- 3/4	3- 1/2	9- 5/8	10.94
824-100CF*	10	9-11/16	4- 7/16	11-15/16	20.37
824-120CF*	12	11- 5/16	5- 1/16	14- 1/8	31.43
824-140CF*	14	12-15/16	5-15/16	15- 1/2	88.89
824-160CF*	16	14-13/16	6-13/16	17-11/16	126.08
824-180CF*	18	16- 3/4	7- 3/4	19- 7/8	175.81

* Fabricated

45° Street Ell

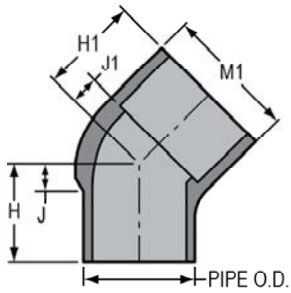
Spigot x Socket



Part Number	Size	H	H1	J	J1	M1	Approx. Wt. (Lbs.)
827-005C	1/2	1- 9/32	1- 5/16	11/32	7/16	1- 3/16	.06
827-007C	3/4	1- 1/2	1- 1/2	7/16	1/2	1-13/32	.09
827-010C	1	1-25/32	1- 1/2	19/32	3/8	1- 3/4	.15
827-012C	1-1/4	2	1-23/32	5/8	15/32	2- 3/32	.24
827-015C	1-1/2	2- 1/32	2- 1/8	19/32	25/32	2-11/32	.31
827-020C	2	2- 5/16	2-11/32	11/16	3/8	2-27/32	.46
827-025C	2-1/2	3-11/16	2- 9/16	1-11/16	13/16	3- 1/2	1.28
827-030C	3	3- 1/4	2-13/16	1- 3/16	29/32	4- 5/32	1.25
827-040C	4	3-13/16	3-13/16	1- 9/32	1- 9/16	5- 1/4	2.19
827-060C	6	5- 3/32	4-25/32	2- 1/16	2- 1/16	7-19/32	5.91
827-080C	8	6- 5/8	5-31/32	2-19/32	1- 3/4	9- 3/4	11.14
827-100C	10	10-21/32	8- 3/16	2-19/32	5- 5/16	12- 3/16	28.76
827-120C	12	13- 1/4	9-11/16	6- 3/8	3- 3/32	14-13/32	45.35
827-140CF*	14	16- 1/16	11- 9/16	8- 1/16	4- 9/16	15- 1/2	64.42
827-160CF*	16	18- 5/16	13- 5/16	9- 5/16	5- 5/16	17-11/16	90.40

45° Street Ell (Continued)

Spigot x Socket

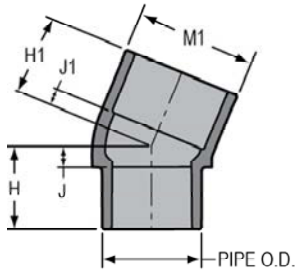


Part Number	Size	H	H1	J	J1	M1	Approx. Wt. (Lbs.)
827-180CF*	18	20- 1/2	15	10- 1/2	6	19- 7/8	131.11

* Fabricated

22-1/2° Street Ell

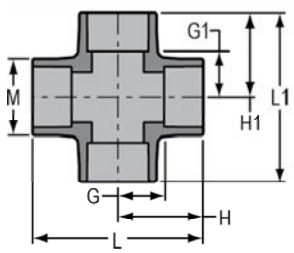
Spigot x Socket



Part Number	Size	H	H1	J	J1	M1	Approx. Wt. (Lbs.)
842-005C	1/2	7/8	1	1/8	1/8	1- 3/16	.05
842-007C	3/4	1- 1/4	1- 5/32	3/16	3/16	1- 3/8	.08
842-010C	1	1- 7/16	1-11/32	5/16	7/32	1-23/32	.13
842-012C	1-1/4	1- 9/16	1- 9/16	5/16	3/8	2- 3/32	.20
842-015C	1-1/2	1-21/32	1- 7/8	9/32	1/2	2- 3/8	.27
842-020C	2	2	1-29/32	15/32	13/32	2- 7/8	.40
842-025C	2-1/2	2- 7/32	2- 7/32	15/32	15/32	3- 1/2	.76
842-030C	3	2- 1/2	2- 5/16	21/32	7/16	4- 5/32	1.00
842-040C	4	2-27/32	3- 1/32	9/16	25/32	5- 1/4	1.80
842-060C	6	5-11/16	3-15/16	2- 3/8	7/8	7- 5/8	6.03
842-080C	8	7- 3/8	5- 1/8	3- 1/8	1- 1/8	9- 3/4	12.70

Cross

Socket x Socket x Socket x Socket



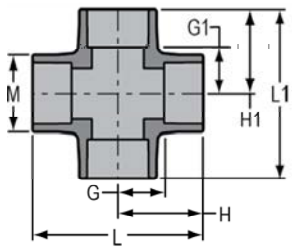
Part Number	Size	G	G1	H	H1	L	L1	M	M1	Approx. Wt. (Lbs.)
820-002C	1/4	13/32	13/32	1- 1/32	1- 1/32	2- 1/16	2- 1/16	27/32	27/32	.05
820-005C	1/2	9/16	9/16	1-15/32	1-15/32	2-15/16	2-15/16	1- 3/16	1- 3/16	.13
820-007C	3/4	5/8	5/8	1- 5/8	1- 5/8	3- 9/32	3- 9/32	1-13/32	1-13/32	.21
820-010C	1	31/32	31/32	2- 3/32	2- 3/32	4- 7/32	4- 7/32	1-23/32	1-23/32	.46
820-012C	1-1/4	1- 3/32	1- 3/32	2- 3/8	2- 3/8	4- 3/4	4- 3/4	2- 1/8	2- 1/8	.65

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Cross

(Continued)

Socket x Socket x Socket x Socket

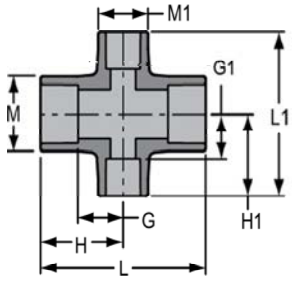


Part Number	Size	G	G1	H	H1	L	L1	M	M1	Approx. Wt. (Lbs.)
820-015C	1-1/2	1- 1/4	1- 1/4	2- 5/8	2- 5/8	5- 1/4	5- 1/4	2- 3/8	2- 3/8	.86
820-020C	2	1- 1/2	1- 1/2	3	3	6	6	3	3	1.40
820-025C	2-1/2	1-11/16	1-11/16	3-15/32	3-15/32	6-29/32	6-29/32	3-17/32	3-17/32	2.11
820-030C	3	2- 3/32	2- 3/32	3-31/32	3-31/32	7-15/16	7-15/16	4-11/32	4-11/32	3.39
820-040C	4	2- 5/8	2- 5/8	4- 7/8	4- 7/8	9- 3/4	9- 3/4	5-11/32	5-11/32	5.50
820-060CF*	6	6- 1/4	6- 1/4	9- 1/2	9- 1/2	19	19	7- 1/2	7- 1/2	16.93
820-080CF*	8	7- 5/8	7- 5/8	11- 7/8	11- 7/8	23- 3/4	23- 3/4	9- 5/8	9- 5/8	30.81
820-100CF*	10	9	9	14- 1/4	14- 1/4	28- 1/2	28- 1/2	11-15/16	11-15/16	54.55
820-120CF*	12	11- 1/4	11- 1/4	17- 1/2	17- 1/2	35	35	14- 1/8	14- 1/8	96.33
820-140CF*	14	12- 1/4	12- 1/4	19- 1/4	19- 1/4	38- 1/2	38- 1/2	15- 1/2	15- 1/2	114.69
820-160CF*	16	13	13	21	21	42	42	17-11/16	17-11/16	175.70
820-180CF*	18	13- 3/4	13- 3/4	22- 3/4	22- 3/4	45- 1/2	45- 1/2	19- 7/8	19- 7/8	233.48

* Fabricated

Cross - Reducing

Socket x Socket x Socket x Socket

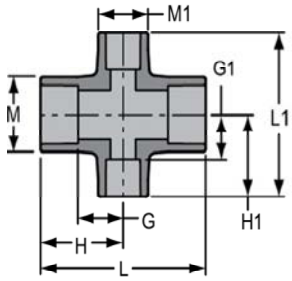


Part Number	Size	G	G1	H	H1	L	L1	M	M1	Approx. Wt. (Lbs.)
820-130C[1]	1X1/2	1	1- 7/16	2- 1/8	2- 3/8	4- 7/32	4- 3/4	1-23/32	1-23/32	.59
820-131C	1X3/4	23/32	5/8	1- 5/8	1- 5/8	3- 1/4	3- 1/4	1- 7/8	1- 1/2	.30
820-166C[1]	1-1/4X1/2	1- 3/32	1- 3/32	2- 3/8	2-11/16	4- 3/4	5- 3/16	3- 3/32	3- 3/32	.89
820-167C	1-1/4X3/4	1- 1/16	23/32	2- 1/16	1-31/32	4- 3/32	3-31/32	2- 1/16	1-13/32	.34
820-209C[1]	1-1/2X1/2	1- 7/32	1- 7/32	2-21/32	2-31/32	5- 1/4	5-15/16	2- 3/8	2- 3/8	1.16
820-210C	1-1/2X3/4	11/16	1- 5/32	2- 3/32	2- 3/16	4- 3/16	4-11/32	2- 3/8	1-13/32	.41
820-211C[1]	1-1/2X1	1- 3/4	1- 3/4	2- 5/8	3	5- 5/16	5- 7/8	1- 3/8	1- 3/8	1.11
820-248C[1]	2X3/4	11/16	1- 7/16	2- 7/32	2- 7/16	4-13/32	4- 7/8	2-29/32	1-13/32	.55
820-249C[1]	2X1	1- 1/2	2- 9/32	3	3- 7/16	6	6-27/32	3	3	1.89
820-289C	2-1/2X1	7/8	1-23/32	2-11/16	2- 7/8	5-11/32	5- 3/4	3- 1/2	1- 3/4	.99
820-291C[1]	2-1/2X1-1/2	1-11/16	2-15/32	3- 7/16	3-27/32	6- 7/8	7-23/32	3- 9/16	3- 9/16	2.91
820-336C[1]	3X1-1/4	2- 3/32	3- 1/8	3-31/32	4- 3/8	7-29/32	8- 3/4	4- 3/16	4- 3/16	4.79
820-338C[1]	3X2	2- 3/32	2-27/32	3-31/32	4- 5/16	7-29/32	8- 5/8	4-13/32	4- 5/16	4.66
820-420C[1]	4X2	2- 5/8	3-13/16	4- 7/8	5-11/32	9- 3/4	10-21/32	5-11/32	5-11/32	7.70
820-422C[1]	4X3	2- 5/8	3- 7/16	4- 7/8	5- 5/16	9- 3/4	10- 5/8	5- 1/4	5- 1/4	7.21
820-420CF*	4X2	3- 7/8	4- 1/4	6- 1/8	6	12- 1/4	12	5- 3/16	2-13/16	4.14

Cross - Reducing

Socket x Socket x Socket x Socket

(Continued)



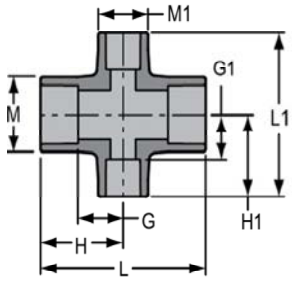
Part Number	Size	G	G1	H	H1	L	L1	M	M1	Approx. Wt. (Lbs.)
820-528CF*	6X2	4- 5/8	5- 3/16	7- 7/8	6-15/16	15- 3/4	13- 7/8	7- 1/2	2-13/16	8.70
820-530CF*	6X3	4- 3/4	5- 3/4	8	8	16	16	7- 1/2	4- 1/8	10.24
820-532CF*	6X4	5- 1/4	6- 3/4	8- 1/2	9	17	18	7- 1/2	5- 3/16	12.14
820-578CF*	8X2	4-11/16	6- 1/8	8-15/16	7- 7/8	17- 7/8	15- 3/4	9- 5/8	2-13/16	14.84
820-580CF*	8X3	5- 3/16	6-11/16	9- 7/16	8-15/16	18- 7/8	17- 7/8	9- 5/8	4- 1/8	16.96
820-582CF*	8X4	5- 3/4	7-11/16	10	9-15/16	20	19- 7/8	9- 5/8	5- 3/16	20.46
820-585CF*	8X6	6- 3/4	8- 1/16	11	11- 5/16	22	22- 5/8	9- 5/8	7- 1/2	24.47
820-621CF*	10X2	4- 3/8	7- 1/8	9- 5/8	8- 7/8	19- 1/4	17-11/16	11-15/16	2-13/16	24.57
820-623CF*	10X3	4- 7/8	7-11/16	10- 1/8	9-15/16	20- 1/4	19-13/16	11-15/16	4- 1/8	28.98
820-624CF*	10X4	5- 3/8	8-11/16	10- 5/8	10-15/16	21- 1/4	21-13/16	11-15/16	5- 3/16	28.01
820-626CF*	10X6	5- 7/8	9- 1/16	11- 1/8	12- 5/16	22- 1/4	24- 5/8	11-15/16	7- 1/2	36.35
820-628CF*	10X8	8- 1/4	9-15/16	13- 1/2	14- 3/16	27	28- 3/8	11-15/16	9- 5/8	48.29
820-661CF*	12X2	4- 3/4	8	11	9- 3/4	22	19- 1/2	14- 1/8	2-13/16	35.55
820-663CF*	12X3	5- 1/4	8- 9/16	11- 1/2	10-13/16	23	21- 5/8	14- 1/8	4- 1/8	45.27
820-664CF*	12X4	5- 3/4	9- 9/16	12	11-13/16	24	23- 5/8	14- 1/8	5- 3/16	42.59
820-666CF*	12X6	7- 1/4	9-15/16	13- 1/4	13- 3/16	26- 1/2	26- 3/8	14- 1/8	7- 1/2	54.27
820-668CF*	12X8	8	10-13/16	14- 1/4	15- 1/16	28- 1/2	30- 1/8	14- 1/8	9- 5/8	58.59
820-670CF*	12X10	10-1/4	10-13/16	16-1/2	16- 1/16	33	32- 1/8	14- 1/8	11-15/16	80.00
820-691CF*	14X2	5- 3/16	8- 9/16	12- 3/16	10- 5/16	24- 3/8	20- 5/8	15- 1/2	2-13/16	53.24
820-693CF*	14X3	5- 3/4	9- 1/8	12- 3/4	11- 3/8	25- 1/2	22- 3/4	15- 1/2	4- 1/8	56.21
820-694CF*	14X4	6- 1/2	10- 1/8	13- 1/2	12- 3/8	27	24- 3/4	15- 1/2	5- 3/16	61.77
820-696CF*	14X6	8- 1/4	10- 1/2	15- 1/4	13- 3/4	30- 1/2	27- 1/2	15- 1/2	7- 1/2	72.85
820-698CF*	14X8	9- 1/4	11- 3/8	16- 1/4	15- 5/8	32- 1/2	31- 1/4	15- 1/2	9- 5/8	84.42
820-700CF*	14X10	10- 1/8	11- 3/8	17- 1/8	16- 5/8	34- 1/4	33- 1/4	15- 1/2	11-15/16	97.45
820-702CF*	14X12	11	11- 3/8	18	17- 5/8	36	35- 1/4	15- 1/2	14- 1/8	117.29
820-751CF*	16X2	5- 7/8	9- 1/2	13- 7/8	11- 1/4	27- 3/4	22- 1/2	17-11/16	2-13/16	77.67
820-753CF*	16X3	6- 5/16	10- 1/16	14- 5/16	12- 5/16	28- 5/8	24- 5/8	17-11/16	4- 1/8	81.65
820-754CF*	16X4	6- 1/8	11- 1/16	14- 1/8	13- 5/16	28- 1/4	26- 5/8	17-11/16	5- 3/16	80.84
820-756CF*	16X6	8- 5/8	11- 7/16	16- 5/8	14-11/16	33- 1/4	29- 3/8	17-11/16	7- 1/2	98.57
820-758CF*	16X8	9- 5/8	12- 5/16	17- 5/8	16- 9/16	35- 1/4	33- 1/8	17-11/16	9- 5/8	111.25
820-760CF*	16X10	10-5/8	12-5/16	18-5/8	17-9/16	37-1/4	35-1/8	17-11/16	11-15/16	125.38
820-762CF*	16X12	11- 5/8	12- 5/16	19- 5/8	18- 9/16	39- 1/4	37- 1/8	17-11/16	14- 1/8	138.83
820-764CF*	16X14	12- 3/4	12-11/16	20- 3/4	19-11/16	41- 1/2	39- 3/8	17-11/16	15- 1/2	129.51
820-784CF*	18X4	6- 7/8	11-15/16	15- 7/8	14- 3/16	31- 3/4	28- 3/8	19- 7/8	5- 3/16	106.93
820-786CF*	18X6	8- 1/2	12- 5/16	17- 1/2	15- 9/16	35	31- 1/8	19- 7/8	7- 1/2	121.05
820-788CF*	18X8	9- 1/2	13- 3/16	18- 1/2	17- 7/16	37	34- 7/8	19- 7/8	9- 5/8	133.90
820-790CF*	18X10	10- 1/2	13- 3/16	19- 1/2	18- 7/16	39	36- 7/8	19- 7/8	11-15/16	149.71
820-792CF*	18X12	11- 1/2	13- 3/16	20- 1/2	19- 7/16	41	38- 7/8	19- 7/8	14- 1/8	.00
820-794CF*	18X14	12- 3/4	13- 9/16	21- 3/4	20- 9/16	43- 1/2	41- 1/8	19-11/16	15- 1/2	165.77

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Cross - Reducing

(Continued)

Socket x Socket x Socket x Socket



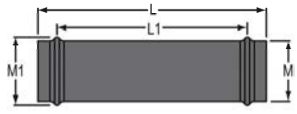
Part Number	Size	G	G1	H	H1	L	L1	M	M1	Approx. Wt. (Lbs.)
820-796CF*	18X16	13- 1/2	14- 3/16	22- 1/2	22- 3/16	45	44- 3/8	19-11/16	17-11/16	172.46

[1] Sized with Bushing

* Fabricated

Repair Coupling - Fabricated

Gasket x Gasket

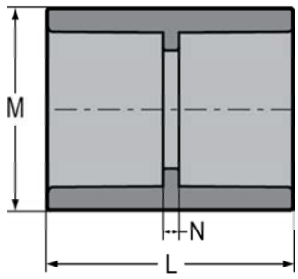


Part Number	Size	L	L1	M	M1	Approx. Wt. (Lbs.)
828-020CF*	2	9- 1/8	6	2-13/16	3- 3/16	1.00
828-030CF*	3	15- 1/2	11- 3/4	4- 1/8	4- 5/8	3.38
828-040CF*	4	19- 1/2	15	5- 3/16	5- 3/4	6.53
828-060CF*	6	23	18-1/4	7- 1/2	8- 1/8	13.41
828-080CF*	8	26-1/8	19	9- 5/8	10- 3/8	23.42
828-100CF*	10	28	21-1/4	11-15/16	13-1/8	37.92
828-120CF*	12	29	21-3/8	14- 1/8	15-3/8	53.28
828-140CF*	14	30	21	15- 1/2	17-1/4	68.61
828-160CF*	16	31	22-1/4	17-11/16	18-7/8	6.34
828-180CF*	18	32	22-5/8	19-7/8	21-7/8	127.70
828-200CF*	20	32	23-1/2	22-1/16	24-1/16	160.38
828-240CF*	24	32	23-1/2	22-7/16	24-13/16	236.00

* Fabricated

Coupling

Socket x Socket

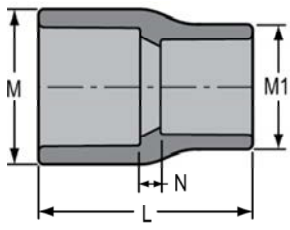


Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
829-002C	1/4	1- 3/8	27/32	1/16	.02
829-003C	3/8	1-5/8	1	3/32	.03
829-005C	1/2	1- 7/8	1- 3/16	1/8	.07
829-007C	3/4	2- 1/8	1-13/32	1/8	.10
829-010C	1	2-15/32	1-23/32	3/16	.12
829-012C	1-1/4	2-11/16	2- 7/32	3/16	.25
829-015C	1-1/2	2- 7/8	2-11/32	3/32	.22
829-020C	2	3- 1/8	2-27/32	3/32	.32
829-025C	2-1/2	3-11/16	3-15/32	1/4	.58
829-030C	3	3-31/32	4- 5/32	3/16	.81
829-040C	4	4- 3/4	5- 5/16	1/4	1.36
829-050C	5	5-15/32	6- 3/8	7/32	2.18
829-060C	6	6- 3/8	7- 9/16	1/4	3.87
829-080C	8	8- 1/4	9-23/32	13/32	6.88
829-100C	10	10- 9/32	12- 1/16	1/4	12.31
829-100CF*	10	13-1/8	11-15/16	2-5/8	15.68
829-120C	12	12- 3/8	14- 7/32	3/8	20.05
829-120CF*	12	15-1/4	14-1/8	2-3/4	25.85
829-140C	14	14- 7/16	15- 5/8	3/8	28.10
829-140CF*	14	16	15- 1/2	2	33.33
829-160CF*	16	19-3/4	17-11/16	3-3/4	54.79
829-180CF*	18	22	19- 7/8	4	72.88
829-200CF*	20	23- 3/4	22- 1/16	3- 3/4	97.40
829-240CF*	24	29- 1/4	26- 7/16	5- 1/4	167.66

* Fabricated

Coupling - Reducer

Socket x Socket



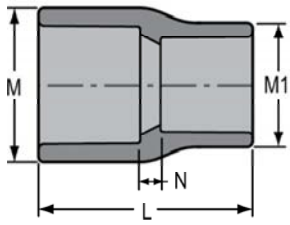
Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
829-101C	3/4X1/2	2- 3/32	1-13/32	1- 5/32	7/32	.06
829-130C	1X1/2	2- 3/16	1-23/32	1-13/32	7/32	.12
829-131C	1X3/4	2-13/32	1-23/32	1-13/32	1/4	.15
829-166C	1-1/4X1/2	2- 9/16	2- 3/32	1- 5/32	7/16	.14
829-167C	1-1/4X3/4	2-19/32	2- 3/32	1- 5/8	11/32	.17

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Coupling - Reducer

(Continued)

Socket x Socket

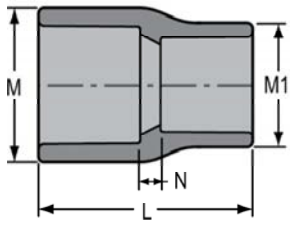


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
829-168C	1-1/4X1	2-11/16	2- 1/8	1- 3/4	5/16	.14
829-209C	1-1/2X1/2	2-27/32	2-11/32	1- 3/16	19/32	.20
829-210C	1-1/2X3/4	2- 7/8	2- 3/8	1-13/32	17/32	.18
829-211C	1-1/2X1	2- 7/8	2-11/32	1-15/16	3/8	.26
829-212C	1-1/2X1-1/4	2-13/16	2-13/32	2- 1/8	5/32	.22
829-247C	2X1/2	3- 3/32	2- 7/8	1- 5/32	11/16	.31
829-248C	2X3/4	3- 7/32	2- 7/8	1-13/32	23/32	.32
829-249C	2X1	3-1/2	3	1-23/32	27/32	.37
829-250C	2X1-1/4	3-11/32	2- 7/8	2- 3/32	19/32	.33
829-251C	2X1-1/2	3- 7/32	2-27/32	2-11/32	1/4	.31
829-290C[1]	2-1/2X1-1/4	3-29/32	3-1/2	2-3/8	15/16	.57
829-291C	2-1/2X1-1/2	3- 3/4	3- 1/2	2- 3/8	19/32	.50
829-292C	2-1/2X2	3-21/32	3-15/32	2-27/32	13/32	.51
829-335C[1]	3X1	4- 7/16	4- 1/8	2- 7/8	1- 7/16	1.02
829-336C[1]	3X1-1/4	4- 7/32	4- 5/32	2-29/32	1- 1/16	.98
829-337C[1]	3X1-1/2	3-1/2	4- 3/16	2-3/8	7/32	.70
829-338C	3X2	4	4- 5/32	2-7/8	19/32	.77
829-339C	3X2-1/2	4-1/8	4- 5/32	3- 15/32	1/2	.79
829-339CF*	3X2-1/2	6	4- 1/16	3- 7/16	1- 3/4	1.01
829-416C[1]	4X3/4	5-23/32	5- 9/32	2-29/32	2-13/32	1.79
829-417C[1]	4X1	5-15/16	5- 9/32	2-29/32	2-17/32	1.77
829-419C[1]	4X1-1/2	5-23/32	5- 9/32	2-29/32	2- 1/16	1.67
829-420C	4X2	5- 1/2	5- 9/32	2- 7/8	1-25/32	1.52
829-421C	4X2-1/2	4- 9/16	5- 3/16	3- 1/2	17/32	1.27
829-422C	4X3	4-19/32	5- 1/4	4- 3/16	15/32	1.32
829-488CF*	5X3	7-15/16	6- 1/4	5- 3/16	2-15/16	3.30
829-490CF*	5X4	7- 3/4	6- 1/4	5- 3/16	2- 1/2	2.35
829-528C[1]	6X2	7- 1/16	7- 1/2	5	2- 9/16	4.55
829-529C[1]	6X2-1/2	6-31/32	7-19/32	5- 9/32	2- 3/16	4.71
829-530C[1]	6X3	7- 1/8	7- 9/16	5- 9/32	2- 1/4	4.30
829-532C	6X4	6- 5/8	7- 5/8	5- 5/16	1- 7/16	3.44
829-533CF*	6X5	8-3/4	7-3/8	6-5/16	2-1/2	3.92
829-580CF*	8X3	15	9- 1/2	5- 3/16	8- 7/8	8.74
829-582C[1]	8X4	8-29/32	9-23/32	5- 1/4	2-15/32	6.43
829-582CF*	8X4	14- 5/8	9- 1/2	5- 3/16	8- 1/8	7.75
829-583CF*	8X5	14-11/16	9-1/2	6-5/16	7-7/16	8.30
829-585C	8X6	8	9- 3/4	7- 1/2	1	6.48
829-621CF*	10X2	21- 1/2	11- 3/4	5- 3/16	14- 3/4	17.04
829-623CF*	10X3	21- 1/2	11- 3/4	5- 3/16	14- 7/16	17.18
829-624CF*	10X4	21- 1/8	11- 3/4	5- 3/16	13- 5/8	16.03
829-625CF*	10X5	21- 3/16	11- 3/4	6- 5/16	12-15/16	16.94
829-626C	10X6	10-19/32	12- 1/32	7-19/32	2-17/32	11.46

Coupling - Reducer

(Continued)

Socket x Socket



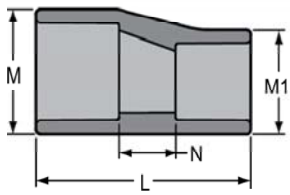
Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
829-626CF*	10X6	17- 5/8	11- 3/4	7- 1/2	9- 1/8	15.00
829-628C	10X8	10- 5/8	12	9- 3/4	1-17/32	11.44
829-628CF*	10X8	13- 3/8	11- 3/4	9- 5/8	3- 7/8	11.31
829-664CF*	12X4	28- 3/8	13-15/16	5- 3/16	19- 7/8	29.44
829-665CF*	12X5	28- 7/16	13-15/16	6- 5/16	19- 3/16	33.36
829-666CF*	12X6	24- 7/8	13-15/16	7- 1/2	15- 3/8	29.92
829-668C	12X8	12- 5/8	14- 7/32	9- 3/4	2- 7/16	18.35
829-668CF*	12X8	20- 5/8	13-15/16	9- 5/8	10- 1/8	27.00
829-670CF*	12X10	16- 3/8	13-15/16	11-15/16	4- 7/8	20.77
829-694CF*	14X4	30- 1/8	15- 3/16	5- 3/16	20- 7/8	34.71
829-696CF*	14X6	26- 5/8	15- 3/16	7- 1/2	16- 3/8	31.45
829-698CF*	14X8	22- 3/8	15- 3/16	9- 5/8	11- 1/8	27.68
829-700CF*	14X10	18- 1/8	15- 3/16	11-15/16	5- 7/8	25.24
829-702CF*	14X12	17- 3/4	15- 3/8	14- 1/8	4- 1/2	29.29
829-754CF*	16X4	38	17- 3/8	5- 3/16	27- 3/4	53.88
829-756CF*	16X6	34- 1/2	17- 3/8	7- 1/2	23- 1/4	54.03
829-758CF*	16X8	30- 1/4	17- 3/8	9- 5/8	18	57.02
829-760CF*	16X10	26	17- 3/8	11-15/16	12- 3/4	45.61
829-762CF*	16X12	20- 1/4	17- 3/8	14- 1/8	6	40.03
829-764CF*	16X14	21- 1/4	17- 1/2	15- 1/2	5- 1/4	43.94
829-784CF*	18X4	47- 3/8	19-11/16	5- 3/16	36- 1/8	106.08
829-786CF*	18X6	43- 7/8	19-11/16	7- 1/2	31- 5/8	104.71
829-788CF*	18X8	39- 5/8	19-11/16	9- 5/8	26- 3/8	100.55
829-790CF*	18X10	35- 3/8	19-11/16	11-15/16	21- 1/8	89.53
829-792CF*	18X12	29- 5/8	19-11/16	14- 1/8	14- 3/8	76.67
829-794CF*	18X14	29- 5/8	19-11/16	15- 1/2	13- 5/8	86.99
829-796CF*	18X16	23	19-11/16	17-11/16	6	63.70
829-818CF*	20X8	50- 1/4	21- 7/8	9- 5/8	36	155.53
829-826CF*	20X16	33- 5/8	21- 7/8	17-11/16	15- 5/8	112.40
829-828CF*	20X18	25- 1/2	21- 7/8	19- 7/8	6- 1/2	88.55
829-906CF*	24X6	68	26- 1/16	7- 1/2	52- 3/4	251.98
829-918CF*	24X18	39	26- 1/16	19- 7/8	18	167.74
829-920CF*	24X20	30- 5/8	26- 1/16	22- 1/16	8- 5/8	128.81

[1] Sized with Bushing
* Fabricated

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Coupling - Eccentric Reducer

Socket x Socket

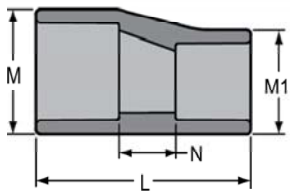


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
829-101CFE*	3/4X1/2	3-7/16	1- 3/8	1- 1/8	1-7/16	.07
829-130CFE*	1X1/2	4-1/16	1- 5/8	1- 1/8	1-13/16	.11
829-131CFE*	1X3/4	4	1- 5/8	1-1/8	1- 3/4	.13
829-168CFE*	1-1/4X1	4-5/8	2	1-11/16	1-7/8	.22
829-209CFE2*	1-1/2X1/2	8	2- 1/4	1- 1/8	5-1/2	.44
829-210CFE2*	1-1/2X3/4	7-15/16	2- 1/4	1- 3/8	5-7/16	.33
829-211CFE*	1-1/2X1	5-5/16	2-1/4	1-11/16	2-9/16	.27
829-212CFE*	1-1/2X1-1/4	4-9/16	2- 5/16	2- 1/16	1-9/16	.33
829-249CFE*	2X1	6- 1/8	2- 3/4	1-11/16	3- 1/8	.41
829-250CFE*	2X1-1/4	6- 1/8	2- 3/4	2- 1/16	2- 7/8	.40
829-251CFE*	2X1-1/2	5-9/16	2- 3/4	2- 5/16	2-5/16	.48
829-289CFE2*	2-1/2X1	10-3/8	3-5/16	1-11/16	7-1/8	1.19
829-290CFE2*	2-1/2X1-1/4	10-3/8	3- 5/16	2- 1/16	6-7/8	1.01
829-291CFE2*	2-1/2X1-1/2	9-13/16	3- 5/16	2- 5/16	6-5/16	1.23
829-292CFE*	2-1/2X2	6-5/8	3- 5/16	2-13/16	2-7/8	.72
829-335CFE2*	3X1	11- 7/8	3-15/16	1-11/16	8- 3/8	1.21
829-336CFE2*	3X1-1/4	11- 7/8	3-15/16	2- 1/16	8- 1/8	1.46
829-337CFE2*	3X1-1/2	11-5/16	3-15/16	2- 5/16	7-9/16	1.31
829-338EC	3X2	5-7/8	4-5/32	2-7/8	2-15/32	1.00
829-338CFE*	3X2	8- 1/8	3-15/16	2-13/16	4- 1/8	1.07
829-339CFE*	3X2-1/2	7- 1/4	4- 1/16	3- 7/16	3	1.12
829-417CFE3*	4X1	17	5- 1/8	1-11/16	13- 1/2	2.66
829-418CFE3*	4X1-1/4	17	5- 1/8	2- 1/16	13- 1/4	2.64
829-419CFE3*	4X1-1/2	16-7/16	5- 1/8	2- 5/16	12-11/16	2.59
829-420CFE2*	4X2	13- 1/4	5- 1/8	2-13/16	9- 1/4	2.46
829-421CFE2*	4X2-1/2	12- 3/8	5- 1/8	3- 7/16	8- 1/8	2.62
829-422CFE*	4X3	8- 3/4	5- 1/8	4- 1/8	4- 1/4	1.90
829-490CFE*	5X4	10	6-1/4	5-3/16	4-3/4	3.14
829-528CFE3*	6X2	20- 7/8	7- 5/16	2-13/16	15- 7/8	5.39
829-529CFE3*	6X2-1/2	20	7- 5/16	3- 7/16	14- 3/4	6.53
829-530CFE2*	6X3	16- 3/8	7- 5/16	4- 1/8	10- 7/8	5.03
829-532CFE*	6X4	11- 1/8	7- 5/16	5- 3/16	5- 5/8	3.74
829-533CFE*	6X5	11-1/4	7-3/8	6-5/16	5	4.77
829-578CFE4*	8X2	30- 5/8	9- 1/2	2-13/16	24- 5/8	12.97
829-580CFE3*	8X3	26- 1/8	9- 1/2	4- 1/8	19- 5/8	12.51
829-582CFE2*	8X4	20- 7/8	9- 1/2	5- 3/16	14- 3/8	11.11
829-583CFE2*	8X5	21	9- 1/2	6- 5/16	13- 3/4	11.51
829-585CFE*	8X6	15- 1/4	9- 1/2	7- 1/2	7- 3/4	9.77
829-624CFE3*	10X4	32	11- 3/4	5- 3/16	24- 1/2	23.06

Coupling - Eccentric Reducer

(Continued)

Socket x Socket



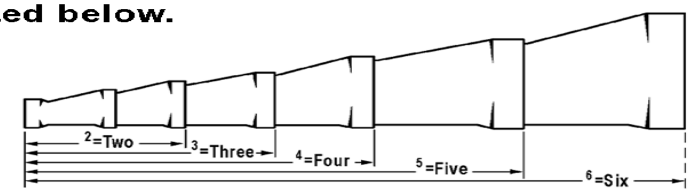
Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
829-625CFE[3*]	10X5	32- 1/8	11- 3/4	6- 5/16	23- 7/8	23.12
829-626CFE[2*]	10X6	26- 1/2	11- 3/4	7- 1/2	18	21.55
829-628CFE[*]	10X8	18- 1/16	11- 3/4	9- 5/8	8- 9/16	16.14
829-664CFE[4*]	12X4	43- 1/2	13-15/16	5- 3/16	35	47.98
829-666CFE[3*]	12X6	37- 7/8	13-15/16	7- 1/2	28- 3/8	40.39
829-668CFE[2*]	12X8	29- 9/16	13-15/16	9- 5/8	19- 1/16	34.85
829-670CFE[*]	12X10	20- 5/8	13-15/16	11-15/16	9- 1/8	26.05
829-696CFE[3*]	14X6	41- 3/8	15- 3/16	7- 1/2	31- 1/8	45.55
829-698CFE[2*]	14X8	33- 1/16	15- 3/16	9- 5/8	21-13/16	39.31
829-700CFE[*]	14X10	24- 1/8	15- 3/16	11-15/16	11- 7/8	29.93
829-702CFE[*]	14X12	20- 1/8	15- 3/8	14- 1/8	6- 7/8	35.17
829-756CFE[4*]	16X6	54- 1/4	17- 1/2	7- 1/2	43	81.83
829-758CFE[3*]	16X8	45-15/16	17- 1/2	9- 5/8	33-11/16	86.98
829-760CFE[2*]	16X10	37	17- 1/2	11-15/16	23- 3/4	67.18
829-762CFE[2*]	16X12	33	17- 1/2	14- 1/8	18- 3/4	71.77
829-764CFE[*]	16X14	24- 5/8	17- 1/2	15- 1/2	9- 5/8	59.26
829-786CFE[5*]	18X6	69- 1/4	19-11/16	7- 1/2	57	59.26
829-788CFE[4*]	18X8	60-15/16	19-11/16	9- 5/8	47-11/16	148.97
829-790CFE[3*]	18X10	52	19-11/16	11-15/16	37- 3/4	138.73
829-792CFE[3*]	18X12	48	19-11/16	14- 1/8	32- 3/4	139.09
829-794CFE[2*]	18X14	39- 5/8	19-11/16	15- 1/2	23- 5/8	111.05
829-796CFE[*]	18X16	28- 5/8	19-11/16	17-11/16	11- 5/8	85.64

* Fabricated

Eccentric Reducer Coupling Footnotes

Multi-Step Configurations

The number after the part number denotes steps listed below.

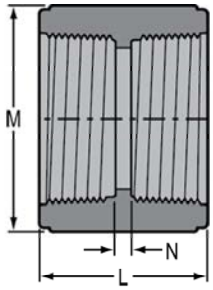


Example: 829-582CFE^2 (^{2}= 2 Step)

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Coupling

Fipt x Fipt

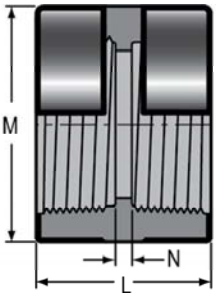


Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
830-002C	1/4	1-11/32	13/16	5/32	.02
830-003C	3/8	1-15/32	1	9/32	.03
830-005C	1/2	1- 5/8	1- 9/32	1/4	.07
830-007C	3/4	1-11/16	1- 5/8	3/32	.09
830-010C	1	2- 3/32	1-15/16	1/8	.15
830-012C	1-1/4	2- 3/16	2- 9/32	3/16	.22
830-015C	1-1/2	2- 7/32	2- 5/8	3/16	.29
830-020C	2	2- 7/32	3	7/32	.35
830-025C	2-1/2	3- 5/16	3- 9/16	1/8	.71
830-030C	3	3-15/32	4- 3/8	21/32	1.12
830-040C	4	3-21/32	5- 9/16	3/16	1.61
830-060CF*	6	3- 3/4	7- 3/16	3/4	1.76
830-080CF*	8	4-1/2	9-3/8	1-1/16	3.32

* Fabricated

Coupling - Special Reinforced

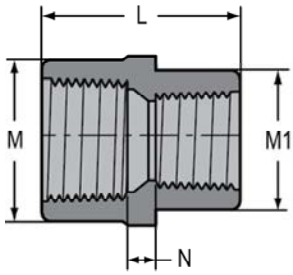
SR Fipt x SR Fipt - Stainless Steel Collar



Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
830-005CSR	1/2	1-19/32	1- 7/32	9/32	.06
830-007CSR	3/4	1- 5/8	1- 3/8	1/8	.07
830-010CSR	1	1-15/16	1-23/32	1/16	.12
830-012CSR	1-1/4	2- 1/16	2- 1/16	5/16	.17
830-015CSR	1-1/2	2- 5/32	2- 7/16	11/32	.25
830-020CSR	2	2- 1/4	3- 1/32	1/4	.39

Coupling - Reducer

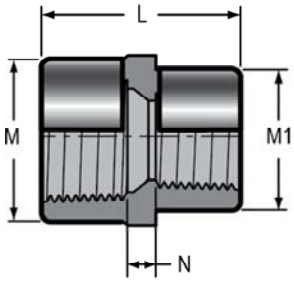
Fipt x Fipt



Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
830-072C	1/2X1/4	1-31/32	1-5/16	1-5/32	5/8	.08
830-073C	1/2X3/8	1-29/32	1-7/32	1-7/32	19/32	.08
830-101C	3/4X1/2	1-23/32	1- 3/8	1- 7/32	7/32	.06

Coupling - Special Reinforced Reducer

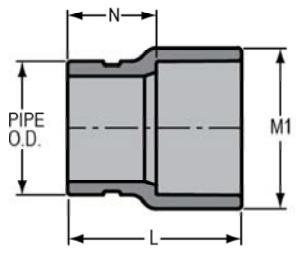
SR Fipt x SR Fipt - Stainless Steel Collar



Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
830-101CSR	3/4X1/2	1-3/4	1- 3/8	1- 7/32	1/4	.08
830-130CSR	1X1/2	2- 1/4	1-23/32	1- 7/32	21/32	.17
830-131CSR	1X3/4	2-13/32	1-23/32	1- 3/8	23/32	.16
830-210CSR	1-1/2X3/4	2- 7/8	2- 7/16	1- 3/8	1- 7/32	.30
830-211CSR	1-1/2X1	2-15/16	2- 7/16	1-11/16	7/16	.32
830-212CSR	1-1/2X1-1/4	2- 7/8	2- 1/2	2- 3/32	15/16	.34
830-249CSR	2X1	3- 3/16	3	1-23/32	1-17/32	.48
830-251CSR	2X1-1/2	3- 1/4	3	2- 7/16	1- 7/16	.52

Grooved Coupling Adapter

Groove x Socket



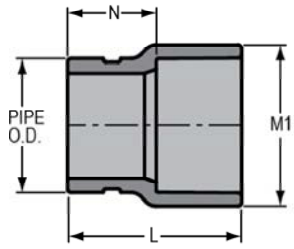
Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
833-012C	1-1/4	2-13/16	2- 1/16	1- 9/16	.16
833-015C	1-1/2	2-29/32	2-11/32	1- 1/2	.19
833-020C	2	3- 1/16	2- 7/8	1- 9/16	.29
833-025C	2-1/2	3- 3/8	3- 1/2	1- 5/8	.52
833-030C	3	3- 9/16	4- 3/16	1-11/16	.72
833-040C	4	4-17/32	5- 1/4	2- 9/32	1.37
833-050CF*	5	7	6- 5/16	4	2.77

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Grooved Coupling Adapter

(Continued)

Groove x Socket

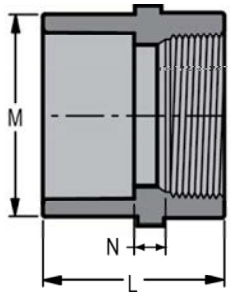


Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
833-060C	6	5- 5/16	7- 9/16	2- 5/16	2.99
833-080CF*	8	8- 3/16	9- 5/8	3-15/16	6.59
833-100CF*	10	9- 7/8	11-15/16	4- 5/8	10.90
833-120CF*	12	10- 7/8	14- 1/8	4- 5/8	19.87

* Fabricated

Female Adapter

Socket x Fipt

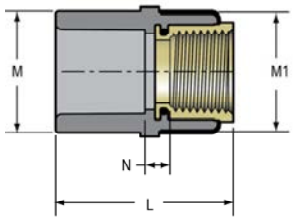


Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
835-002C	1/4	1-11/32	27/32	3/32	.02
835-003C	3/8	1-15/32	1	3/32	.03
835-098C	3/4X1/4	1-15/16	1-13/32	13/32	.06
835-005C	1/2	1-23/32	1- 5/32	1/8	.06
835-007C	3/4	1-27/32	1-13/32	3/32	.08
835-010C	1	2-1/4	1-3/4	3/32	.13
835-012C	1-1/4	2- 5/16	2- 3/32	3/32	.16
835-015C	1-1/2	2- 1/2	2-11/32	3/32	.21
835-020C	2	2-11/16	3	1/4	.41
835-025C	2-1/2	3- 1/4	3- 9/16	7/32	.72
835-030C	3	3-15/32	4- 1/4	3/16	.76
835-040C	4	3-31/32	5- 7/32	1/4	1.62
835-060C	6	4-31/32	7-21/32	5/16	3.22
835-080C	8	6- 5/32	9-23/32	1/4	5.39
835-080CF*	8	8- 9/16	9- 5/8	2- 9/16	6.89
835-100CF*	10	10- 1/4	11-15/16	3	11.58
835-120CF*	12	11- 1/8	14- 1/8	2- 5/8	16.51

* Fabricated

Female Adapter - Brass Transition

Socket x Fipt With Brass Thread Insert

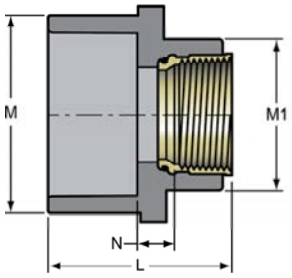


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
835-005CBR	1/2	1-25/32	1- 5/32	1- 7/32	5/8	.12
835-007CBR	3/4	2	1-13/32	1- 3/8	3/8	.15
835-010CBR	1	2- 7/32	1- 3/4	1-11/16	13/32	.24
835-012CBR	1-1/4	2- 3/8	2- 3/32	2- 1/16	3/8	.34
835-015CBR	1-1/2	2-17/32	2-13/32	2- 7/16	13/32	.46
835-020CBR	2	2-25/32	2- 7/8	3- 3/16	7/16	1.03

Not intended to convey or dispense water for human consumption through drinking or cooking

Female Adapter - Brass Transition Reducing

Socket x Fipt With Brass Thread Insert

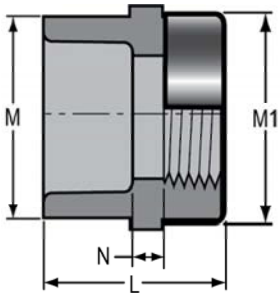


Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
835-101CBR	3/4X1/2	2- 1/32	1- 7/16	1- 3/16	15/32	.13

Not intended to convey or dispense water for human consumption through drinking or cooking

Female Adapter - Special Reinforced

Socket x SR Fipt - Stainless Steel Collar



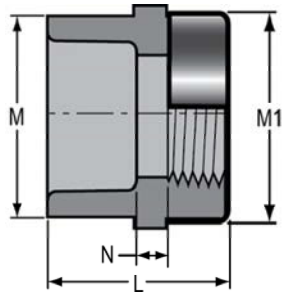
Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
835-002CSR	1/4	1-13/32	27/32	27/32	3/32	.03
835-003CSR	3/8	1-15/32	15/16	31/32	3/32	.03
835-005CSR	1/2	1-23/32	1- 5/32	1- 3/16	3/32	.06
835-007CSR	3/4	1- 7/8	1-13/32	1- 3/8	3/32	.08
835-010CSR	1	2- 1/8	1-23/32	1-11/16	3/32	.12
835-012CSR	1-1/4	2- 5/16	2- 3/32	2- 1/16	3/32	.24
835-015CSR	1-1/2	2- 7/16	2-13/32	2- 7/16	7/32	.28
835-020CSR	2	2-23/32	3	3- 1/32	1/4	.45
835-025CSR	2-1/2	3- 1/4	3- 9/16	3- 9/16	11/32	.72

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Female Adapter - Special Reinforced

(Continued)

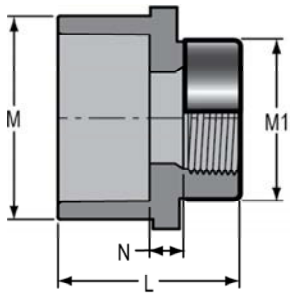
Socket x SR Fipt - Stainless Steel Collar



Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
835-030CSR	3	3- 1/2	4- 1/4	4- 9/32	7/32	1.01
835-040CSR	4	3-31/32	5- 7/32	5- 1/4	7/32	1.35
835-060CSR	6	4-31/32	7- 5/8	7-21/32	1/4	3.16

Female Adapter - Special Reinforced Reducing

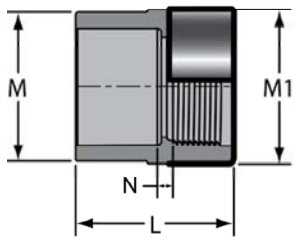
Socket x SR Fipt - Stainless Steel Collar



Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
835-074CSR	1/2X3/4	1- 3/4	1- 3/16	1- 3/8	7/32	.07
835-098CSR	3/4X1/4	1-15/16	1-13/32	27/32	13/32	.06
835-101CSR	3/4X1/2	1- 7/8	1- 3/8	1- 3/16	3/16	.07
835-102CSR	3/4X1	2- 1/16	1- 7/16	1-11/16	7/32	.12
835-130CSR	1X1/2	2	1-11/16	1- 3/16	7/32	.10
835-131CSR	1X3/4	2- 3/32	1- 3/4	1- 3/8	1/4	.12

Female Adapter - Encapsulated Special Reinforced

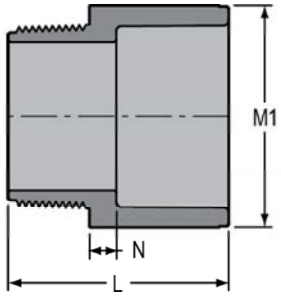
Socket x ESR Fipt



Part Number	Size	L	M	M1	N	Approx. Wt. (Lbs.)
835-002CESR	1/4	1- 1/2	27/32	29/32	3/32	.03
835-003CESR	3/8	1-17/32	15/16	1- 1/32	3/16	.04
835-005CESR	1/2	1- 7/8	1- 3/16	1- 9/32	9/32	.07
835-007CESR	3/4	2	1-13/32	1-15/32	1/8	.09
835-010CESR	1	2- 1/4	1- 3/4	1-13/16	1/8	.14
835-012CESR	1-1/4	2- 7/16	2- 1/8	2- 5/32	3/16	.26
835-015CESR	1-1/2	2- 9/16	2-13/32	2- 1/2	1/4	.31
835-020CESR	2	2-27/32	3	3- 3/32	13/32	.48

Male Adapter

Mipt x Socket

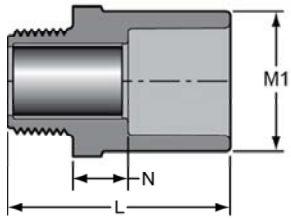


Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
836-005C	1/2	1-23/32	1- 5/32	3/16	.04
836-007C	3/4	1-27/32	1- 7/16	7/32	.06
836-102C	3/4X1	2- 9/32	1- 3/4	17/32	.10
836-131C	1X3/4	2- 1/16	1-13/32	1/4	.12
836-010C	1	2- 5/32	1-23/32	7/32	.10
836-012C	1-1/4	2- 1/4	2- 1/8	9/32	.15
836-015C	1-1/2	2-9/16	2- 13/32	9/32	.19
836-020C	2	2- 7/8	2- 7/8	5/16	.30
836-025C	2-1/2	3-21/32	3-17/32	11/32	.53
836-030C	3	3- 7/8	4- 1/4	3/8	.77
836-040C	4	4-13/32	5- 5/16	13/32	1.18
836-050CF*	5	6	6-5/16	1-5/8	2.71
836-060C	6	5- 1/2	7- 9/16	19/32	3.03
836-060CF*	6	6-1/2	7-1/2	1-13/16	3.92
836-080CF*	8	8- 3/16	9- 5/8	2- 3/16	6.67
836-100CF*	10	10- 3/8	11-15/16	3- 3/16	11.27
836-120CF*	12	11- 1/8	14- 1/8	2- 3/4	22.93

* Fabricated

Male Adapter - Internal Reinforced

R Mipt x Socket - Stainless Steel Sleeve
NSF® Certified Lead Free



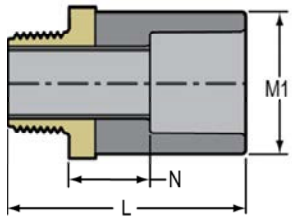
Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
836-005CR	1/2	2- 3/32	1- 5/32	9/16	.05
836-007CR	3/4	2- 1/4	1- 3/8	9/16	.08
836-010CR	1	2-21/32	1-23/32	11/16	.15



Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Male Adapter - CPVC Lined Brass Transition

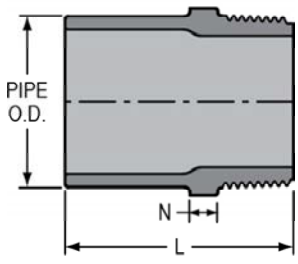
Brass Mipt x Socket
NSF® Certified Lead Free



Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
836-005CBR	1/2	2-13/32	1- 9/32	27/32	.20
836-007CBR	3/4	2-17/32	1-13/32	13/16	.26
836-010CBR	1	2-15/16	1-23/32	29/32	.50
836-012CBR	1-1/4	3- 1/8	2- 3/32	31/32	.66
836-015CBR	1-1/2	3- 9/32	2-11/32	1	.80
836-020CBR	2	3- 7/16	2-27/32	31/32	1.07

Male Spigot Adapter

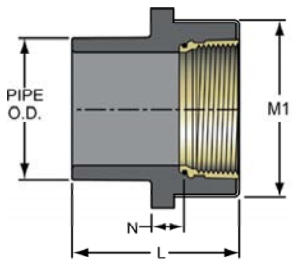
Spigot x Mipt



Part Number	Size	L	N	Approx. Wt. (Lbs.)
861-005C	1/2	1-13/16	5/16	.03
861-007C	3/4	1-31/32	5/16	.04
861-010C	1	2- 3/32	1/4	.07
861-131C	1X3/4	2	1/4	.07
861-012C	1-1/4	2- 9/32	1/8	.12
861-015C	1-1/2	2- 5/8	11/32	.14
861-020C	2	2-13/16	13/32	.24

Female Spigot Adapter - Brass Transition

Spigot x Fipt With Brass Thread Insert

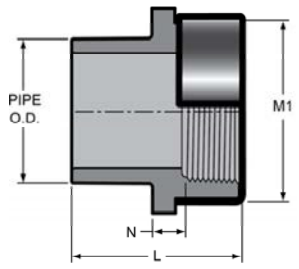


Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
878-010CBR	1	2-9/32	1-23/32	13/32	.22

Not intended to convey or dispense water for human consumption through drinking or cooking

Female Spigot Adapter - Special Reinforced

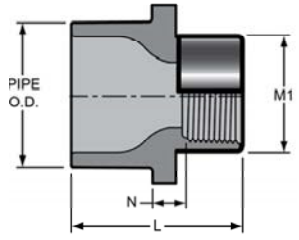
Spigot x SR Fipt - Stainless Steel Collar



Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
878-005CSR	1/2	1- 3/4	1- 3/16	5/32	.05
878-007CSR	3/4	1-15/16	1- 3/8	3/16	.07
878-010CSR	1	2- 1/4	1-11/16	7/32	.12
878-012CSR	1-1/4	2-15/32	2- 1/16	1/4	.18
878-015CSR	1-1/2	2-21/32	2- 7/16	13/32	.26
878-020CSR	2	2-13/16	3	3/8	.40
878-030CSR	3	3-27/32	4- 9/32	5/16	.96
878-040CSR	4	4- 3/8	5- 1/4	5/8	1.42

Female Spigot Adapter - Special Reinforced Reducing

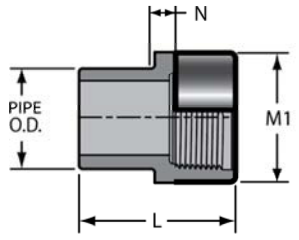
Spigot x SR Fipt - Stainless Steel Collar



Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
878-072CSR	1/2X1/4	1-13/32	27/32	3/16	.03
878-098CSR	3/4X1/4	1-27/32	27/32	7/32	.05
878-128CSR	1X1/4	2- 3/8	27/32	21/32	.08

Female Spigot Adapter - Encapsulated Special Reinforced

Spigot x ESR Fipt

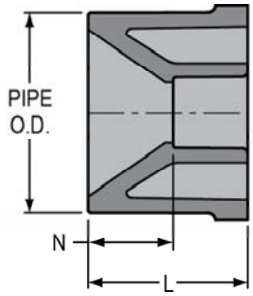


Part Number	Size	L	M1	N	Approx. Wt. (Lbs.)
878-005CESR	1/2	1- 7/8	1- 9/32	3/16	.06
878-007CESR	3/4	2- 1/16	1-15/32	3/8	.09
878-010CESR	1	2- 3/8	1-25/32	11/32	.14
878-012CESR	1-1/4	2-19/32	2- 5/32	5/16	.20
878-015CESR	1-1/2	2- 3/4	2- 1/2	13/32	.29
878-020CESR	2	2-15/16	3- 3/32	5/16	.43

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Reducer Bushing
Flush Style

Spigot x Socket

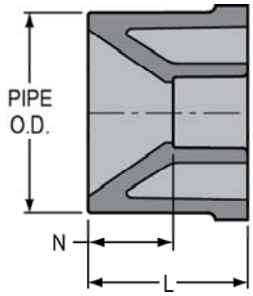


Part Number	Size	L	N	Approx. Wt. (Lbs.)
837-052C	3/8X1/4	31/32	5/16	.01
837-072C	1/2X1/4	1- 3/32	13/32	.02
837-073C	1/2X3/8	1- 1/8	11/32	.01
837-101C	3/4X1/2	1- 7/32	11/32	.02
837-129C[1]	1X3/8	1- 5/8	27/32	.08
837-130C	1X1/2	1-3/8	1/2	.06
837-131C	1X3/4	1-11/32	5/16	.03
837-166C	1-1/4X1/2	1- 1/2	5/8	.12
837-167C	1-1/4X3/4	1- 1/2	1/2	.09
837-168C	1-1/4X1	1-19/32	15/32	.06
837-209C	1-1/2X1/2	1-23/32	13/16	.15
837-210C	1-1/2X3/4	1- 5/8	5/8	.16
837-211C	1-1/2X1	1- 9/16	13/32	.12
837-212C	1-1/2X1-1/4	1- 9/16	9/32	.06
837-247C	2X1/2	1-29/32	1	.29
837-248C	2X3/4	1-29/32	21/32	.27
837-249C	2X1	1-25/32	5/8	.24
837-250C	2X1-1/4	1-11/16	7/16	.20
837-251C	2X1-1/2	1- 3/4	11/32	.15
837-289C[1]	2-1/2X1	2- 1/32	29/32	.39
837-290C	2-1/2X1-1/4	2- 5/32	13/32	.40
837-291C	2-1/2X1-1/2	2- 5/32	3/4	.40
837-292C	2-1/2X2	2-1/4	3/4	.29
837-333C	3X1/2	2-3/16	1-5/16	.64
837-334C[1]	3X3/4	2- 9/16	1-17/32	.73
837-335C	3X1	2- 9/32	1- 1/8	.70
837-336C	3X1-1/4	2- 1/4	1	.70
837-337C	3X1-1/2	2- 9/32	7/8	.66
837-338C	3X2	2-7/32	9/16	.63
837-339C	3X2-1/2	2-7/32	7/16	.40
837-419C	4X1-1/2	2-19/32	1-3/16	1.07
837-420C	4X2	2-21/32	1- 5/32	1.10
837-421C[1]	4X2-1/2	2-17/32	25/32	1.07
837-422C	4X3	2- 9/16	11/16	.85
837-490C	5X4	2-31/32	23/32	1.35
837-525C[1]	6X1	3-31/32	2-13/16	3.25
837-528C	6X2	3-17/32	2- 1/32	3.00
837-529C[1]	6X2-1/2	3-29/32	2- 5/32	3.46
837-530C	6X3	3-17/32	2- 1/8	3.05
837-532C	6X4	3- 9/16	1- 1/4	2.90
837-533CF*	6X5	3	3/8	1.75
837-534C	6X5	3-17/32	7/8	2.05
837-578C[1]	8X2	4-15/16	3- 3/8	6.63

Reducer Bushing
Flush Style

Spigot x Socket

(Continued)

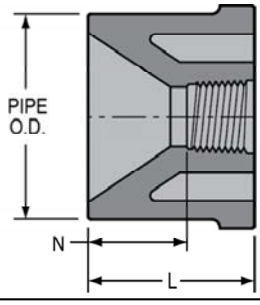


Part Number	Size	L	N	Approx. Wt. (Lbs.)
837-580C[1]	8X3	5- 1/8	3- 1/4	6.39
837-582C	8X4	4- 1/2	2- 1/4	5.53
837-585C	8X6	4- 3/8	1- 3/8	5.36
837-624C[1]	10X4	6	3- 3/4	13.30
837-626C	10X6	5- 5/16	2-5/16	10.39
837-628C	10X8	5-11/32	1-5/16	10.55
837-666CF*	12X6	6- 7/16	3- 3/8	20.72
837-668C	12X8	6- 7/8	2- 7/16	18.48
837-670CF*	12X10	6	1	12.31
837-696CF*	14X6	7-7/8	4-13/16	26.63
837-698CF*	14X8	7- 1/2	3- 7/16	21.51
837-700CF*	14X10	7	2	22.64
837-702CF*	14X12	7	1	10.33
837-756CF*	16X6	8-7/8	5-13/16	47.20
837-758CF*	16X8	8- 1/2	4- 7/16	42.24
837-760CF*	16X10	8	3	42.68
837-762CF*	16X12	8	2	31.01
837-764CF*	16X14	8	1	20.03
837-788CF*	18X8	9- 1/2	5- 7/16	68.96
837-796CF*	18X16	9	1	27.00

[1] Sized with Bushing
* Fabricated

Reducer Bushing
Flush Style

Spigot x Fipt



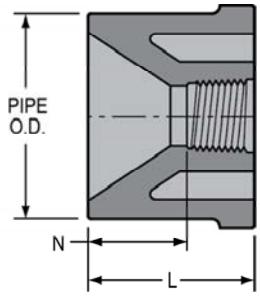
Part Number	Size	L	N	Approx. Wt. (Lbs.)
838-052C	3/8X1/4	31/32	3/8	.01
838-071C	1/2X1/8	1	9/16	.02
838-072C	1/2X1/4	1	7/8	.01
838-073C	1/2X3/8	1- 3/32	17/32	.01
838-098C	3/4X1/4	1- 7/32	5/8	.04
838-099C	3/4X3/8	1- 1/4	21/32	.03
838-101C	3/4X1/2	1-7/32	15/32	.02
838-129C	1X3/8	1-13/32	19/32	.06

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Reducer Bushing
Flush Style

Spigot x Fipt

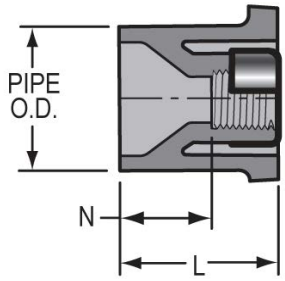
(Continued)



Part Number	Size	L	N	Approx. Wt. (Lbs.)
838-130C	1X1/2	1-11/32	21/32	.06
838-131C	1X3/4	1- 3/8	21/32	.05
838-166C	1-1/4X1/2	1-17/32	3/4	.11
838-167C	1-1/4X3/4	1- 7/16	23/32	.09
838-168C	1-1/4X1	1-17/32	5/8	.09
838-207C	1-1/2X1/4	1- 9/16	1- 3/16	.14
838-209C	1-1/2X1/2	1-11/16	31/32	.16
838-210C	1-1/2X3/4	1- 9/16	27/32	.14
838-211C	1-1/2X1	1-23/32	13/16	.15
838-212C	1-1/2X1-1/4	1- 1/2	9/16	.10
838-247C	2X1/2	1-29/32	1- 5/32	.26
838-248C	2X3/4	1- 7/8	1- 5/32	.26
838-249C	2X1	1-29/32	1	.26
838-250C	2X1-1/4	1-19/32	21/32	.25
838-251C	2X1-1/2	1- 9/16	5/8	.20
838-287C	2-1/2X1/2	2- 3/8	1-21/32	.45
838-288C	2-1/2X3/4	2- 7/16	1- 5/8	.48
838-289C	2-1/2X1	2- 5/32	1- 1/4	.41
838-290C	2-1/2X1-1/4	2-13/32	1- 3/8	.45
838-291C	2-1/2X1-1/2	2- 3/8	1-13/32	.51
838-292C	2-1/2X2	2- 1/16	1- 1/16	.26
838-334C	3X3/4	2- 9/32	1- 1/2	.62
838-335C	3X1	2- 9/32	1-11/32	.61
838-336C	3X1-1/4	2- 1/4	1- 3/8	.61
838-337C	3X1-1/2	2- 1/4	1- 5/8	.59
838-338C	3X2	2- 3/16	1- 7/32	.57
838-339C	3X2-1/2	2- 3/8	3/4	.50
838-420C	4X2	2-11/16	1-21/32	1.19
838-421C	4X2-1/2	2-21/32	1- 1/16	1.10
838-422C	4X3	2- 5/8	1	.84
838-528C	6X2	3-1/4	2-9/32	2.77
838-530C	6X3	3-17/32	2- 1/8	3.14
838-532C	6X4	3-17/32	2- 1/32	2.79

Reducer Bushing - Special Reinforced

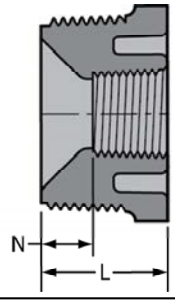
Spigot x SR Fipt - Stainless Steel Collar



Part Number	Size	L	N	Approx. Wt. (Lbs.)
838-128CSR	1X1/4	1-13/32	25/32	.08
838-207CSR	1-1/2X1/4	1- 9/16	1	.14
838-209CSR	1-1/2X1/2	1-23/32	31/32	.17
838-210CSR	1-1/2X3/4	1- 9/16	13/16	.16
838-247CSR	2X1/2	1-29/32	1- 5/32	.27
838-248CSR	2X3/4	1-29/32	1- 5/32	.27
838-249CSR	2X1	1- 7/8	31/32	.28
838-334CSR	3X3/4	2- 9/32	1-17/32	.62
838-335CSR	3X1	2- 9/32	1-11/32	.63
838-336CSR	3X1-1/4	2- 1/4	1- 5/16	.63
838-337CSR	3X1-1/2	2- 1/4	1- 3/8	.64
838-528CSR	6X2	3- 1/2	2- 9/16	2.73
838-530CSR	6X3	3-17/32	2- 1/8	3.07
838-532CSR	6X4	3-27/32	2	2.75

Reducer Bushing (T.T.) Flush Style

Mipt x Fipt



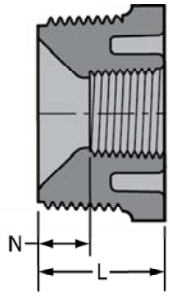
Part Number	Size	L	N	Approx. Wt. (Lbs.)
839-041C	1/4X1/8	23/32	11/32	.01
839-052C	3/8X1/4	13/16	1/8	.01
839-072C	1/2X1/4	29/32	9/32	.01
839-073C	1/2X3/8	15/16	11/32	.01
839-098C	3/4X1/4	1- 1/32	7/16	.03
839-099C	3/4X3/8	1- 1/32	7/16	.03
839-101C	3/4X1/2	15/16	3/16	.01
839-128C	1X1/4	1- 1/8	17/32	.06
839-129C	1X3/8	1- 7/32	5/8	.05
839-130C	1X1/2	1- 1/16	5/16	.05
839-131C	1X3/4	1- 1/8	13/32	.04
839-166C	1-1/4X1/2	1- 5/16	9/16	.09
839-167C	1-1/4X3/4	1- 9/32	9/16	.08
839-168C	1-1/4X1	1- 9/32	1- 1/32	.06
839-209C	1-1/2X1/2	1-11/32	19/32	.12
839-210C	1-1/2X3/4	1-11/32	19/32	.12
839-211C	1-1/2X1	1-11/32	13/32	.10

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Reducer Bushing (T.T.) Flush Style

(Continued)

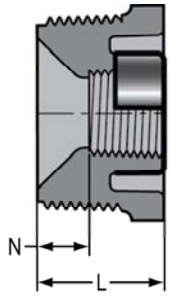
Mipt x Fipt



Part Number	Size	L	N	Approx. Wt. (Lbs.)
839-212C	1-1/2X1-1/4	1-11/32	13/32	.06
839-247C	2X1/2	1- 3/8	21/32	.18
839-248C	2X3/4	1- 3/8	5/8	.18
839-249C	2X1	1- 3/8	15/32	.18
839-250C	2X1-1/4	1- 3/8	7/16	.16
839-251C	2X1-1/2	1- 3/8	13/32	.12
839-292C	2-1/2X2	1-29/32	7/8	.22
839-337C	3X1-1/2	1-15/16	29/32	.52
839-338C	3X2	1-15/16	15/16	.46
839-339C	3X2-1/2	1-15/16	5/8	.38
839-420C	4X2	2- 1/8	1- 1/8	.86
839-422C	4X3	2- 1/8	1/2	.74
839-532C	6X4	3-17/32	1-13/16	3.05

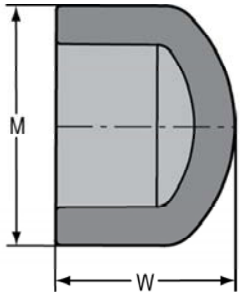
Reducer Bushing - Special Reinforced Reducing Flush Style

Mipt x SR Fipt - Stainless Steel Collar



Part Number	Size	L	N	Approx. Wt. (Lbs.)
839-209CSR	1-1/2X1/2	1-11/32	19/32	.12
839-210CSR	1-1/2X3/4	1-11/32	19/32	.12
839-247CSR	2X1/2	1- 3/8	21/32	.18
839-248CSR	2X3/4	1- 3/8	5/8	.18
839-249CSR	2X1	1- 3/8	15/32	.20
839-420CSR	4X2	2- 1/8	1- 1/8	.90

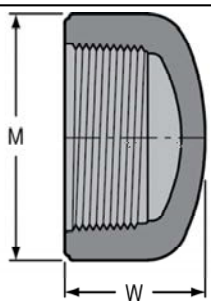
Cap
Socket



Part Number	Size	M	W	Approx. Wt. (Lbs.)
847-002C	1/4	13/16	15/16	.01
847-003C	3/8	31/32	1- 1/8	.02
847-005C	1/2	1- 3/16	1- 7/32	.03
847-007C	3/4	1- 3/8	1-13/32	.04
847-010C	1	1-23/32	1- 5/8	.08
847-012C	1-1/4	2- 3/32	1-27/32	.12
847-015C	1-1/2	2-11/32	2	.17
847-020C	2	2-27/32	2- 9/32	.26
847-025C	2-1/2	3-17/32	2- 5/8	.46
847-030C	3	4- 5/32	3- 1/32	.73
847-040C	4	5- 1/4	3-19/32	1.20
847-060C	6	7- 1/2	4- 7/8	3.29
847-080C	8	9-23/32	6- 3/8	6.35
847-100CF*	10	12- 1/4	5-15/16	7.48
847-120CF*	12	14- 1/4	7- 1/8	12.11
847-140CF*	14	15- 1/2	7- 3/8	14.71
847-160CF*	16	17- 7/8	9	24.00
847-180CF*	18	19-15/16	9-1/4	28.87
847-200CF*	20	22	14-1/4	45.81

* Fabricated

Cap
Fipt



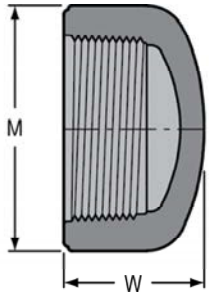
Part Number	Size	M	W	Approx. Wt. (Lbs.)
848-002C	1/4	29/32	15/16	.01
848-003C	3/8	31/32	29/32	.01
848-005C	1/2	1- 3/16	1- 1/16	.03
848-007C	3/4	1- 3/8	1- 7/32	.04
848-010C	1	1-27/32	1- 7/16	.10
848-012C	1-1/4	2- 7/32	1-17/32	.15
848-015C	1-1/2	2-17/32	1- 5/8	.20
848-020C	2	3- 5/32	1-25/32	.29
848-025C	2-1/2	3- 5/8	2- 7/16	.58
848-030C	3	4- 3/8	2- 7/16	.77

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Cap

(Continued)

Fipt

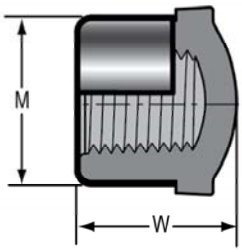


Part Number	Size	M	W	Approx. Wt. (Lbs.)
848-040C	4	5- 7/16	3- 1/16	1.37
848-080CF*	8	9-3/8	4-3/8	3.76

* Fabricated

Cap - Special Reinforced

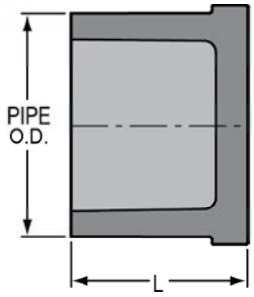
SR Fipt - Stainless Steel Collar



Part Number	Size	M	W	Approx. Wt. (Lbs.)
848-002CSR	1/4	27/32	27/32	.01
848-003CSR	3/8	31/32	29/32	.02
848-005CSR	1/2	1-3/16	1-1/16	.04
848-007CSR	3/4	1- 3/8	1- 3/32	.05
848-030CSR	3	4- 9/32	2- 7/16	.84

Plug

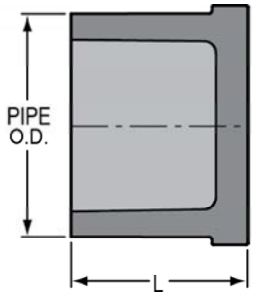
Spigot



Part Number	Size	L	Approx. Wt. (Lbs.)
849-005C	1/2	1- 1/8	.03
849-007C	3/4	1- 1/4	.03
849-010C	1	1- 3/8	.06
849-012C	1-1/4	1-17/32	.10
849-015C	1-1/2	1-11/16	.14
849-020C	2	1- 7/8	.22
849-025CF[4*]	2-1/2	5- 3/8	1.12
849-030CF[4*]	3	5- 5/8	1.55
849-040CF[4*]	4	6- 1/2	2.66

Plug
Spigot

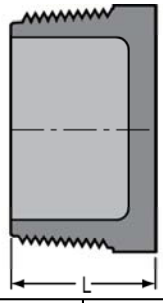
(Continued)



Part Number	Size	L	Approx. Wt. (Lbs.)
849-060CF[4*]	6	9	6.75
849-080CF[4*]	8	12	13.50
849-100CF[4*]	10	11-15/16	17.99
849-120CF[4*]	12	14- 1/8	28.85

[4] Plug fabricated using Cap and pipe spigot.
* Fabricated

Plug
Mipt



Part Number	Size	L	Approx. Wt. (Lbs.)
850-002C	1/4	23/32	.01
850-003C	3/8	13/16	.01
850-005C	1/2	13/16	.01
850-007C	3/4	7/8	.02
850-010C	1	1- 1/4	.04
850-012C	1-1/4	1- 9/32	.07
850-015C	1-1/2	1-11/32	.10
850-020C	2	1- 3/8	.16
850-025C	2-1/2	1-25/32	.29
850-030C	3	1- 7/8	.45
850-040C	4	2- 3/32	.81
850-060C	6	2- 3/32	1.79
850-080C	8	2-3/8	3.53
850-080CF[4*]	8	8- 5/8	12.18
850-100CF[4*]	10	8- 7/16	13.76

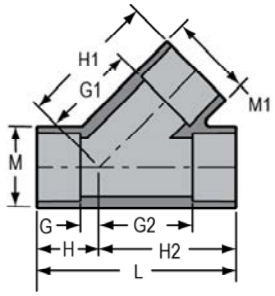
[4] Plug fabricated using Cap and threaded pipe.
* Fabricated

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Wye

Socket x Socket x Socket

1/2" - 2" - 235 psi Maximum Internal Pressure Rating @ 73°F (23°C), 2-1/2" - 6" - 150 psi Maximum Internal Pressure Rating @ 73°F (23° C), 8" - Larger & All Fabricated Sizes - 80 psi Maximum Internal Pressure Rating @ 73°F (23° C)



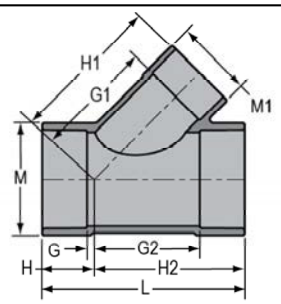
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
875-005C	1/2	1/4	1-3/16	1-3/16	1- 1/8	2- 1/16	2-1/16	3- 3/16	1- 5/32	1- 5/32	.12
875-007C	3/4	5/16	1- 3/8	1- 3/8	1- 5/16	2- 3/8	2- 3/8	3-23/32	1- 3/8	1- 3/8	.19
875-010C	1	5/16	1- 3/4	1- 3/4	1- 7/16	2-29/32	2- 7/8	4-11/32	1-11/16	1-11/16	.32
875-012C	1-1/4	13/32	2- 5/32	2- 5/32	1-21/32	3-13/32	3-13/32	5- 3/32	2- 1/16	2- 1/16	.52
875-015C	1-1/2	17/32	2- 1/2	2- 1/2	1-29/32	3- 7/8	3- 7/8	5-13/16	2- 5/16	2- 5/16	.73
875-020C	2	5/8	3- 7/32	3- 7/32	2- 5/32	4- 7/8	4- 7/8	6- 7/8	2- 7/8	2- 7/8	1.27
875-025C	2-1/2	27/32	3-31/32	3-31/32	2-19/32	5-23/32	5-23/32	8- 5/16	3- 1/2	3- 1/2	2.04
875-030C	3	31/32	4- 3/4	4-25/32	2-27/32	6- 5/8	6-21/32	9- 1/2	4- 3/16	4- 3/16	3.12
875-040C	4	1- 1/4	6- 1/32	6- 1/32	3- 1/2	8- 9/32	8- 9/32	11-25/32	5- 1/4	5- 1/4	5.35
875-060C	6	1- 5/32	8-25/32	8- 3/16	4- 3/16	11-25/32	11- 3/16	15- 3/8	7- 9/16	7- 9/16	13.21
875-080C	8	1-15/16	11-11/32	11-11/32	5-31/32	15-11/32	15-11/32	21- 5/16	9- 3/4	9- 3/4	28.12
875-080CF[2*]	8	5- 1/16	15- 7/8	13-11/16	9- 5/16	20- 1/8	17-15/16	27- 1/4	9- 5/8	9- 5/8	37.70
875-100CF[2*]	10	6- 1/2	18- 7/8	17- 1/4	11- 3/4	24- 1/8	22- 1/2	34- 1/4	11-15/16	11-15/16	78.20
875-120CF[2*]	12	7- 1/8	21-13/16	19- 7/8	13- 3/8	28- 1/16	26- 1/8	39- 1/2	14- 1/8	14- 1/8	107.26
875-140CF[2*]	14	9-13/16	23-13/16	23-13/16	16-13/16	30-13/16	30-13/16	47- 5/8	15- 1/2	15- 1/2	159.14
875-160CF[2*]	16	10- 1/8	26- 1/8	26- 1/8	18- 1/8	34- 1/8	34- 1/8	52- 1/4	17-11/16	17-11/16	211.72
875-180CF[2*]	18	10	29- 3/8	28	19	38- 3/8	37	56	19- 7/8	19- 7/8	292.03

[2] Fiberglass reinforced.
* Fabricated

Wye - Reducing

Socket x Socket x Socket

1/2" - 2" - 235 psi Maximum Internal Pressure Rating @ 73°F (23°C), 2-1/2" - 6" - 150 psi Maximum Internal Pressure Rating @ 73°F (23° C), 8" - Larger & All Fabricated Sizes - 80 psi Maximum Internal Pressure Rating @ 73°F (23° C)



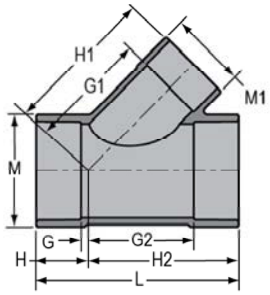
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
875-167C[1]	1-1/4X3/4	3/8	2- 3/4	2- 1/4	1- 5/8	3- 3/4	3- 1/2	5- 1/8	2- 1/16	2- 1/16	.62
875-168C[1]	1-1/4X1	3/8	2- 5/8	2- 1/4	1- 5/8	3- 3/4	3- 1/2	5- 1/8	2- 1/16	2- 1/16	.59
875-210C[1]	1-1/2X3/4	1/2	3- 1/2	2- 9/16	1- 7/8	4- 1/2	3-15/16	5-13/16	2-11/32	2-11/32	.90
875-211C[1]	1-1/2X1	1/2	3	2- 9/16	1- 7/8	4- 5/32	3-15/16	5-13/16	2-11/32	2-11/32	.86
875-212C[1]	1-1/2X1-1/4	1/2	3- 1/4	2- 9/16	1- 7/8	4- 1/2	3-15/16	5-13/16	2-11/32	2-11/32	.80
875-248C[1]	2X3/4	5/8	4- 5/32	3- 7/32	2- 5/32	5- 5/32	4- 7/8	6- 7/8	2- 7/8	2- 7/8	1.55
875-250C[1]	2X1-1/4	5/8	3- 5/16	3- 3/8	2- 5/32	5	4- 3/4	6- 7/8	2- 7/8	2- 7/8	1.48
875-251C[1]	2X1-1/2	1/2	3-23/32	3-11/32	2- 1/32	5- 3/32	4- 7/8	6- 7/8	2- 7/8	2- 7/8	1.43
875-335C[1]	3X1	11/16	5- 7/8	4- 7/32	2- 9/16	6-15/16	6- 1/8	8-23/32	4- 3/16	4- 3/16	3.82
875-336C[1]	3X1-1/4	7/8	5- 3/4	4- 1/8	2- 3/4	7	6	8- 3/4	4- 3/16	4- 3/16	3.83
875-337C[1]	3X1-1/2	15/16	5-11/16	4-3/4	2-13/16	7-1/16	6-5/8	9-7/16	4-3/16	4-3/16	3.79

Wye - Reducing

(Continued)

Socket x Socket x Socket

1/2" - 2" - 235 psi Maximum Internal Pressure Rating @ 73°F (23°C), 2-1/2" - 6" - 150 psi Maximum Internal Pressure Rating @ 73°F (23° C), 8" - Larger & All Fabricated Sizes - 80 psi Maximum Internal Pressure Rating @ 73°F (23° C)



Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
875-338C[1]	3X2	1	5-11/32	4- 3/4	2- 7/8	6-31/32	6- 5/8	9- 1/2	4- 3/16	4- 3/16	3.76
875-339C[1]	3X2-1/2	7/8	4- 1/8	4-21/32	2- 3/4	6- 3/4	6	8- 3/4	4- 3/16	4- 3/16	3.53
875-420C	4X2	-3/16	4-31/32	4-15/32	2-1/6	6-15/32	6-23/32	8-25/32	5-1/4	2-29/32	3.13
875-422C[1]	4X3	1/2	5- 7/16	5- 7/32	2- 3/4	7- 5/16	7-15/32	10- 7/32	5- 1/4	4- 3/16	4.18
875-528C[1]	6X2	1/16	8-13/16	6- 9/16	3- 1/16	10- 5/16	9- 9/16	12- 5/8	7- 9/16	5- 7/16	10.33
875-528CF[2*]	6X2	1-15/16	9- 3/16	8- 9/16	5- 3/16	10-15/16	11-13/16	17	7- 1/2	2-13/16	12.18
875-530C[1]	6X3	1/16	8- 3/8	6-11/16	3	10- 1/4	9-11/16	12- 5/8	7- 9/16	5- 3/8	10.08
875-530CF[2*]	6X3	2-15/16	10- 5/16	9- 9/16	6- 3/16	12- 9/16	12-13/16	19	7- 1/2	4- 1/8	14.44
875-532C	6X4	31/32	6- 9/16	5-11/16	3-15/16	8-27/32	8-23/32	12-21/32	7- 9/16	5- 7/16	9.22
875-578C[1]	8X2	2	14-15/16	11- 1/4	6	16- 9/16	16- 7/16	21- 1/4	9-11/16	9-11/16	16.42
875-578CF[2*]	8X2	7/8	10- 1/2	9- 1/2	5- 1/8	12- 1/4	13- 3/4	18- 7/8	9- 5/8	2-13/16	19.11
875-579CF[2*]	8X2-1/2	1- 7/16	10-15/16	10- 1/16	5-11/16	12-15/16	14- 5/16	20	9- 5/8	3- 7/16	18.53
875-580CF[2*]	8X3	1-15/16	11- 5/8	10- 9/16	6- 3/16	13- 7/8	14-13/16	21	9- 5/8	4- 1/8	21.71
875-582C	8X4	-11/16	9- 1/8	8-1/4	3- 5/16	11- 3/8	12-1/4	15-9/16	9-3/4	5- 1/4	15.31
875-582CF[2*]	8X4	2-15/16	11- 7/8	11- 9/16	7- 3/16	14- 1/8	15-13/16	23	9- 5/8	5- 3/16	24.77
875-585C[1]	8X6	2	12-15/16	11- 1/4	6	15-15/16	15- 1/4	21- 1/4	9-11/16	9-11/16	33.48
875-585CF[2*]	8X6	4-15/16	13-15/16	13- 9/16	9- 3/16	17- 3/16	17-13/16	27	9- 5/8	7- 1/2	32.07
875-621CF[2*]	10X2	1/4	11- 7/8	10- 1/2	5	13- 5/8	15- 3/4	20- 3/4	11-15/16	2-13/16	29.82
875-623CF[2*]	10X3	3/4	13	11- 1/2	6	15- 1/4	16- 3/4	22- 3/4	11-15/16	4- 1/8	33.43
875-624CF[2*]	10X4	1- 3/4	13- 1/4	12- 1/2	7	15- 1/2	17- 3/4	24- 3/4	11-15/16	5- 3/16	34.35
875-626C	10X6	-3/16	12	11	4-13/16	15	16	20-25/32	12- 1/16	7-21/32	29.73
875-626CF[2*]	10X6	3- 3/4	15- 5/16	14- 1/2	9	18- 9/16	19- 3/4	28- 3/4	11-15/16	7- 1/2	47.48
875-628C	10X8	1-7/8	12-5/8	11-15/16	6-15/16	16-5/8	16-15/16	23-13/16	12- 1/32	9-3/4	37.73
875-628CF[2*]	10X8	5- 1/4	17- 1/4	16	10- 1/2	21- 1/2	21- 1/4	31- 3/4	11-15/16	9- 5/8	56.36
875-661CF[2*]	12X2	1- 5/16	13- 3/16	11- 7/16	4-15/16	14-15/16	17-11/16	22- 5/8	14- 1/8	2-13/16	44.03
875-663CF[2*]	12X3	1/8	14- 5/16	12- 7/8	6- 3/8	16- 9/16	19- 1/8	25- 1/2	14- 1/8	4- 1/8	44.74
875-664CF[2*]	12X4	5/8	14- 9/16	13- 3/8	6- 7/8	16-13/16	19- 5/8	26- 1/2	14- 1/8	5- 3/16	50.66
875-666CF[2*]	12X6	2- 5/8	16- 5/8	15- 3/8	8- 7/8	19- 7/8	21- 5/8	30- 1/2	14- 1/8	7- 1/2	63.31
875-668CF[2*]	12X8	4- 1/4	18- 9/16	17	10- 1/2	22-13/16	23- 1/4	33- 3/4	14- 1/8	9- 5/8	74.48
875-670CF[2*]	12X10	5- 3/4	20- 3/16	18- 1/2	12	25- 7/16	24- 3/4	36- 3/4	14- 1/8	11-15/16	86.93
875-694CF[2*]	14X4	1- 1/4	15- 5/16	15- 1/4	8- 1/4	17- 9/16	22- 1/4	30- 1/2	15- 1/2	5- 3/16	73.56
875-696CF[2*]	14X6	2	17- 3/8	16	9	20- 5/8	23	32	15- 1/2	7- 1/2	83.85
875-698CF[2*]	14X8	4- 1/4	19- 5/16	18- 1/4	11- 1/4	23- 9/16	25- 1/4	36- 1/2	15- 1/2	9- 5/8	93.92
875-702CF[2*]	14X12	7- 1/4	22- 9/16	21- 1/4	14- 1/4	28-13/16	28- 1/4	42- 1/2	15- 1/2	14- 1/8	133.37
875-754CF[2*]	16X4	1- 1/8	16- 5/8	17- 1/8	9- 1/8	18- 7/8	25- 1/8	34- 1/4	17-11/16	5- 3/16	103.11
875-756CF[2*]	16X6	1- 5/8	18-11/16	17- 5/8	9- 5/8	21-15/16	25- 5/8	35- 1/4	17-11/16	7- 1/2	107.53
875-758CF[2*]	16X8	3- 5/8	20- 5/8	19- 5/8	11- 5/8	24- 7/8	27- 5/8	39- 1/4	17-11/16	9- 5/8	126.98
875-760CF[2*]	16X10	5- 1/8	22- 1/4	21- 1/8	13- 1/8	27- 1/2	29- 1/8	42- 1/4	17-11/16	11-15/16	137.96
875-762CF[2*]	16X12	6- 1/2	23- 7/8	22- 1/2	14- 1/2	30- 1/8	30- 1/2	45	17-11/16	14- 1/8	165.90
875-764CF[2*]	16X14	7- 7/8	25- 1/8	23- 7/8	15- 7/8	32- 1/8	31- 7/8	47- 3/4	17-11/16	15- 1/2	167.10

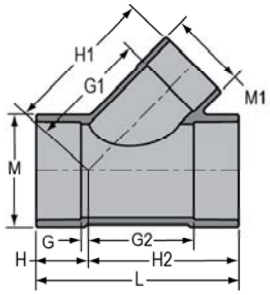
Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Wye - Reducing

(Continued)

Socket x Socket x Socket

1/2" - 2" - 235 psi Maximum Internal Pressure Rating @ 73°F (23°C), 2-1/2" - 6" - 150 psi Maximum Internal Pressure Rating @ 73°F (23° C), 8" - Larger & All Fabricated Sizes - 80 psi Maximum Internal Pressure Rating @ 73°F (23° C)



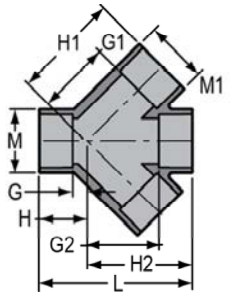
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
875-784CF[2*]	18X4	0	17- 7/8	18	9	20- 1/8	27	36	19- 7/8	5- 3/16	117.96
875-786CF[2*]	18X6	3/8	20- 1/8	18- 9/16	9- 3/8	23- 3/8	27- 9/16	36-15/16	19- 7/8	7- 1/2	123.00
875-788CF[2*]	18X8	3	21- 7/8	21	12	26- 1/8	30	42	19- 7/8	9- 5/8	144.89
875-790CF[2*]	18X10	4- 1/2	23- 1/2	22- 1/2	13- 1/2	28- 3/4	31- 1/2	45	19- 7/8	11-15/16	197.59
875-792CF[2*]	18X12	6	25- 1/8	24	15	31- 3/8	33	48	19- 7/8	14- 1/8	187.13
875-794CF[2*]	18X14	7	26- 3/8	25	16	33- 3/8	34	50	19- 7/8	15- 1/2	211.64
875-796CF[2*]	18X16	8- 1/2	27- 3/8	26- 1/2	17- 1/2	35- 3/8	35- 1/2	53	19- 7/8	17-11/16	243.00

[1] Sized with Bushing
[2] Fiberglass reinforced.
* Fabricated

Double Wye

Socket x Socket x Socket x Socket

100 psi Maximum internal Pressure Rating @ 73° F (23°C)



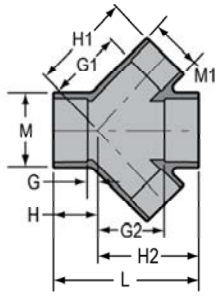
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
876-020CF[2*]	2	3- 7/8	6- 1/4	6- 1/4	5- 7/16	7-13/16	7-13/16	13- 3/16	2- 7/8	2- 7/8	5.16
876-030CF[2*]	3	4-3/4	8-1/4	8-1/4	6-5/8	10-3/16	10-3/16	16-13/16	4- 3/16	4- 3/16	10.11
876-040CF[2*]	4	4-11/16	9- 3/16	9- 3/16	6-15/16	11- 7/16	11- 7/16	18- 3/8	5- 3/16	5- 3/16	13.41
876-060CF[2*]	6	4-15/16	12- 5/8	11- 9/16	8- 3/16	15- 7/8	14-13/16	23	7- 1/2	7- 1/2	30.18
876-080CF[2*]	8	5- 1/16	15- 7/8	13-11/16	9- 5/16	20- 1/8	17-15/16	27- 1/4	9- 5/8	9- 5/8	53.78
876-100CF[2*]	10	6- 1/2	18- 7/8	17- 1/4	11- 3/4	24- 1/8	22- 1/2	34- 1/4	11-15/16	11-15/16	93.99
876-120CF[2*]	12	7- 1/8	21-13/16	19- 7/8	13- 3/8	28- 1/16	26- 1/8	39- 1/2	14- 1/8	14- 1/8	149.18

[2] Fiberglass reinforced.
* Fabricated

Double Wye - Reducing

Socket x Socket x Socket x Socket

Size 3" is 150 psi, all Fabricated Sizes- 100 psi Maximum Internal Pressure Rating @ 73°F (23° C)



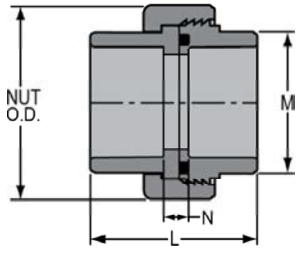
Part Number	Size	G	G1	G2	H	H1	H2	L	M	M1	Approx. Wt. (Lbs.)
876-338C	3X2	3/16	4- 1/4	4	2-1/16	5- 3/4	5-7/8	7-15/16	4- 3/16	2- 7/8	2.39
876-421CF[2*]	4X2-1/2	4- 9/16	8-13/16	9- 1/16	6-13/16	10- 1/2	11- 5/16	18- 1/8	5- 1/4	3- 1/2	9.09
876-422CF[2*]	4X3	4-11/16	10	9- 3/16	6-15/16	11-13/16	11- 7/16	18- 3/8	5- 3/16	5- 3/16	15.13
876-528CF[2*]	6X2	1-15/16	9- 3/16	8- 9/16	5- 3/16	10-15/16	11-13/16	17	7- 1/2	2-13/16	13.76
876-529CF[2*]	6X2-1/2	2- 7/16	9- 5/8	9- 1/16	5-11/16	11- 5/8	12- 5/16	18	7- 1/2	3- 7/16	12.12
876-530CF[2*]	6X3	2-15/16	10- 5/16	9- 9/16	6- 3/16	12- 9/16	12-13/16	19	7- 1/2	4- 1/8	16.03
876-532CF[2*]	6X4	3-15/16	10- 9/16	10- 9/16	7- 3/16	12-13/16	13-13/16	21	7- 1/2	5- 3/16	19.77
876-578CF[2*]	8X2	7/8	10- 1/2	9- 1/2	5- 1/8	12- 1/4	13- 3/4	18- 7/8	9- 5/8	2-13/16	17.30
876-579CF[2*]	8X2-1/2	1- 7/16	10-15/16	10- 1/16	5-11/16	12-15/16	14- 5/16	20	9- 5/8	3- 7/16	19.58
876-580CF[2*]	8X3	1-15/16	11- 5/8	10- 9/16	6- 3/16	13- 7/8	14-13/16	21	9- 5/8	4- 1/8	20.70
876-582CF[2*]	8X4	2-15/16	11- 7/8	11- 9/16	7- 3/16	14- 1/8	15-13/16	23	9- 5/8	5- 3/16	28.85
876-585CF[2*]	8X6	4-15/16	13-15/16	13- 9/16	9- 3/16	17- 3/16	17-13/16	27	9- 5/8	7- 1/2	41.47
876-621CF[2*]	10X2	1/4	11- 7/8	10- 1/2	5	13- 5/8	15- 3/4	20- 3/4	11-15/16	2-13/16	27.20
876-622CF[2*]	10X2-1/2	1/8	12- 5/16	10- 7/8	5- 3/8	14- 5/16	16- 1/8	21- 1/2	11-15/16	3- 7/16	29.09
876-623CF[2*]	10X3	3/4	13	11- 1/2	6	15- 1/4	16- 3/4	22- 3/4	11-15/16	4- 1/8	31.16
876-624CF[2*]	10X4	1- 3/4	13- 1/4	12- 1/2	7	15- 1/2	17- 3/4	24- 3/4	11-15/16	5- 3/16	35.90
876-626CF[2*]	10X6	3- 3/4	15- 5/16	14- 1/2	9	18- 9/16	19- 3/4	28- 3/4	11-15/16	7- 1/2	46.54
876-628CF[2*]	10X8	5- 1/4	17- 1/4	16	10- 1/2	21- 1/2	21- 1/4	31- 3/4	11-15/16	9- 5/8	70.04
876-661CF[2*]	12X2	1- 5/16	13- 3/16	11- 7/16	4-15/16	14-15/16	17-11/16	22- 5/8	14- 1/8	2-13/16	39.69
876-662CF[2*]	12X2-1/2	15/16	13- 5/8	11-13/16	5- 5/16	15- 5/8	18- 1/16	23- 3/8	14- 1/8	3- 7/16	42.00
876-663CF[2*]	12X3	1/8	14-15/16	12- 7/8	6- 3/8	16- 9/16	19- 1/8	25- 1/2	14- 1/8	4- 1/8	46.17
876-666CF[2*]	12X6	2- 5/8	16- 5/8	15- 3/8	8- 7/8	19- 7/8	21- 5/8	30- 1/2	14- 1/8	7- 1/2	63.31
876-668CF[2*]	12X8	4- 1/4	18- 9/16	17	10- 1/2	22-13/16	23- 1/4	33- 3/4	14- 1/8	9- 5/8	79.18
876-664CF[2*]	12X4	5/8	14- 9/16	13- 3/8	6- 7/8	16-13/16	19- 5/8	26- 1/2	14- 1/8	5- 3/16	49.78
876-670CF[2*]	12X10	5- 3/4	20- 3/16	18- 1/2	12	25- 7/16	24- 3/4	36- 3/4	14- 1/8	11-15/16	102.16

[2] Fiberglass reinforced.
* Fabricated

Union 2000 - Socket/FKM

Socket x Socket with FKM O-ring Seal

Dimensions Also Applicable to 8097-XXXC EPDM O-Ring Seals



Pressure Rating
1/2" - 4" 235 psi @ 73°F
6" 150 PSI @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
857-002C	1/4	1-15/16	15/16	5/8	1-21/32	.09
857-003C	3/8	2- 5/32	1- 1/32	19/32	1-25/32	.11

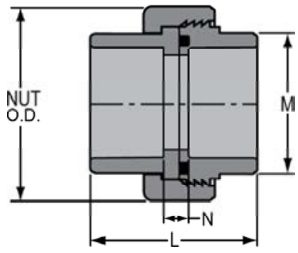
Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Union 2000 - Socket/FKM

(Continued)

Socket x Socket with FKM O-ring Seal

Dimensions Also Applicable to
8097-XXXC EPDM O-Ring Seals



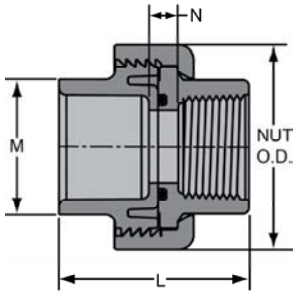
Pressure Rating
1/2" - 4" 235 psi @ 73°F
6" 150 PSI @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
8057-005C	1/2	2- 3/32	1- 3/16	11/32	1- 7/8	.12
8057-007C	3/4	2- 3/8	1-13/32	3/8	2- 9/32	.20
8057-010C	1	2-11/16	1-23/32	7/16	2- 9/16	.28
8057-012C	1-1/4	2-15/16	2- 3/32	7/16	3- 3/32	.41
8057-015C	1-1/2	3- 1/4	2- 3/8	1/2	3- 1/2	.54
8057-020C	2	3-17/32	2- 7/8	17/32	4- 9/32	.90
8057-025C	2-1/2	4- 7/32	3- 1/2	25/32	6- 5/32	2.25
8057-030C	3	4- 1/4	4- 3/16	1/2	6- 5/32	2.27
8057-040C	4	5- 1/8	5- 1/4	5/8	7- 3/4	4.02
8057-060C	6	6-27/32	7- 1/2	25/32	11- 5/8	12.26

Union 2000 - Socket/Fipt/FKM

Socket x Fipt with FKM O-ring Seal

Dimensions Also Applicable to
8099-XXXC EPDM O-Ring Seals



Pressure Rating
1/2" - 4" 235 psi @ 73°F
6" 150 PSI @ 73°F

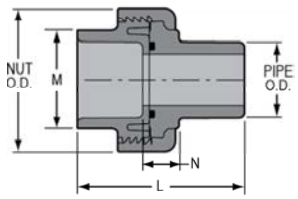
Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
8059-005C	1/2	1- 7/8	1- 3/16	5/16	1- 7/8	.12
8059-007C	3/4	2- 1/16	1-13/32	5/16	2- 9/32	.19
8059-010C	1	2-13/32	1-23/32	13/32	2- 9/16	.27
8059-012C	1-1/4	2-19/32	2- 3/32	13/32	3- 1/8	.40
8059-015C	1-1/2	2-13/16	2- 3/8	1/2	3- 1/2	.53
8059-020C	2	2-31/32	2- 7/8	13/32	4- 9/32	.88
8059-025C	2-1/2	3-15/32	3- 1/2	13/32	6- 3/16	2.28
8059-030C	3	3-25/32	4- 3/16	17/32	6- 5/32	2.26
8059-040C	4	4- 3/8	5- 1/4	5/8	7- 3/4	3.85
8059-060C	6	6-27/32	7- 1/2	1- 1/2	11- 5/8	11.80

Schedule 80 CPVC Unions

Union 2000 - Socket/Spigot/FKM

Socket x Spigot with FKM O-ring Seal

Dimensions Also Applicable to 8096-XXXC EPDM O-Ring Seals



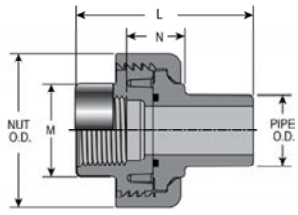
Pressure Rating
1/2" - 4" 235 psi @ 73°F
6" 150 PSI @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
8056-005C	1/2	2- 5/16	1- 3/16	9/16	1- 7/8	.13
8056-007C	3/4	2- 5/8	1- 3/8	21/32	2- 9/32	.20
8056-010C	1	2-15/16	1-23/32	5/8	2- 9/16	.29
8056-012C	1-1/4	3- 7/32	2- 3/32	11/16	3- 3/16	.43
8056-015C	1-1/2	3- 1/2	2- 3/8	11/16	3- 9/16	.55
8056-020C	2	3- 3/4	2- 7/8	3/4	4- 5/16	.92
8056-025C	2-1/2	4-21/32	3-15/32	1- 5/32	6- 5/32	2.32
8056-030C	3	4-25/32	4- 5/32	7/32	6- 5/32	2.35
8056-040C	4	5- 5/8	5- 1/4	1- 1/8	7-23/32	4.09
8056-060C	6	7- 3/4	7- 9/16	1- 1/2	11-11/16	12.68

Union 2000 - Special Reinforced Fipt/Spigot/FKM

SR Fipt x Spigot with FKM O-ring Seal

Dimensions Also Applicable to 8095-XXXCSR EPDM O-Ring Seals



Pressure Rating
1/2" - 4" 235 psi @ 73°F
6" 150 PSI @ 73°F

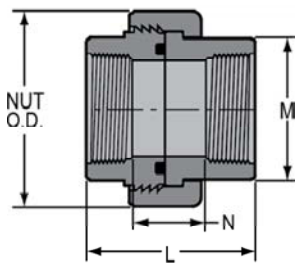
Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
8055-005CSR	1/2	2-3/8	1-3/16	3/4	1-15/16	.14
8055-007CSR	3/4	2-5/8	1-3/8	7/8	2-3/8	.22
8055-010CSR	1	3	1-11/16	1-1/16	2-5/8	.34
8055-012CSR	1-1/4	3-1/4	2-1/16	1-1/16	3-3/16	.47
8055-015CSR	1-1/2	3-1/2	2-13/32	1-1/8	3-5/8	.61
8055-020CSR	2	3-31/32	3-1/32	1-7/16	4-5/16	1.02
8055-025CSR	2-1/2	4-7/8	3-9/16	1-13/16	6-3/16	2.51
8055-030CSR	3	5-1/8	4-1/4	1-13/16	6-3/16	2.59
8055-040CSR	4	5-15/16	5-1/4	2-3/16	7-3/4	4.38
8055-060CSR	6	7-5/8	7-11/16	2-7/8	11-5/8	12.98

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Union 2000 - Fipt/FKM

Fipt x Fipt with FKM O-ring Seal

Dimensions Also Applicable to
8098-XXXC EPDM O-Ring Seals



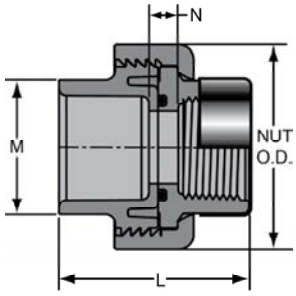
Pressure Rating
1/2" - 4" 235 psi @ 73°F
6" 150 PSI @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
858-002C	1/4	1-15/16	15/16	11/16	1-21/32	.10
858-003C	3/8	2- 5/32	1- 1/32	15/16	1-25/32	.13
8058-005C	1/2	1-29/32	1- 3/16	17/32	1- 7/8	.13
8058-007C	3/4	2- 1/16	1- 3/8	9/16	2- 9/32	.20
8058-010C	1	2-17/32	1-11/16	25/32	2- 9/16	.29
8058-012C	1-1/4	2-21/32	2- 1/32	3/4	3- 1/8	.42
8058-015C	1-1/2	2-25/32	2- 3/8	29/32	3- 1/2	.56
8058-020C	2	3- 1/8	3	1- 3/16	4- 7/32	.94
8058-025C	2-1/2	4- 1/32	3- 9/16	1-15/32	6- 5/32	2.41
8058-030C	3	4- 5/32	4- 9/32	1-13/32	6- 5/32	2.48
8058-040C	4	4-21/32	5- 1/4	1-21/32	7- 3/4	4.05
8058-060C	6	6- 1/8	7-21/32	2-13/16	11-19/32	11.96

Union 2000 - Socket/Special Reinforced Fipt/FKM

Socket x SR Fipt with FKM O-ring Seal

Dimensions Also Applicable to
8099-XXXCSR EPDM O-Ring Seals



Pressure Rating
1/2" - 4" 235 psi @ 73°F
6" 150 PSI @ 73°F

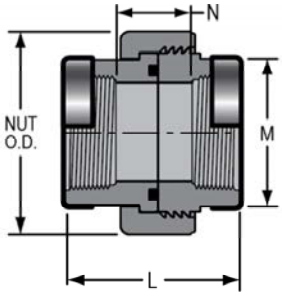
Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
8059-005CSR	1/2	1-29/32	1- 3/16	11/32	1- 7/8	.13
8059-007CSR	3/4	2- 5/32	1-13/32	13/32	2- 9/32	.20
8059-010CSR	1	2- 7/16	1-23/32	7/16	2- 9/16	.29
8059-012CSR	1-1/4	2- 5/8	2- 3/32	7/16	3- 1/8	.42
8059-015CSR	1-1/2	2-13/16	2- 3/8	1/2	3- 1/2	.56
8059-020CSR	2	3	2- 7/8	7/16	4- 7/32	.92
8059-025CSR	2-1/2	3-27/32	3-15/32	27/32	6- 3/16	2.32
8059-030CSR	3	3- 3/4	4- 3/16	1/2	6- 9/32	2.34
8059-040CSR	4	4- 3/8	5- 1/4	5/8	7- 3/4	3.95
8059-060CSR	6	6-27/32	7- 1/2	2- 5/32	11- 5/8	11.95

Schedule 80 CPVC Unions

Union 2000 - Special Reinforced Fipt/FKM

SR Fipt x SR Fipt w/FKM O-ring Seal - Stainless Steel Collar

Dimensions Also Applicable to
8098-XXXCSR EPDM O-Ring Seals



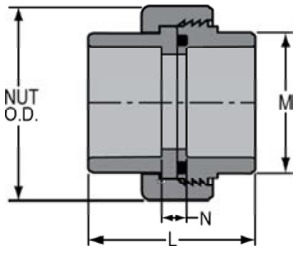
Pressure Rating
1/2" - 4" 235 psi @ 73°F
6" 150 PSI @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
8058-005CSR	1/2	2	1- 3/16	5/8	1- 7/8	.15
8058-007CSR	3/4	2- 5/32	1- 3/8	21/32	2- 9/32	.22
8058-010CSR	1	2- 9/16	1-11/16	13/16	2- 9/16	.34
8058-012CSR	1-1/4	2-23/32	2- 1/32	13/16	3- 1/8	.46
8058-015CSR	1-1/2	2-27/32	2-13/32	29/32	3-17/32	.62
8058-020CSR	2	3- 7/32	3- 1/32	1- 3/16	4- 7/32	1.02
8058-025CSR	2-1/2	4-3/32	3-9/16	1-15/32	6-5/32	2.51
8058-030CSR	3	4- 3/16	4- 9/32	1- 3/8	6- 5/32	2.58
8058-040CSR	4	4-23/32	5- 1/4	3/4	7-3/4	4.24
8058-060CSR	6	6- 3/16	7-11/16	2-13/16	11- 5/8	12.25

Union (Old Style) - Socket/FKM

Socket x Socket with FKM O-ring Seal

Dimensions Also Applicable to
897-XXXC EPDM O-Ring Seals



Pressure Rating
235 psi @ 73°F

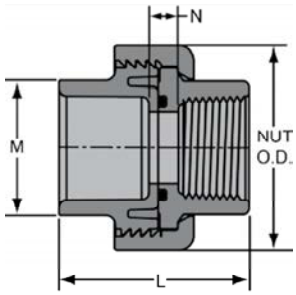
Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
857-005C	1/2	2- 3/32	1- 9/32	11/32	1-31/32	.15
857-007C	3/4	2- 3/8	1-17/32	11/32	2- 1/2	.28
857-010C	1	2- 9/16	1-27/32	3/8	2- 7/8	.39
857-012C	1-1/4	2- 7/8	2- 7/32	3/8	3- 5/16	.52
857-015C	1-1/2	3- 3/32	2- 9/16	15/32	3- 9/16	.64
857-020C	2	3- 5/8	3- 1/32	9/16	4- 3/16	1.01
857-025C	2-1/2	4- 3/8	3- 5/8	15/16	4- 7/8	1.58
857-030C	3	5	4- 3/8	1- 3/16	5- 3/4	2.50
857-040C	4	5- 7/8	5-13/32	1- 3/8	7- 1/16	3.97

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Union (Old Style) - Socket/Fipt/FKM

Socket x Fipt with FKM O-ring Seal

Dimensions Also Applicable to 899-XXXC EPDM O-Ring Seals



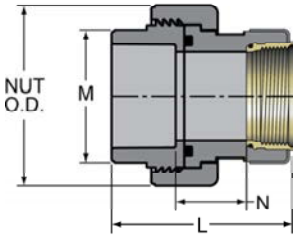
Pressure Rating
235 psi @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
859-005C	1/2	2- 3/32	1- 9/32	15/32	1-31/32	.16
859-007C	3/4	2- 3/8	1-17/32	9/16	2- 1/2	.29
859-010C	1	2- 9/16	1-27/32	13/32	2- 7/8	.40
859-012C	1-1/4	2- 7/8	2- 7/32	5/8	3- 5/16	.54
859-015C	1-1/2	3- 1/8	2-19/32	27/32	3- 9/16	.66
859-020C	2	3- 5/8	3- 1/32	1- 1/16	4- 3/16	1.06
859-025C	2-1/2	4- 3/8	3- 5/8	1-13/32	4- 7/8	1.65
859-030C	3	5- 1/16	4- 3/8	1- 1/2	5- 3/4	2.60
859-040C	4	5- 7/8	5- 7/16	1- 7/8	7- 1/16	4.12

Union - Socket/Brass Fipt/FKM

Socket x Fipt with Brass Thread Insert & FKM O-ring Seal

Dimensions Also Applicable to 899-XXXCBR EPDM O-Ring Seals



Pressure Rating
235 psi @ 73°F

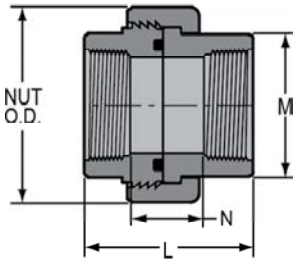
Part Number	Size	L	M	N	Approx. Wt. (Lbs.)
859-005CBR	1/2	2-1/4	1-9/32	3/4	.22
859-007CBR	3/4	2-11/16	1-17/32	15/16	.36
859-010CBR	1	2-13/16	1- 7/8	1- 1/32	.52
859-012CBR	1-1/4	3- 9/32	2- 7/32	1- 1/16	.76
859-015CBR	1-1/2	3- 1/2	2- 9/16	1- 3/32	.92
859-020CBR	2	3- 5/8	2- 7/8	1- 1/4	1.63

Not intended to convey or dispense water for human consumption through drinking or cooking

Union (Old Style) - Fipt/FKM

Fipt x Fipt with FKM O-ring Seal

Dimensions Also Applicable to 898-XXXC EPDM O-Ring Seals



Pressure Rating
235 psi @ 73°F

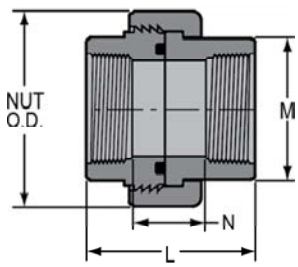
Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
858-005C	1/2	2- 3/32	1- 9/32	19/32	1-31/32	.16
858-007C	3/4	2- 3/8	1-17/32	3/4	2- 1/2	.30

Union (Old Style) - Fipt/FKM

(Continued)

Fipt x Fipt with FKM O-ring Seal

Dimensions Also Applicable to
898-XXXC EPDM O-Ring Seals



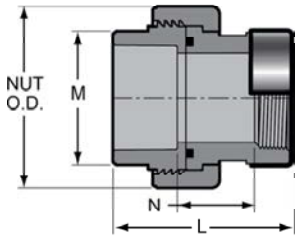
Pressure Rating
235 psi @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
858-010C	1	2- 9/16	1-27/32	7/16	2- 7/8	.41
858-012C	1-1/4	2- 7/8	2- 7/32	7/8	3- 5/16	.61
858-015C	1-1/2	3- 3/32	2- 9/16	1- 5/32	3- 9/16	.69
858-020C	2	3- 5/8	3- 1/32	1-11/16	4- 3/16	1.11
858-025C	2-1/2	4- 3/8	3- 5/8	1- 7/8	4- 7/8	1.74
858-030C	3	5- 1/16	4- 3/8	1-13/16	5- 3/4	2.66
858-040C	4	5- 7/8	5- 7/16	2- 3/8	7- 1/16	4.29

Union (Old Style) - Socket/Special Reinforced Fipt/FKM

Socket x SR Fipt w/FKM O-ring Seal - Stainless Steel Collar

Dimensions Also Applicable to
899-XXXCSR EPDM O-Ring Seals



Pressure Rating
235 psi @ 73°F

Part Number	Size	L	M	N	NUT O.D.	Approx. Wt. (Lbs.)
859-002CSR	1/4	2- 1/16	15/16	25/32	1-21/32	.07
859-003CSR	3/8	2- 9/32	1- 1/32	7/8	1-25/32	.07
859-005CSR	1/2	2- 9/32	1- 9/32	21/32	1-31/32	.16
859-007CSR	3/4	2-19/32	1-17/32	25/32	2- 1/2	.29
859-010CSR	1	2-15/16	1-27/32	25/32	2- 7/8	.42
859-012CSR	1-1/4	3- 5/32	2- 7/32	29/32	3- 5/16	.57
859-015CSR	1-1/2	3-13/32	2- 9/16	1- 1/32	3- 9/16	.71
859-020CSR	2	4- 3/32	3- 1/32	1-19/32	4- 3/16	1.17
859-030CSR	3	5- 1/4	4- 3/8	1-11/16	5- 3/4	2.74
859-040CSR	4	5- 7/8	5-13/32	2- 1/8	7- 3/32	4.19

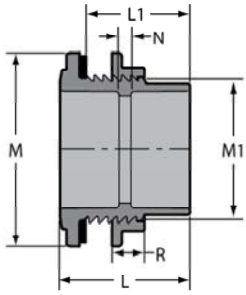
Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings

Tank Adapters, CPVC New Style Standard with Neoprene Gaskets

Socket x Socket

150 psi Maximum Internal Pressure Rating @ 73° F (23°C)

Dimensions Also Applicable to 8170E-XXXC & 8170V-XXXC



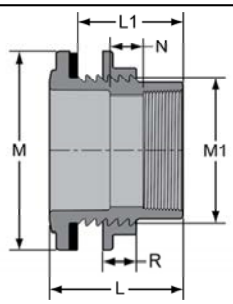
Part Number	Size	L	L1	M	M1	N	R	Min Hole Size	Approx. Wt. (Lbs.)
8170-002C	1/4	2- 1/2	1-13/16	1- 1/2	1- 1/16	1- 3/16	1/2	1-1/16	.11
8170-003C	3/8	2- 1/2	1-27/32	1- 5/8	31/32	7/8	1/2	1-3/16	.11
8170-005C	1/2	2-15/16	2- 3/16	2- 1/16	1-15/32	1- 1/8	5/8	1-1/2	.22
8170-007C	3/4	2-15/16	2- 3/16	2- 1/4	1- 5/8	15/16	5/8	1-3/4	.25
8170-010C	1	3- 5/16	2- 9/16	2- 5/8	2	1- 1/16	5/8	2	.37
8170-012C	1-1/4	3- 7/16	2- 5/8	3- 1/8	2- 5/16	15/16	5/8	2-3/8	.48
8170-015C	1-1/2	3- 5/8	2-13/16	3- 5/8	2-11/16	13/16	5/8	2-3/4	.66
8170-020C	2	4- 1/8	3- 1/4	4- 7/8	3- 1/4	1- 1/16	3/4	3-3/8	1.29
8170-025C	2-1/2	4-27/32	3- 7/8	5- 1/4	3- 9/16	29/32	1	3-7/8	1.22
8170-030C	3	5- 1/2	4- 1/2	6	4- 9/16	1-11/16	1	4-5/8	2.61
8170-040C	4	5	4	7- 1/2	5- 1/2	7/16	1- 1/4	5-1/2	3.21
8170-060C	6	5	4	10-3/32	8	1/8	1-1/4	8	5.76
8170-080C	8	8- 5/8	7	12-15/16	10- 1/4	1/2	1- 1/2	10-3/8	17.30

Tank Adapters, CPVC New Style Standard with Neoprene Gaskets

Socket x Fipt

150 psi Maximum Internal Pressure Rating @ 73° F (23°C)

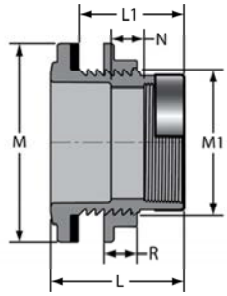
Dimensions Also Applicable to 8171E-XXXC & 8171V-XXXC



Part Number	Size	L	L1	M	M1	N	R	Min Hole Size	Approx. Wt. (Lbs.)
8171-002C	1/4	2- 1/2	1-13/16	1- 1/2	1- 1/16	1- 1/4	1/2	1-1/16	.12
8171-003C	3/8	2- 1/2	1-13/16	1- 5/8	1- 3/16	1- 3/16	1/2	1-3/16	.12
8171-005C	1/2	2-15/16	2- 3/16	2- 1/16	1-15/32	1- 1/4	5/8	1-1/2	.23
8171-007C	3/4	2-15/16	2-15/32	2- 1/4	1- 5/8	1- 3/16	5/8	1-3/4	.26
8171-010C	1	3- 5/16	2-13/16	2- 5/8	1-31/32	1- 1/4	5/8	2	.39
8171-012C	1-1/4	3-13/32	2-27/32	3- 3/32	2- 5/16	1-17/32	5/8	2-3/8	.51
8171-015C	1-1/2	3- 5/8	2-13/16	3- 5/8	2-11/16	1- 1/4	5/8	2-3/4	.71
8171-020C	2	4- 1/8	3- 1/4	4- 7/8	3- 1/4	1- 5/8	3/4	3-3/8	1.34
8171-025C	2-1/2	4- 7/8	7/8	5- 1/4	3-13/16	1-13/16	1	3-7/8	2.39
8171-030C	3	5- 1/2	4- 1/2	6	4- 9/16	2- 3/16	1	4-5/8	2.75
8171-040C	4	5	4	7- 1/2	5- 1/2	1- 1/4	1- 1/4	5-1/2	3.35
8171-060C	6	4-31/32	4- 1/16	10- 1/16	7-11/16	1/16	1- 1/4	8	5.91

Tank Adapters, CPVC New Style Special Reinforced (SR) Threaded with Neoprene Gaskets

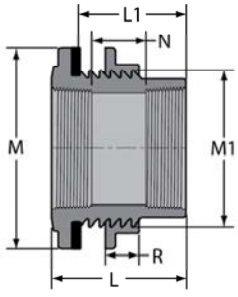
Socket x SR Fipt - Stainless Steel Collar
150 psi Maximum Internal Pressure Rating @ 73° F (23°C)
Dimensions Also Applicable to 8171E-XXXCSR & 8171V-XXXCSR



Part Number	Size	L	L1	M	M1	N	R	Min Hole Size	Approx. Wt. (Lbs.)
8171-002CSR	1/4	2- 1/2	1-13/16	1- 1/2	1- 1/16	1- 1/4	1/2	1-1/16	.12
8171-003CSR	3/8	2- 1/2	1-13/16	1- 5/8	1- 3/16	1- 3/16	1/2	1-3/16	.12
8171-005CSR	1/2	2-15/16	2- 1/4	2- 1/16	1-15/32	1- 9/32	5/8	1-1/2	.24
8171-007CSR	3/4	2-15/16	2- 3/16	2- 1/4	1- 5/8	1- 1/4	5/8	1-3/4	.27
8171-010CSR	1	3- 5/16	2-13/16	2- 5/8	1-31/32	1- 1/4	5/8	2	.40
8171-012CSR	1-1/4	3-13/32	2- 5/8	3- 3/32	2- 5/16	1-17/32	5/8	2-3/8	.53
8171-015CSR	1-1/2	3- 5/8	2-13/16	3- 5/8	2-11/16	1- 1/4	5/8	2-3/4	.74
8171-020CSR	2	4- 1/8	3- 1/4	4- 7/8	3- 1/4	1- 5/8	3/4	3-3/8	1.36
8171-025CSR	2-1/2	4- 7/8	3- 7/8	5- 1/4	3-13/16	1-11/16	1	3-7/8	2.45
8171-030CSR	3	5- 1/2	4- 1/2	6	4- 9/16	2- 3/16	1	4-5/8	2.82
8171-040CSR	4	5	4	7- 1/2	5- 1/2	1- 1/4	1- 1/4	5-1/2	3.47
8171-060CSR	6	4-31/32	4- 1/16	10- 1/16	7-11/16	1/16	1- 1/4	8	9.16

Tank Adapters, CPVC New Style Standard with Neoprene Gaskets

Fipt x Fipt
150 psi Maximum Internal Pressure Rating @ 73° F (23°C)
Dimensions Also Applicable to 8172E-XXXC & 8172V-XXXC

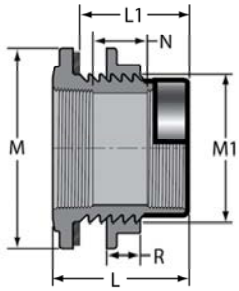


Part Number	Size	L	L1	M	M1	N	R	Min Hole Size	Approx. Wt. (Lbs.)
8172-002C	1/4	2- 1/2	1-13/16	1- 1/2	1- 1/16	1- 5/16	1/2	1-1/16	.12
8172-003C	3/8	2- 1/2	1-13/16	1- 5/8	1- 3/16	1- 3/8	1/2	1-3/16	.12
8172-005C	1/2	2-15/16	2- 3/16	2- 1/16	1-15/32	1-13/32	5/8	1-1/2	.24
8172-007C	3/4	2-15/16	2-15/32	2- 1/4	1- 5/8	1- 1/2	5/8	1-3/4	.27
8172-010C	1	3- 5/16	2-13/16	2- 5/8	1-31/32	1- 1/4	5/8	2	.40
8172-012C	1-1/4	3-13/32	2-27/32	3- 3/32	2- 5/16	1-17/32	5/8	2-3/8	.53
8172-015C	1-1/2	3-19/32	3- 1/16	3-19/32	2-21/32	1-11/16	5/8	2-3/4	.74
8172-020C	2	4- 1/8	3- 1/4	4- 7/8	3- 1/4	2- 3/16	3/4	3-3/8	1.35
8172-025C	2-1/2	4- 7/8	3- 7/8	5- 1/4	3-13/16	2- 1/4	1	3-7/8	2.52
8172-030C	3	5- 1/2	4- 1/2	6	4- 9/16	2-11/16	1	4-5/8	2.95
8172-040C	4	5	4	7- 1/2	5- 1/2	2	1- 1/4	5-1/2	3.69
8172-060C	6	5	4- 3/16	9- 7/8	7-31/32	1- 5/32	1- 1/4	8	6.21

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas
See Spears® Product Sourcebook for product Offerings
Spears® Manufacturing Company

Tank Adapters, CPVC New Style Special Reinforced (SR) Threaded with Neoprene Gaskets

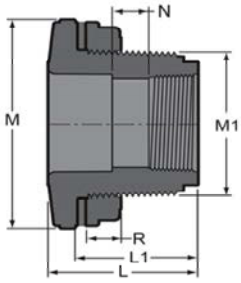
Fipt x SR Fipt - Stainless Steel Collar
150 psi Maximum Internal Pressure Rating @ 73° F (23°C)
Dimensions Also Applicable to 8172E-XXXCSR & 8172V-XXXCSR



Part Number	Size	L	L1	M	M1	N	R	Min Hole Size	Approx. Wt. (Lbs.)
8172-002CSR	1/4	2- 1/2	1- 7/8	1- 9/16	1- 1/16	1- 5/16	1/2	1-1/16	.12
8172-003CSR	3/8	2- 1/2	1-13/16	1- 5/8	1- 3/16	1- 3/8	1/2	1-3/16	.12
8172-005CSR	1/2	2-15/16	2- 3/16	2- 1/16	1-15/32	1-13/32	5/8	1-1/2	.25
8172-007CSR	3/4	2-15/16	2-15/32	2- 1/4	1- 5/8	1- 3/16	5/8	1-3/4	.28
8172-010CSR	1	3-15/16	2-19/32	2- 5/8	1-31/32	1- 1/4	5/8	2	.42
8172-012CSR	1-1/4	3-13/32	2-27/32	3- 3/32	2- 5/16	1-17/32	5/8	2-3/8	.54
8172-015CSR	1-1/2	3- 5/8	2-13/16	3- 5/8	2-11/16	1- 3/4	5/8	2-3/4	.77
8172-020CSR	2	4- 1/8	3- 1/4	4-27/32	3- 1/32	2- 1/8	3/4	3-3/8	1.41
8172-025CSR	2-1/2	4- 7/8	3- 7/8	5- 1/4	3-13/16	2- 1/4	1	3-7/8	2.58
8172-030CSR	3	5-15/32	4-17/32	5-31/32	4-17/32	2-21/32	1	4-5/8	2.96
8172-040CSR	4	5	4	7- 1/2	5- 1/2	2	1- 1/4	5-1/2	3.79
8172-060CSR	6	5	4-3/16	9-7/8	7-31/32	1-5/32	1-1/4	8	9.40

Tank Adapter, CPVC Old Style with Neoprene Gasket

Socket x Fipt
150 psi Maximum Internal Pressure Rating @ 73° F (23°C)



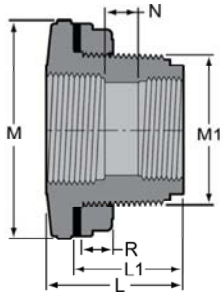
Part Number	Size	L	L1	M	M1	N	R	Approx. Wt. (Lbs.)
871-005C	1/2	2-27/32	2-11/32	2- 9/32	1- 9/32	1- 3/8	5/8	.25
871-007C	3/4	2-23/32	2- 7/32	2- 1/2	1- 5/8	29/32	5/8	.31
871-010C	1	2-25/32	2- 1/8	2-13/16	1- 7/8	25/32	21/32	.34
871-012C	1-1/4	3- 1/8	2- 7/16	3-29/32	2-11/32	27/32	5/8	.62
871-015C	1-1/2	3- 5/32	2-21/32	3-29/32	2-11/32	3/4	5/8	.57
871-020C	2	3- 3/16	2-17/32	4-31/32	3-15/32	13/16	3/4	1.42
871-030C	3	4-19/32	3-13/16	6- 7/16	4-15/32	31/32	1- 3/16	2.62
871-040C	4	4- 7/16	3-23/32	7- 7/16	5- 1/2	1/2	1- 1/4	3.37

Schedule 80 CPVC Tank Adapters

Tank Adapter, CPVC Old Style with Neoprene Gasket

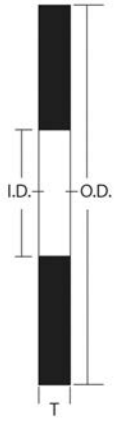
Fipt x Fipt

150 psi Maximum Internal Pressure Rating @ 73° F (23°C)



Part Number	Size	L	L1	M	M1	N	R	Approx. Wt. (Lbs.)
872-005C	1/2	2-27/32	2-11/32	2- 9/32	1- 9/32	1-13/32	5/8	.25
872-007C	3/4	2-23/32	2- 1/4	2- 1/2	1- 5/8	1- 5/32	5/8	.32
872-010C	1	2-25/32	2- 5/16	2-13/16	1- 7/8	25/32	5/8	.36
872-012C	1-1/4	3- 1/8	2- 5/8	3-27/32	2-11/32	1- 1/8	5/8	.64
872-015C	1-1/2	3- 1/8	2- 5/8	3-29/32	2-11/32	1- 1/16	5/8	.60
872-020C	2	3- 5/32	2- 3/8	5- 1/16	3- 7/16	1- 5/32	3/4	1.44
872-030C	3	4-19/32	3-13/16	6- 7/16	4-15/32	1-11/32	1- 3/16	2.61
872-040C	4	4- 7/16	3- 1/2	7- 1/2	5- 1/2	15/16	1- 1/4	3.46

TANK ADAPTER GASKET SECTION



SIZE	O.D.*	I.D.*	T
1/2	2.25	1.33	3/16
3/4	2.49	1.69	3/16
1	2.79	1.94	3/16
1-1/4	3.81	2.39	3/16
1-1/2	3.81	2.39	3/16
2	4.89	3.51	3/16
3	6.30	4.49	3/16
4	7.33	5.50	3/16

Old Style Tank Adapter Gasket & Hole Size Requirements

Tank Adapter Size	Recommended Minimum Hole Size	Minimum Inside Curvature Radius (inches)	Maximum Tank Wall Thickness (inches)
1/2	1-3/8	3.88	1.06
3/4	1-3/4	5.00	1.06
1	2	6.12	1.06
1-1/4	2-7/16	10.75	1.34
1-1/2	2-7/16	10.75	1.34
2	3-9/16	18.50	1.16
3	4-9/16	31.00	1.75
4	5-9/16	42.75	1.81

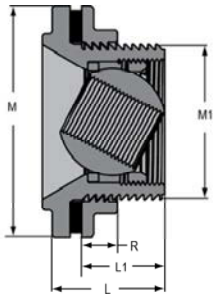
*** Both outside and inside dimensions are +/- .03 shore hardness 65-70**

Tank Adapter, CPVC Self Aligning with Neoprene Gasket

Fipt

75 psi Maximum Internal Pressure Rating @ 73°F (23°C)

Dimensions Also Applicable to 8172ESA-XXXC & 8172VSA-XXXC



Part Number	Size	L	L1	M	M1	R	Approx. Wt. (Lbs.)
8172SA-010C	1	2- 9/16	1- 3/4	4- 7/8	3- 1/4	3/4	2.66
8172SA-020C	2	2-11/16	1- 3/4	6	4- 9/16	1	9.03
8172SA-030C	3	3- 1/4	2- 1/4	7- 1/2	5- 1/2	1- 1/4	3.14

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas

See Spears® Product Sourcebook for product Offerings

INDUSTRIAL DIAPHRAGM VALVE KITS

COMPOSITE (PLASTIC) VALVE KITS
FOR WATER SOFTENERS

Composite (Plastic) Valve Kits for Water Softeners

Part Number	Tank Size Inches	Pipe Size Inches	Service Rate GPM	Backwash Rate GPM	Valves #1 & #2 (Service)	Valve #3 (Backwash Out)	Valve #4 (Backwash In)	Valve #5 (Brine)	Valve #6 (Rinse)	Brine Injector	Drain Line Flow Control
VNPWS21	21	1	26	12	K531-X200-14000 (1070304)	K531-X200-14000 (1070304)	K531-X200-14000 (1070304)	K531-X200-14000 (1070304)	K531-X200-14000 (1070304)	OM-2.5075 (0.75" FPT PVC)	OM-TH1252/12 (1.25" MPT PVC)
VNPWS24	24	1.5	52	16	K534-X200-14000 (1070308)	K531-X200-14000 (1070304)	K531-X200-14000 (1070304)	K531-X200-14000 (1070304)	K531-X200-14000 (1070304)	OM-3.5075 (0.75" FPT PVC)	OM-TH1252/16 (1.25" MPT PVC)
VNPWS30	30	2	80	25	K535-X200-14000 (1070312)	K531-X200-14000 (1070304)	K531-X200-14000 (1070304)	K531-X200-14000 (1070304)	K531-X200-14000 (1070304)	OM-5.0075 (0.75" FPT PVC)	OM-TH1504/25 (1.5" MPT PVC)
VNPWS36	36	2	112	35	K535-X200-14000 (1070312)	K534-X200-14000 (1070308)	K534-X200-14000 (1070308)	K534-X200-14000 (1070308)	K534-X200-14000 (1070308)	OM-7100 (1" FPT PVC)	OM-TH1504/35 (1.5" MPT PVC)
VNPWS42	42	3	152	48	K537-X200-14000 (1070316)	K534-X200-14000 (1070308)	K534-X200-14000 (1070308)	K534-X200-14000 (1070308)	K534-X200-14000 (1070308)	OM-10100 (1" FPT PVC)	OM-TH2007/48 (2" MPT PVC)
VNPWS48	48	3	200	63	K537-X200-14000 (1070316)	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	OM-12150 (1.5" FPT PVC)	OM-TH2007/63 (2" MPT PVC)
VNPWS63	63	3	312	98	K537-X200-14000 (1070316)	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	OM-20150 (1.5" FPT PVC)	OM-TH30014/98 (3" MPT PVC)

The above valve nests include the necessary valve socket adapters (ASTM). Metric sizes (JIS and ISO) are available at no additional cost.
These kits do **not** include the interconnecting pipe or fittings.

Optional Regeneration Bypass Valves

Part Number	Tank Size Inches
K531-X2B2-14000	21 to 24
K534-X2B2-14000	30 to 42
K535-X2B2-14000	48 to 63

Bypass Valve Socket Weld Adapter Kits

Part Number	Description
QA-K531060	1 inch ASTM
QA-K534060	1.5 inch ASTM
QA-K535060	2 inch ASTM

Valve Sizes

K531	1 inch
K534	1.5 inch
K535	2 inch
K537	3 inch

Flow Rate is based on 5 gpm per cubic foot at 6 lb of salt per cubic foot per regeneration for greater than 90% hardness removal.
Reduce Flow Rate to 3.5 gpm per cubic foot at 10 to 12 lb of salt per cubic foot per regeneration for 100% hardness removal (Service Flow Rate x 0.7).
Peak Flow Rate: (Service Flow Rate x 2.0).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1197
EFFECTIVE
JULY 2009

Industrial Diaphragm Valve Kits

CAST IRON VALVE KITS
FOR WATER SOFTENERS

Cast Iron Valve Kits for Water Softeners

Part Number	Tank Size Inches	Pipe Size Inches	Service Rate GPM	Backwash Rate GPM	Valves #1 & #2 (Service)	Valve #3 (Backwash Out)	Valve #4 (Backwash In)	Valve #5 (Brine)	Valve #6 (Rinse)	Brine Injector	Drain Line Flow Control
VNMWS21	21	1.25	26	12	V42D-0000-00000 (1070023)	V42C-0000-00000 (1070011)	V42C-0000-00000 (1070011)	V42C-0000-00000 (1070011)	V42C-0000-00000 (1070011)	OM-2.5075 (0.75" FPT PVC)	OM-ST1252/12 (1.25" MPT Steel)
VNMWS24	24	1.5	52	16	V42E-0000-00000 (1070025)	V42C-0000-00000 (1070011)	V42C-0000-00000 (1070011)	V42C-0000-00000 (1070011)	V42C-0000-00000 (1070011)	OM-3.5075 (0.75" FPT PVC)	OM-ST1252/16 (1.25" MPT Steel)
VNMWS30	30	2	80	25	V42F-0000-00000 (1070035)	V42C-0000-00000 (1070011)	V42C-0000-00000 (1070011)	V42C-0000-00000 (1070011)	V42C-0000-00000 (1070011)	OM-5.0075 (0.75" FPT PVC)	OM-ST1504/25 (1.5" MPT Steel)
VNMWS36	36	2	112	35	V42G-0000-00000 (1070041)	V42D-0000-00000 (1070023)	V42D-0000-00000 (1070023)	V42D-0000-00000 (1070023)	V42D-0000-00000 (1070023)	OM-7100 (1" FPT PVC)	OM-ST1504/35 (1.5" MPT Steel)
VNMWS42	42	2.5	152	48	V42H-0000-00000 (1070042)	V42E-0000-00000 (1070025)	V42H-0000-00000 (1070042)	V42E-0000-00000 (1070025)	V42E-0000-00000 (1070025)	OM-10100 (1" FPT PVC)	OM-ST2007/48 (2" MPT Steel)
VNMWS48	48	3	200	63	V42J-0000-00000 (1070043)	V42E-0000-00000 (1070025)	V42E-0000-00000 (1070025)	V42E-0000-00000 (1070025)	V42E-0000-00000 (1070025)	OM-12150 (1.5" FPT PVC)	OM-ST2007/63 (2" MPT Steel)
VNMWS54	54	3	256	80	V42J-0000-00000 (1070043)	V42F-0000-00000 (1070035)	V42F-0000-00000 (1070035)	V42F-0000-00000 (1070035)	V42F-0000-00000 (1070035)	OM-15150 (1.5" FPT PVC)	OM-ST2509/80 (2.5" MPT Steel)
VNMWS60	60	4	312	98	V42K-3000-00000	V42F-0000-00000 (1070035)	V42F-0000-00000 (1070035)	V42F-0000-00000 (1070035)	V42F-0000-00000 (1070035)	OM-20150 (1.5" FPT PVC)	OM-ST30014/98 (3" MPT Steel)
VNMWS66	66	4	380	120	V42K-3000-00000	V42H-0000-00000 (1070042)	V42H-0000-00000 (1070042)	V42G-0000-00000 (1070041)	V42H-0000-00000 (1070042)	QA-5461 (2" FPT PVC)	OM-ST30014/120 (3" MPT Steel)
VNMWS72	72	4	425	152	V42K-3000-00000	V42H-0000-00000 (1070042)	V42H-0000-00000 (1070042)	V42G-0000-00000 (1070041)	V42H-0000-00000 (1070042)	QA-5465 (2" FPT PVC)	OM-ST40025/152 (4" MPT Steel)

Optional Regeneration Bypass Valves

Part Number	Tank Size Inches
V42C-0032-00000	21
V42D-0032-00000	24
V42E-0032-00000	30 to 36
V42F-0032-00000	42
V42H-0032-00000	48 to 54
V42J-0032-00000	60 to 72

Valve Sizes

V42C	1 inch
V42D	1.25 inch
V42E	1.5 inch
V42F	2 inch
V42G	2 inch High FLow
V42H	2.5 inch
V42J	3 inch
V42K	4 inch

1.25 thru 3 inch valve nests are female NPT. 4 inch valve nests are flanged (ASTM). Metric flanges and thread sizes (BST & JIS) are available at no additional cost. These kits do **not** include the interconnecting pipe or fittings.

Flow Rate is based on 5 gpm per cubic foot at 6 lb of salt per cubic foot per regeneration for greater than 90% hardness removal.
Reduce Flow Rate to 3.5 gpm per cubic foot at 10 to 12 lb of salt per cubic foot per regeneration for 100% hardness removal (Service Flow Rate x 0.7).
Peak Flow Rate: (Service Flow Rate x 2.0).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1197
EFFECTIVE
JULY 2009

Industrial Diaphragm Valve Kits

COMPOSITE (PLASTIC) VALVE KITS
FOR MULTI-MEDIA SYSTEMS

Composite (Plastic) Valve Kits for Multi-Media Systems

Part Number	Tank Size Inches	Pipe Size Inches	Service Rate GPM	Backwash Rate GPM	Valves #1 & #2 (Service)	Valve #3 (Backwash Out)	Valve #4 (Backwash In)	Valve #5 (Rinse)	Drain Line Flow Control
VNPSF21	21	1.5	20	29	K534-X200-14000 (1070308)	K531-X200-14000 (1070304)	K531-X200-14000 (1070304)	K531-X200-14000 (1070304)	OM-TH1504/29 (1.5" MPT PVC)
VNPSF24	24	1.5	30	38	K534-X200-14000 (1070308)	K534-X200-14000 (1070308)	K534-X200-14000 (1070308)	K534-X200-14000 (1070308)	OM-TH1504/38 (1.5" MPT PVC)
VNPSF30	30	2	50	59	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	OM-TH2007/59 (2" MPT PVC)
VNPSF36	36	2	70	85	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	OM-TH2509/85 (2.5" MPT PVC)
VNPSF42	42	2	95	115	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	OM-TH30014/115 (3" MPT PVC)
VNPSF48	48	3	120	151	K537-X200-14000 (1070316)	K537-X200-14000 (1070316)	K537-X200-14000 (1070316)	K537-X200-14000 (1070316)	OM-TH40025/151 (4" MPT PVC)
VNPSF63	60 to 63	3	200	235	K537-X200-14000 (1070316)	K537-X200-14000 (1070316)	K537-X200-14000 (1070316)	K537-X200-14000 (1070316)	OM-TH40025/235 (4" MPT PVC)

The above valve nests include the necessary valve socket adapters (ASTM). Metric sizes (JIS and ISO) are available at no additional cost.
These kits do **not** include the interconnecting pipe or fittings.

Optional Regeneration Bypass Valves

Part Number	Tank Size Inches
K531-X2B2-14000	21 to 24
K534-X2B2-14000	30 to 42
K535-X2B2-14000	48 to 63

Bypass Valve Socket Weld Adapter Kits

Part Number	Description
QA-K531060	1 inch ASTM
QA-K534060	1.5 inch ASTM
QA-K535060	2 inch ASTM

Valve Sizes

K531	1 inch
K534	1.5 inch
K535	2 inch
K537	3 inch

Flow Rate is based on 10 gpm per square foot.
10 Micron Filtration: (Service Flow Rate x 0.5).
Peak Flow Rate: (Service Flow Rate x 1.5).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1196
EFFECTIVE
JULY 2009

INDUSTRIAL DIAPHRAGM VALVE KITS

CAST IRON VALVE KITS
FOR MULTI-MEDIA SYSTEMS

Cast Iron Valve Kits for Multi-Media Systems

Part Number	Tank Size Inches	Pipe Size Inches	Service Rate GPM	Backwash Rate GPM	Valves #1 & #2 (Service)	Valve #3 (Backwash Out)	Valve #4 (Backwash In)	Valve #5 (Rinse)	Drain Line Flow Control
VNMSF21	21	1.25	20	29	V42D-0000-00000 (1070023)	V42C-0000-00000 (1070011)	V42C-0000-00000 (1070011)	V42C-0000-00000 (1070011)	OM-ST1504/29 (1.5" MPT Steel)
VNMSF24	24	1.5	30	38	V42E-0000-00000 (1070025)	V42E-0000-00000 (1070025)	V42E-0000-00000 (1070025)	V42E-0000-00000 (1070025)	OM-ST1504/38 (1.5" MPT Steel)
VNMSF30	30	2	50	59	V42F-0000-00000 (1070035)	V42F-0000-00000 (1070035)	V42F-0000-00000 (1070035)	V42F-0000-00000 (1070035)	OM-ST2007/59 (2" MPT Steel)
VNMSF36	36	2	70	85	V42G-0000-00000 (1070041)	V42G-0000-00000 (1070041)	V42G-0000-00000 (1070041)	V42G-0000-00000 (1070041)	OM-ST2509/85 (2.5" MPT Steel)
VNMSF42	42	2.5	95	115	V42H-0000-00000 (1070042)	V42H-0000-00000 (1070042)	V42H-0000-00000 (1070042)	V42H-0000-00000 (1070042)	OM-ST30014/115 (3" MPT Steel)
VNMSF48	48	2.5	120	151	V42H-0000-00000 (1070042)	V42H-0000-00000 (1070042)	V42H-0000-00000 (1070042)	V42H-0000-00000 (1070042)	OM-ST40025/151 (4" MPT Steel)
VNMSF54	54	3	160	191	V42J-0000-00000 (1070043)	V42J-0000-00000 (1070043)	V42J-0000-00000 (1070043)	V42J-0000-00000 (1070043)	OM-ST40025/191 (4" MPT Steel)
VNMSF60	60	3	200	235	V42J-0000-00000 (1070043)	V42J-0000-00000 (1070043)	V42J-0000-00000 (1070043)	V42J-0000-00000 (1070043)	OM-ST40025/235 (4" MPT Steel)
VNMSF66	66	4	235	285	V42K-3000-00000 (1070045)	V42K-3000-00000 (1070045)	V42K-3000-00000 (1070045)	V42K-3000-00000 (1070045)	OM-ST40025/237 (4" MPT Steel)
VNMSF72	72	4	275	298	V42K-3000-00000 (1070045)	V42K-3000-00000 (1070045)	V42K-3000-00000 (1070045)	V42K-3000-00000 (1070045)	OM-ST60054/270 (6" MPT Steel)

Optional Regeneration Bypass Valves

Part Number	Tank Size Inches
V42C-0032-00000	21
V42D-0032-00000	24
V42E-0032-00000	30 to 36
V42F-0032-00000	42 to 48
V42H-0032-00000	54 to 60
V42J-0032-00000	66 to 72

Valve Sizes

V42C	1 inch
V42D	1.25 inch
V42E	1.5 inch
V42F	2 inch
V42G	2 inch High FLow
V42H	2.5 inch
V42J	3 inch
V42K	4 inch

1.25 thru 3 inch valve nests are female NPT. 4 inch valve nests are flanged (ASTM). Metric flanges and thread sizes (BST & JIS) are available at no additional cost. These kits do **not** include the interconnecting pipe or fittings.

Flow Rate is based on 10 GPM per square foot.
10 Micron Filtration: (Service Flow Rate x 0.5).
Peak Flow Rate: (Service Flow Rate x 1.5).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1196
EFFECTIVE
JULY 2009

Industrial Diaphragm Valve Kits

COMPOSITE (PLASTIC) VALVE KITS
FOR CARBON AND FILTEREASE™ MEDIA

Composite (Plastic) Valve Kits for Carbon and FilterEase Media

Part Number	Tank Size Inches	Pipe Size Inches	Service Rate GPM	Backwash Rate GPM	Valves #1 & #2 (Service)	Valve #3 (Backwash Out)	Valve #4 (Backwash In)	Valve #5 (Rinse)	Drain Line Flow Control
VNPCF21	21	1.5	25	24	K534-X200-14000 (1070308)	K531-X200-14000 (1070304)	K531-X200-14000 (1070304)	K531-X200-14000 (1070304)	OM-TH1504/24 (1.5" MPT PVC)
VNPCF24	24	1.5	40	31	K534-X200-14000 (1070308)	K534-X200-14000 (1070308)	K534-X200-14000 (1070308)	K534-X200-14000 (1070308)	OM-TH1504/31 (1.5" MPT PVC)
VNPCF30	30	2	48	49	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	OM-TH2007/49 (2" MPT PVC)
VNPCF36	36	2	80	70	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	OM-TH2007/70 (2" MPT PVC)
VNPCF42	42	2	100	96	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	K535-X200-14000 (1070312)	OM-TH30014/96 (3" MPT PVC)
VNPCF48	48	3	115	126	K537-X200-14000 (1070316)	K537-X200-14000 (1070316)	K537-X200-14000 (1070316)	K537-X200-14000 (1070316)	OM-TH30014/126 (3" MPT PVC)
VNPCF63	60 to 63	3	175	196	K537-X200-14000 (1070316)	K537-X200-14000 (1070316)	K537-X200-14000 (1070316)	K537-X200-14000 (1070316)	OM-TH40025/196 (4" MPT PVC)

The above valve nests include the necessary valve socket adapters (ASTM). Metric sizes (JIS and ISO) are available at no additional cost.
These kits do **not** include the interconnecting pipe or fittings.

Optional Regeneration Bypass Valves

Part Number	Tank Size Inches
K531-X2B2-14000	21 to 24
K534-X2B2-14000	30 to 42
K535-X2B2-14000	48 to 63

Bypass Valve Socket Weld Adapter Kits

Part Number	Description
QA-K531060	1 inch ASTM
QA-K534060	1.5 inch ASTM
QA-K535060	2 inch ASTM

Valve Sizes

K531	1 inch
K534	1.5 inch
K535	2 inch
K537	3 inch

Carbon Flow Rate is based on 4 gpm per cubic foot for chlorine, and taste & odor reduction.
VOC Reduction: (Service Flow Rate x 0.5).
Peak Flow Rate: (Service Flow Rate x 1.25).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1192
EFFECTIVE
JULY 2009

Industrial Diaphragm Valve Kits

CAST IRON VALVE KITS
FOR CARBON AND FILTEREASE™ MEDIA

Cast Iron Valve Kits for Carbon and FilterEase Media

Part Number	Tank Size Inches	Pipe Size Inches	Service Rate GPM	Backwash Rate GPM	Valves #1 & #2 (Service)	Valve #3 (Backwash Out)	Valve #4 (Backwash In)	Valve #5 (Rinse)	Drain Line Flow Control
VNMCF21	21	1.25	25	24	V42D-0000-00000 (1070023)	V42C-0000-00000 (1070011)	V42C-0000-00000 (1070011)	V42C-0000-00000 (1070011)	OM-ST1504/24 (1.5" MPT Steel)
VNMCF24	24	1.5	40	31	V42E-0000-00000 (1070025)	V42E-0000-00000 (1070025)	V42E-0000-00000 (1070025)	V42E-0000-00000 (1070025)	OM-ST1504/31 (1.5" MPT Steel)
VNMCF30	30	2	48	49	V42F-0000-00000 (1070035)	V42F-0000-00000 (1070035)	V42F-0000-00000 (1070035)	V42F-0000-00000 (1070035)	OM-ST2007/49 (2" MPT Steel)
VNMCF36	36	2	80	70	V42G-0000-00000 (1070041)	V42G-0000-00000 (1070041)	V42G-0000-00000 (1070041)	V42G-0000-00000 (1070041)	OM-ST2007/70 (2" MPT Steel)
VNMCF42	42	2.5	100	90	V42H-0000-00000 (1070042)	V42H-0000-00000 (1070042)	V42H-0000-00000 (1070042)	V42H-0000-00000 (1070042)	OM-ST2509/90 (2.5" MPT Steel)
VNMCF48	48	2.5	115	126	V42H-0000-00000 (1070042)	V42H-0000-00000 (1070042)	V42H-0000-00000 (1070042)	V42H-0000-00000 (1070042)	OM-ST30014/126 (3" MPT Steel)
VNMCF54	54	3	135	159	V42J-0000-00000 (1070043)	V42J-0000-00000 (1070043)	V42J-0000-00000 (1070043)	V42J-0000-00000 (1070043)	OM-ST40025/159 (4" MPT Steel)
VNMCF60	60	3	175	196	V42J-0000-00000 (1070043)	V42J-0000-00000 (1070043)	V42J-0000-00000 (1070043)	V42J-0000-00000 (1070043)	OM-ST40025/196 (4" MPT Steel)
VNMCF66	66	4	210	237	V42K-3000-00000 (1070045)	V42K-3000-00000 (1070045)	V42K-3000-00000 (1070045)	V42K-3000-00000 (1070045)	OM-ST40025/237 (4" MPT Steel)
VNMCF72	72	4	260	270	V42K-3000-00000 (1070045)	V42K-3000-00000 (1070045)	V42K-3000-00000 (1070045)	V42K-3000-00000 (1070045)	OM-ST60054/270 (6" MPT Steel)

Optional Regeneration Bypass Valves

Part Number	Tank Size Inches
V42C-0032-00000	21
V42D-0032-00000	24
V42E-0032-00000	30 to 36
V42F-0032-00000	42 to 48
V42H-0032-00000	54 to 60
V42J-0032-00000	66 to 72

Valve Sizes

V42C	1 inch
V42D	1.25 inch
V42E	1.5 inch
V42F	2 inch
V42G	2 inch High FLow
V42H	2.5 inch
V42J	3 inch
V42K	4 inch

1.25 thru 3 inch valve nests are female NPT. 4 inch valve nests are flanged (ASTM). Metric flanges and thread sizes (BST & JIS) are available at no additional cost. These kits do **not** include the interconnecting pipe or fittings.

Carbon Flow Rate is based on 4 gpm per cubic foot for chlorine, and taste & odor reduction.
VOC Reduction: (Service Flow Rate x 0.5).
Peak Flow Rate: (Service Flow Rate x 1.25).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1192
EFFECTIVE
JULY 2009

Section 7

External Accessories & Service Tools For Filter Systems

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

Flow Controls

SWT PVC FLOW CONTROLS

Visit www.swtwater.com for more product listings and information.



PART NUMBER MATRIX

SM-FC	5	F	5	M	.25
PRODUCT CODE	(IS)	(IT)	(OS)	(OT)	(FR)

(IS) INLET SIZE:
38 = 3/8 inch
5 = 01/2 inch
7 = 3/4 inch
1 = 1 inch
15 = 1-1/2 inch
2 = 2 inch
3 = 3 inch

(OS) OUTLET SIZE:
38 = 3/8 inch
5 = 01/2 inch
7 = 3/4 inch
1 = 1 inch
15 = 1-1/2 inch
2 = 2 inch
3 = 3 inch

(IT) INLET TYPE:
F = Female Thread
M = Male Thread
S = Socket
SP = Spigot

(OT) OUTLET TYPE:
F = Female Thread
M = Male Thread
S = Socket
SP = Spigot

(FR) FLOW RATE:

.25 = 0.25 gpm (0.9 lpm)	2.5 = 2.5 gpm (9.4 lpm)	12 = 12.0 gpm (45.4 lpm)
.40 = 0.40 gpm (1.5 lpm)	3.0 = 3.0 gpm (11.3 lpm)	15 = 15.0 gpm (56.7 lpm)
.50 = 0.50 gpm (1.8 lpm)	3.5 = 3.5 gpm (13.2 lpm)	20 = 20.0 gpm (75.7 lpm)
.60 = 0.60 gpm (2.2 lpm)		
.70 = 0.70 gpm (2.6 lpm)	4.0 = 4.0 gpm (15.1 lpm)*	
.90 = 0.90 gpm (3.4 lpm)		
1.0 = 1.0 gpm (3.7 lpm)	05 = 5.0 gpm (18.9 lpm)	
1.2 = 1.2 gpm (4.5 lpm)	06 = 6.0 gpm (22.7 lpm)	
1.4 = 1.4 gpm (5.2 lpm)	07 = 7.0 gpm (26.4 lpm)	
1.6 = 1.6 gpm (6.0 lpm)	08 = 8.0 gpm (30.2 lpm)	
1.8 = 1.8 gpm (6.8 lpm)	09 = 9.0 gpm (34.0 lpm)	
2.0 = 2.0 gpm (7.5 lpm)	10 = 10.0 gpm (37.8 lpm)	
2.2 = 2.2 gpm (8.3 lpm)		

* 4.0 gpm (15.1 lpm) flow only available with SM-FC7M7M.

SWT PVC Flow Controls

Part Number	Inlet/Outlet Connections		(FR) Flow Rate Range
	Size, Inches	Type	GPM
SM-FC5SP5SP(FR)	1/2	Spigot	0.25 to 3.5
SM-FC7SP7SP(FR)	3/4	Spigot	0.25 to 10.0
SM-FC1SP1SP(FR)	1	Spigot	0.25 to 20.0
SM-FC15SP15SP(FR)	1-1/2	Spigot	5.0 to 40.0
SM-FC2SP2SP(FR)	2	Spigot	5.0 to 70.0
SM-FC3SP3SP(FR)	3	Spigot	5.0 to 140.0
SM-FC5S5S(FR)	1/2	Socket	0.25 to 3.5
SM-FC7S7S(FR)	3/4	Socket	0.25 to 10.0
SM-FC1S1S(FR)	1	Socket	0.25 to 20.0
SM-FC15S15S(FR)	1-1/2	Socket	5.0 to 40.0
SM-FC2S2S(FR)	2	Socket	5.0 to 70.0
SM-FC3S3S(FR)	3	Socket	5.0 to 140.0

Max. Operating Pressure: 150 PSI
Max. Operating Temperature: 140°F (60°C)
Materials: PVC & Buna-N (Standard)
Other plastic materials available (CPVC, Teflon, ABS, etc).
Metric sizes available.

Part Number	Inlet/Outlet Connections		(FR) Flow Rate Range
	Size, Inches	Type	GPM
SM-FC38F38F(FR)	3/8	FPT	0.25 to 3.5
SM-FC5F5F(FR)	1/2	FPT	0.25 to 3.5
SM-FC7F7F(FR)	3/4	FPT	0.25 to 10.0
SM-FC1F1F(FR)	1	FPT	0.25 to 20.0
SM-FC15F15F(FR)	1-1/2	FPT	5.0 to 40.0
SM-FC2F2F(FR)	2	FPT	5.0 to 70.0
SM-FC3F3F(FR)	3	FPT	5.0 to 140.0
SM-FC5M5M(FR)	1/2	MPT	0.25 to 3.5
SM-FC7M7M(FR)*	3/4	MPT	0.25 to 10.0
SM-FC1M1M(FR)	1	MPT	0.25 to 20.0
SM-FC15M15M(FR)	1-1/2	MPT	5.0 to 40.0
SM-FC2M2M(FR)	2	MPT	5.0 to 70.0
SM-FC3M3M(FR)	3	MPT	5.0 to 140.0
SM-FC5F5M(FR)	1/2	FPT/MPT	0.25 to 3.5
SM-FC7F7M(FR)	3/4	FPT/MPT	0.25 to 10.0
SM-FC1F7M(FR)	1 to 3/4	FPT/MPT	5.0 to 10.0
SM-FC1F1M(FR)	1	FPT/MPT	0.25 to 20.0
SM-FC15F15M(FR)	1-1/2	FPT/MPT	5.0 to 40.0
SM-FC2F2M(FR)	2	FPT/MPT	5.0 to 70.0
SM-FC3F3M(FR)	3	FPT/MPT	5.0 to 140.0

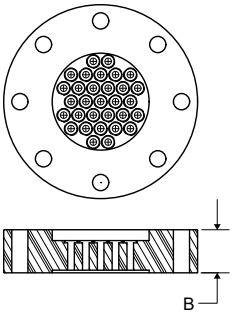
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1318
EFFECTIVE
NOVEMBER 2025

SWT PVC FLANGE DISC, EXTERNAL BACKWASH, BRASS & STAINLESS STEEL FLOW CONTROLS

SWT PVC Flange Disc Flow Controls

Flange Face Surface Finish on Both Sides of Flange Discs
Full-Faced Flange Gaskets Available — See last page



Max. Pressure: 150 PSI

Max. Temp: 140°F (60°C)

Materials: PVC & Buna-N (Standard)

Other materials available include PP, CPVC, PVDF, Kynar, PTFE, Teflon

Part Number	Flange Bolt Pattern	Number of Inserts	(FR) Flow Rate Range		Length "B" Inches	OD
			GPM	LPM		
SM-DI40MM4/(FR)	40mm DN	4	5 to 40	18.9 to 151	0.709	150mm
SM-DI1504/(FR)	1.5 inch ANSI	4	5 to 40	18.9 to 151	1.125	5 inch
SM-DI2007/(FR)	2 inch ANSI	7	5 to 70	18.9 to 265	1.125	6 inch
SM-DI30019/(FR)	3 inch ANSI	19	5 to 190	18.9 to 719	1.5	7-1/2 inch
SM-DI80MM19/(FR)	80mm DN80-PN10	19	5 to 190	18.9 to 719	1.5	200mm
SM-DI100MM25/(FR)	100mm DN100-PN10	25	5 to 250	18.9 to 946	2.0	220mm
SM-DI40025/(FR)	4 inch ANSI	25	5 to 250	18.9 to 946	2.0	9 inch
SM-DI40033/(FR)	4 inch ANSI	33	5 to 330	18.9 to 1249	2.0	9 inch
SM-DI60055/(FR)	6 inch ANSI	55	5 to 550	18.9 to 2082	2.5	8-5/8 inch*
SM-DI804216/(FR)	8 inch ANSI	58	5 to 1000	18.9 to 3785	2.5	13-1/2 inch
SM-DI100###/(FR)	10 inch ANSI	**	**	**	2.5	16 inch
SM-DI120###/(FR)	12 inch ANSI	**	**	**	2.5	19 inch

* Flange disc is without bolt holes and fits inside of bolts between two mating 6 inch ANSI flanges.

** Number of inserts and GPM/LPM are flexible.

NOTE: SM-DI60055/(FR) has 1-7/8" material behind rubber inserts.

SWT External Backwash Flow Controls



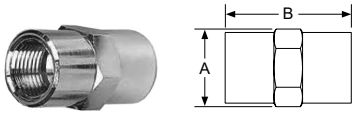
Part Number	Inlet		Outlet		Flow Rate	
	Size Inches	Type	Size Inches	Type	GPM	LPM
BWFC-.75/5	3/4	FPT	1/2	FPT	5	18.9
BWFC-.75/6	3/4	FPT	1/2	FPT	6	22.7
BWFC-.75/7	3/4	FPT	1/2	FPT	7	26.5
BWFC-.75/8	3/4	FPT	1/2	FPT	8	30.3

Flo-et Brass and Stainless Steel Flow Controls

Contains PVC and Buna Internal Components



BRASS



STAINLESS STEEL

Part Number	Pipe Size Inches	(FR) Flow Rate Range		Dimensions Inches		Housing Material
		GPM	LPM	A	B	
LC-FC7M7M(FR)-BR	3/4" MPT	0.25 to 3.5 5 to 10	0.94 to 13.2 18.9 to 37.8	1-3/32	1-3/4	Brass
LC-FC5F5F(FR)-SS	1/2" FPT	0.25 to 3.5 5 to 10	0.94 to 13.2 18.9 to 37.8	1	1-7/8	Stainless Steel
LC-FC7F7F(FR)-SS	3/4" FPT	0.25 to 3.5 5 to 10	0.94 to 13.2 18.9 to 37.8	1-1/4	2	Stainless Steel
LC-FC1F1F(FR)-SS	1" FPT	5 to 10 12 to 20	18.9 to 37.8 45.4 to 75.7	1-1/2	2-3/4	Stainless Steel

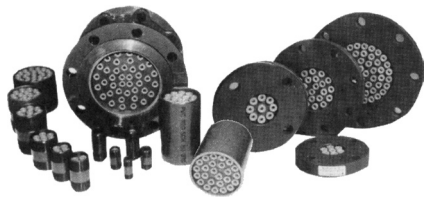
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1318
EFFECTIVE
NOVEMBER 2025

FLO-CONTROLET™ FULLY AUTOMATIC METERING FLOW CONTROLS

Visit www.swtwater.com for more product listings and information.



PART NUMBER MATRIX

OM	-	TH	0501	/	.25
PRODUCT CODE		(CT)	(PI)		(FR)

(CT) CONFIG TYPE:
TH = PVC Threaded
PE = PVC Spigot
FL = PVC ANSI Flanged
DI = PVC Disc–ANSI
ST = Steel Threaded
BR1 = Brass Threaded
BR2 = Brass Threaded

(PI) PIPE SIZE & INSERTS:
0501 = 0.5" w/ 1 Insert
0751 = .75" w/ 1 Insert
1001 = 1" w/ 1 Insert
1001C = 1" w/ 1 Insert
1252 = 1.25" w/ 2 Inserts
1504 = 1.5" w/ 4 Inserts
2007 = 2" w/ 7 Inserts
2509 = 2.5" w/ 9 Inserts
30014 = 3" w/ 14 Inserts
40025 = 4" w/ 25 Inserts
60054 = 6" w/ 54 Inserts

(FR) FLOW RATE:
.25 = 0.25 gpm (0.9 lpm)
.40 = 0.40 gpm (1.5 lpm)
.50 = 0.50 gpm (1.8 lpm)
.60 = 0.60 gpm (2.2 lpm)
.70 = 0.70 gpm (2.6 lpm)
.90 = 0.90 gpm (3.4 lpm)
1.0 = 1.0 gpm (3.7 lpm)
1.2 = 1.2 gpm (4.5 lpm)
1.4 = 1.4 gpm (5.2 lpm)
1.6 = 1.6 gpm (6.0 lpm)
1.8 = 1.8 gpm (6.8 lpm)
2.0 = 2.0 gpm (7.5 lpm)
2.2 = 2.2 gpm (8.3 lpm)
2.5 = 2.5 gpm (9.4 lpm)
3.0 = 3.0 gpm (11.3 lpm)
3.5 = 3.5 gpm (13.2 lpm)

5 thru 540 = 5 gpm (18.9 lpm) thru 540 gpm (2044 lpm) in 1 gpm increments

Flo-ControLet™ Flow Controllers

Part Number	Pipe Size Inches	No. of Inserts	(FR) Flow Rate Range GPM	(TH) PVC Threaded NPT		(PE) PVC Spigot		(FL) PVC ANSI Flanged	
				Length Inches	Approx. Weight Lbs.	Length Inches	Approx. Weight Lbs.	Length Inches	Approx. Weight Lbs.
OM-(CT)0501/(FR)	0.5	1	0.25 to 3.5	—	—	—	—	5	0.49
OM-(CT)0751/(FR)	0.75	1	0.25 to 10	—	—	—	—	5	0.68
OM-(CT)1001/(FR)	1	1	5 to 10	—	—	—	—	6	0.96
OM-(CT)1001C/(FR)	1	1	12, 15, 20	—	—	—	—	6	0.96
OM-(CT)1252/(FR)	1.25	2	10 to 20	3	0.18	6	0.27	6	1.27
OM-(CT)1504/(FR)	1.5	4	20 to 40	3	0.25	6	0.36	6	1.64
OM-(CT)2007/(FR)	2	7	35 to 70	3	0.31	6	0.47	6	2.43
OM-(CT)2509/(FR)	2.5	9	45 to 90	4	0.56	6	0.80	6	3.80
OM-(CT)30014/(FR)	3	14	70 to 140	4	0.68	6	1.00	6	4.76
OM-(CT)40025/(FR)	4	25	125 to 250	4	1.00	6	1.47	6	7.55
OM-(CT)60054/(FR)	6	54	270 to 540	5	2.50	8	3.90	8.5	12.60

Part Number	Pipe Size Inches	No. of Inserts	(FR) Flow Rate Range GPM	(DI) PVC Disc-ANSI		(ST) Steel Threaded NPT		(BR) Brass Threaded NPT	
				Length Inches	Approx. Weight Lbs.	Length Inches	Approx. Weight Lbs.	Length Inches	Approx. Weight Lbs.
OM-(CT)0501/(FR)*	0.5	1	0.25 to 10	—	—	—	—	2	0.12
OM-(CT)0751/(FR)	0.75	1	0.25 to 10	—	—	2.5	0.28	—	—
OM-(CT)1001/(FR)	1	1	5 to 10	—	—	3	0.50	—	—
OM-(CT)1001C/(FR)	1	1	12, 15, 20	—	—	3	0.53	—	—
OM-(CT)1252/(FR)	1.25	2	10 to 20	—	—	3	0.62	—	—
OM-(CT)1504/(FR)	1.5	4	20 to 40	—	—	3	0.78	—	—
OM-(CT)2007/(FR)	2	7	35 to 70	0.9375	1.12	3	1.06	—	—
OM-(CT)2509/(FR)	2.5	9	45 to 90	0.9375	1.50	4	2.15	—	—
OM-(CT)30014/(FR)	3	14	70 to 140	0.9375	1.75	4	2.75	—	—
OM-(CT)40025/(FR)	4	25	125 to 250	0.9375	2.48	4	4.09	—	—
OM-(CT)60054/(FR)	6	54	270 to 540	0.9375	3.73	5	7.85	—	—

* Brass Threaded has two models: BR1 (0.25 to 3.5 gpm) and BR2 (5 to 10 gpm).

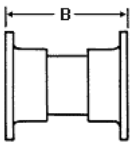
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1318
EFFECTIVE
NOVEMBER 2025

SWT PVC ANSI FLANGE & UNION FLOW CONTROLS & FULL-FACED FLANGE GASKETS

SWT PVC ANSI Flange Flow Controls



Part Number	Pipe Size Inches	(FR) Flow Rate Range		Length "B" Inches
		GPM	LPM	
SM-FL15F15F(FR)	1-1/2	5 to 40	18.9 to 151.4	6
SM-FL2F2F(FR)	2	5 to 70	18.9 to 265.0	6
SM-FL3F3F(FR)	3	5 to 140	18.9 to 530.0	6
SM-FL4F4F(FR)	4	5 to 250	18.9 to 946.4	6

SWT PVC Union Flow Controls Specifications



Part Number	Inlet/Outlet Connections		(FR) Flow Rate Range	
	Size Inches	Type	GPM	LPM
SM-FC1SU1SU(FR)	1	Socket Union	5 to 10	18.9 to 37.8
SM-FC1FU1FU(FR)	1	FNPT Union	5 to 10	18.9 to 37.8
SM-FC15SU15SU(FR)	1-1/2	Socket Union	5 to 40	18.9 to 151
SM-FC15FU15FU(FR)	1-1/2	FNPT Union	5 to 40	18.9 to 151
SM-FC2SU2SU(FR)	2	Socket Union	5 to 70	18.9 to 264.9
SM-FC2FU2FU(FR)	2	FNPT Union	5 to 70	18.9 to 264.9
SM-FC3SU3SU(FR)	3	Socket Union	5 to 140	18.9 to 529.9
SM-FC3FU3FU(FR)	3	FNPT Union	5 to 140	18.9 to 529.9
SM-FC4SU4SU(FR)	4	Socket Union	5 to 250	18.9 to 946.3
SM-FC4FU4FU(FR)	4	FNPT Union	5 to 250	18.9 to 946.3

Full-Faced Flange Gaskets

Flange Size	Bolt Holes	Part Number		
		Buna-N	EPDM	Viton/FKM
1/2	4	853-005-GB	853-005-GE	853-005-GV
3/4	4	853-007-GB	853-007-GE	853-007-GV
1	4	853-010-GB	853-010-GE	853-010-GV
1-1/4	4	853-012-GB	853-012-GE	853-012-GV
1-1/2	4	853-015-GB	853-015-GE	853-015-GV
2	4	853-020-GB	853-020-GE	853-020-GV
2-1/2	4	853-025-GB	853-025-GE	853-025-GV
3	4	853-030-GB	853-030-GE	853-030-GV
4	8	853-040-GB	853-040-GE	853-040-GV
5	8	853-050-GB	853-050-GE	853-050-GV
6	8	853-060-GB	853-060-GE	853-060-GV

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1318
EFFECTIVE
NOVEMBER 2025

Flow Controls

STAINLESS STEEL FLOW CONTROLS



1.25 inch Stainless Steel Flow Control



1.5 inch Stainless Steel Flow Control



2 inch Stainless Steel Flow Control



3 inch Stainless Steel Flow Control

Operating Pressures: 20 psi Minimum / 125 psi Maximum (1.4 to 8.6 bar)

Operating Temperatures: 40°F Minimum / 110°F Maximum (4 to 43°C)

NOTE: These drain line flow controls should not be used as the primary flow control device for critical or health effect applications.

Stainless Steel Flow Controls

Part Number	Inlet		Outlet		Flow Rate Range		Length Inches
	Size Inches	Type	Size Inches	Type	GPM	LPM	
LC-FC125M15F(FR)-SS *	1.25	Male NPT	1.5	Female NPT	9 to 85	34.0 to 321.7	4.20
LC-FC125M15FB(FR)-SS *	1.25	Male NPT	1.5	Female BSPT	9 to 85	34.0 to 321.7	4.20
LC-FC15M15F(FR)-SS *	1.5	Male NPT	1.5	Female NPT	9 to 85	34.0 to 321.7	3.50
LC-FC15M15FB(FR)-SS *	1.5	Male NPT	1.5	Female BSPT	9 to 85	34.0 to 321.7	3.50
LC-FC2M2F(FR)-SS *	2.0	Male NPT	2.0	Female NPT	0.7 to 150	2.64 to 567.8	4.31
LC-FC2MB2F(FR)-SS *	2.0	Male BSPT	2.0	Female NPT	0.7 to 150	2.64 to 567.8	4.31
LC-FC2M2FB(FR)-SS *	2.0	Male NPT	2.0	Female BSPT	0.7 to 150	2.64 to 567.8	4.31
LC-FC2MB2FB(FR)-SS *	2.0	Male BSPT	2.0	Female BSPT	0.7 to 150	2.64 to 567.8	4.31
LC-FC3M3F(FR)-SS *	3.0	Male NPT	3.0	Female NPT	9 to 225	34.0 to 851.7	6.31
LC-FC3MB3F(FR)-SS *	3.0	Male BSPT	3.0	Female NPT	9 to 225	34.0 to 851.7	6.31
LC-FC3M3FB(FR)-SS *	3.0	Male NPT	3.0	Female BSPT	9 to 225	34.0 to 851.7	6.31
LC-FC3MB3FB(FR)-SS *	3.0	Male BSPT	3.0	Female BSPT	9 to 225	34.0 to 851.7	6.31

* (FR) denotes Flow Rate in gallons per minute (gpm).
Example: LC-FC2M2F33-SS is a Stainless Steel Flow Control with 2 inch male NPT input, 2 inch female NPT output, and 33 gpm flow rate.

Materials of Construction

Body: SS316 Internal Retainer: Glass-filled Noryl Orifices: EPDM

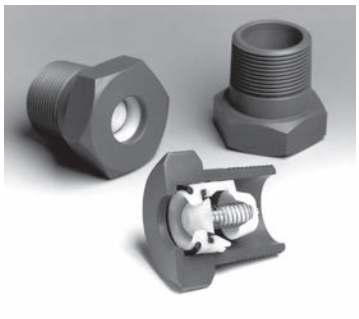
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1430
EFFECTIVE
OCTOBER 2018

PRESSURE VESSEL FITTINGS

VACUUM BREAKERS



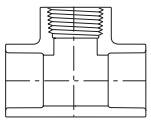
SWT's Machined Vacuum Breakers *are available with a machined PVC, CPVC, or PVDF body and thread or spigot connection. They automatically vent a closed system to atmosphere when a vacuum of approximately 2-inches of water column (5 millibar or 0.07 psi) is present.*

Technical Specifications:

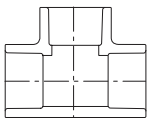
Max .Temperature . . .	PVC: 140ºF	CPVC: 150ºF	PVDF: 150ºF Cont .
Max .Pressure	PVC:. 150 psi @ 105ºF	CPVC: 150 psi @ 105ºF	PVDF: 150 psi @ 150ºF

Available Models:

SM-VB4P 1-1/2" MNPT, PVC (see photo)
SM-VB4P-SPIG 1-1/2" Spigot, PVC
SM-VB4P-CPVC 1-1/2" MNPT, CPVC
SM-VB4P-CPVC-SPIG 1-1/2" Spigot, CPVC
SM-VB4P-PVDF 1-1/2" MNPT, PVDF
SM-VB-34SP-CPVC 3/4" Spigot, CPVC
SM-VB-12SP 1/2" Spigot, PVC



MNPT MODELS TEE
SOC X SOC X FPT



SOCKET MODELS TEE
SOC X SOC X SOC

Materials of Construction:

Machined PVC, CPVC, or PVDF body, acetal diaphragm, stainless steel spring, Buna-N seals

Installation:

Install the vacuum breaker at the highest point in the system using a reducing tee .

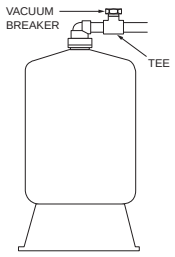
For 1-1/2 inch MNPT models...

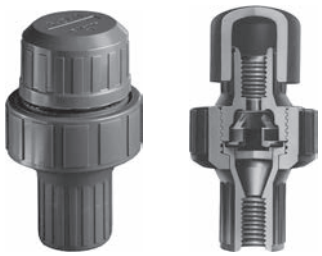
PART NO.	DESCRIPTION
802-015	PVC Tee for 1 5 inch pipe
802-251	PVC Tee for 2 inch pipe
802-291	PVC Tee for 2 5 inch pipe
802-337	PVC Tee for 3 inch pipe
802-419	PVC Tee for 4 inch pipe

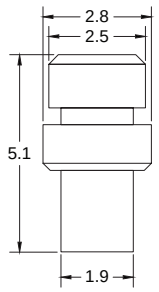
For 1-1/2 inch Socket models...

PART NO.	DESCRIPTION
801-015	PVC Tee for 1 5 inch pipe
801-251	PVC Tee for 2 inch pipe
801-291	PVC Tee for 2 5 inch pipe
801-337	PVC Tee for 3 inch pipe
801-419	PVC Tee for 4 inch pipe

NOTE: Add "C" to end of Part No .for CPVC Tee .







DIMENSIONS SHOWN IN INCHES

Molded 1-inch FNPT Vacuum Breakers (P/N TS-10725) *are designed to protect enclosed tanks from collapse or structural damage during draining and eliminate siphoning of dangerous fluids. There is only one moving part—the patented self-sealing diaphragm. This provides both design simplicity and maximum operating dependability. This normally-closed design seals in the identical location every time, producing a very dependable, long-life seal. These vacuum breakers will begin to break a vacuum at approximately 2-inches of mercury (1.0 psi or 0,07 bar negative pressure). Full vacuum is 29-inches of mercury.*

Technical Specifications:

Maximum Operating Temperature 180ºF. (82ºC)

Maximum Operating Pressure . . . . . 100 psi @ 75ºF .(6 9 bar @ 24º C)

Materials of Construction:

Molded glass-filled polypropylene body, FKM seals

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

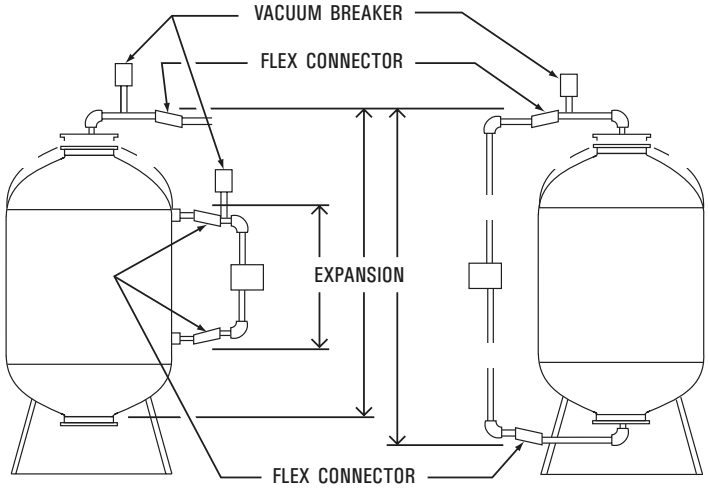
FORM 1388
EFFECTIVE
NOVEMBER 2017

VACUUM BREAKERS

Vacuum Protection & Flex Connectors

Fiberglass/composite pressure vessels are rated for an internal negative pressure of 5-inches Hg (17 Pa) vacuum below atmospheric. If negative pressure could ever exceed 5-inches Hg (17 Pa), an adequate vacuum breaker must be installed between the pressure vessel inlet and any valves (see illustration right). For enclosed tank applications, the vacuum breaker should be installed at the highest location in the system plumbing.

System connections to the pressure vessel must accomodate vertical expansion between side, top, and bottom openings. Either flexibility in piping or flex connectors, as shown here, are recommended.

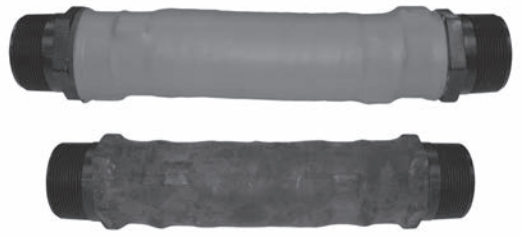


SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association
FORM 1388
EFFECTIVE
NOVEMBER 2017

PRESSURE VESSEL FITTINGS

FLEX CONNECTORS



TOP: NI-5285 Flex Connector
BOTTOM: TS-5285 Flex Connector

Connections & Dimensions:

NI-5282 1" MNPT x 1" MNPT x 14" OAL
NI-5285 2" MNPT x 2" MNPT x 14" OAL
NI-5286 3" MNPT x 3" MNPT x 14" OAL
TS-5285 2" MNPT x 2" MNPT x 12.25" OAL
TS-5286 3" MNPT x 3" MNPT x 13.125" OAL

Flex Connectors *are recommended to accommodate the vertical expansion between the side, top, and bottom opening of fiberglass/ composite pressure vessels in commercial and industrial applications.*

Technical Specifications:

Max. Recommended Operating Temperature . . . . . 180°F (82°C)

Max. Recommended Operating Pressure . . . . . 150 psi

Materials of Construction:

NI-5282, NI-5285, NI-5286 — glass-filled polypropylene threaded end fittings, EPDM water suction hose, stainless steel banding, covered with blue heat shrink

TS-5285, TS-5286 — polypropylene threaded end fittings, white FDA neoprene rubber, polyester tire cord with a wire helix, covered with a smooth weather and abrasion resistant synthetic rubber

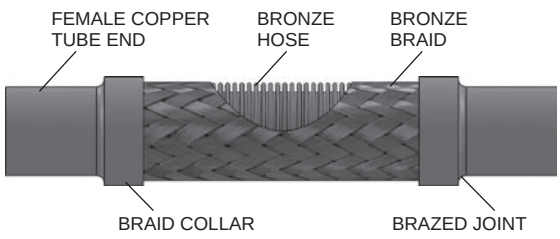
---



Made in USA

Metal Flex Connectors for Copper Pipe

Part Number	Connection Size	Overall Length	Max Pressure @ 70°F
EM1-005	1/2 inch Sweat	10 inch	450 PSI
EM1-007	3/4 inch Sweat	10 inch	340 PSI
EM1-010	1 inch Sweat	10 inch	302 PSI
EM1-012	1-1/4 inch Sweat	10 inch	280 PSI
EM1-015	1-1/2 inch Sweat	12 inch	245 PSI
EM1-020	2 inch Sweat	14 inch	190 PSI
EM1-025	2-1/2 inch Sweat	16 inch	150 PSI
EM1-030	3 inch Sweat	16 inch	150 PSI



Materials of Construction:

The braid is a tubular sheath of metal wires woven in a basket weave fashion. It is made to snugly fit over the corrugated hose, and is fastened to the ends of the hose. It is designed to be strong enough to withstand elongation for the full pressure rating of the hose. The ends are copper for sweat welding to copper pipe.

EM1-005, 007, 010, 012, 015, 020

Copper: Female tube end and braid collar

Bronze: Hose and braid

EM1-025, 030

Copper: Female tube end and braid collar

Stainless Steel: Hose and braid

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1389
EFFECTIVE
FEBRUARY 2018

PRESSURE VESSEL FITTINGS

FLEX CONNECTORS



Made in USA

PVC & CPVC Sch80 Elastomer Flex Connectors

- Convenient, double union end connections with strong, buttress thread union nuts
- Internal nylon cord reinforced elastomer bellows tube
- Chemically resistant neoprene elastomer or EPDM tube available
- Double spherical arch bellows provides improved movement capability
- Pressure rated to 150 psi @ 73°F (23°C)
- Available with socket or Special Reinforced (SR) female plastic thread with stainless steel collar end connectors

PVC Elastomer Flex Connectors with Socket Connection and Neoprene Bellows

EJ02-007 . . . . . 3/4 inch Socket
EJ02-010 . . . . . 1 inch Socket
EJ02-012 . . . . . 1-1/4 inch Socket
EJ02-015 . . . . . 1-1/2 inch Socket
EJ02-020 . . . . . 2 inch Socket
EJ02-025 . . . . . 2-1/2 inch Socket
EJ02-030 . . . . . 3 inch Socket

PVC Elastomer Flex Connectors with Socket Connection and EPDM Bellows

EJ22-007 . . . . . 3/4 inch Socket
EJ22-010 . . . . . 1 inch Socket
EJ22-012 . . . . . 1-1/4 inch Socket
EJ22-015 . . . . . 1-1/2 inch Socket
EJ22-020 . . . . . 2 inch Socket
EJ22-025 . . . . . 2-1/2 inch Socket
EJ22-030 . . . . . 3 inch Socket

CPVC Elastomer Flex Connectors with Socket Connection and EPDM Bellows

EJ22-007C . . . . . 3/4 inch Socket
EJ22-010C . . . . . 1 inch Socket
EJ22-012C . . . . . 1-1/4 inch Socket
EJ22-015C . . . . . 1-1/2 inch Socket
EJ22-020C . . . . . 2 inch Socket
EJ22-025C . . . . . 2-1/2 inch Socket
EJ22-030C . . . . . 3 inch Socket

PVC Elastomer Flex Connectors with FNPT Connection and Neoprene Bellows

EJ01-007SR . . . . 3/4 inch FNPT
EJ01-010SR . . . . 1 inch FNPT
EJ01-012SR . . . . 1-1/4 inch FNPT
EJ01-015SR . . . . 1-1/2 inch FNPT
EJ01-020SR . . . . 2 inch FNPT
EJ01-025SR . . . . 2-1/2 inch FNPT
EJ01-030SR . . . . 3 inch FNPT

PVC Elastomer Flex Connectors with FNPT Connection and EPDM Bellows

EJ21-007SR . . . . 3/4 inch FNPT
EJ21-010SR . . . . 1 inch FNPT
EJ21-012SR . . . . 1-1/4 inch FNPT
EJ21-015SR . . . . 1-1/2 inch FNPT
EJ21-020SR . . . . 2 inch FNPT
EJ21-025SR . . . . 2-1/2 inch FNPT
EJ21-030SR . . . . 3 inch FNPT

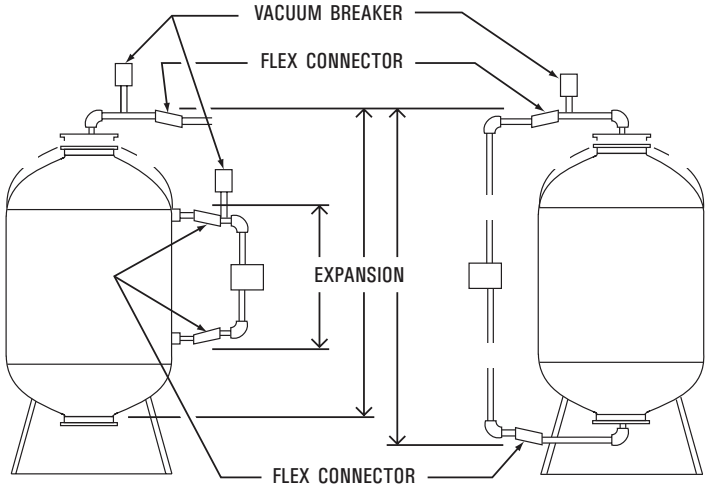
CPVC Elastomer Flex Connectors with FNPT Connection and EPDM Bellows

EJ21-007CSR . . . 3/4 inch FNPT
EJ21-010CSR . . . 1 inch FNPT
EJ21-012CSR . . . 1-1/4 inch FNPT
EJ21-015CSR . . . 1-1/2 inch FNPT
EJ21-020CSR . . . 2 inch FNPT
EJ21-025CSR . . . 2-1/2 inch FNPT
EJ21-030CSR . . . 3 inch FNPT

Vacuum Protection & Flex Connectors

Fiberglass/composite pressure vessels are rated for an internal negative pressure of 5-inches Hg (17 Pa) vacuum below atmospheric. If negative pressure could ever exceed 5-inches Hg (17 Pa), an adequate vacuum breaker must be installed between the pressure vessel inlet and any valves (see illustration right). For enclosed tank applications, the vacuum breaker should be installed at the highest location in the system plumbing.

System connections to the pressure vessel must accomodate vertical expansion between side, top, and bottom openings. Either flexibility in piping or flex connectors, as shown here, are recommended.

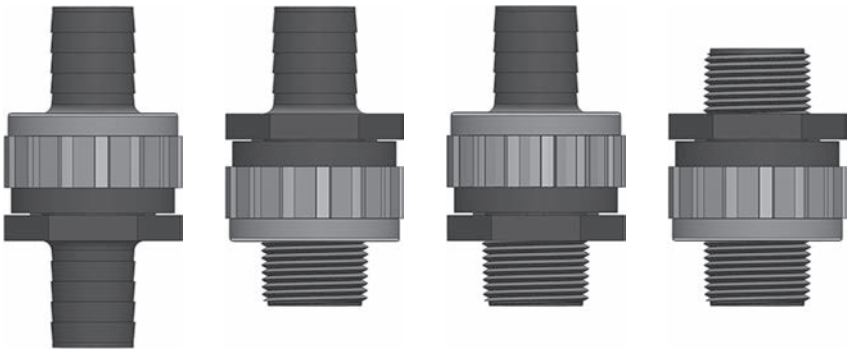


SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1389
EFFECTIVE
FEBRUARY 2018

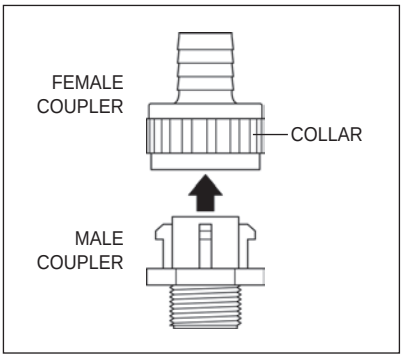
WEDGIT® CONNECTORS
3/4 INCH



"SHOP PAIR" WED-075-CE | "INLET PAIR" WED-075-BE | "OUTLET PAIR" WED-075-CF | "THREADED PAIR" WED-075-BF

Wedgit® Connectors *are easy to use and quickly provide a positive seal for DI and exchange tank applications. They can be connected or disconnected in seconds blindfolded and without tools.*

With only fingertip pressure, rotate the collar 1/8 turn (22 degrees) and the connection is sealed against pressure and vacuum. No tools, no cross-threading. no binding, no wear, no overtightening, no problems.



Wedgit Connectors are sold in four paired configurations. Each pair consists of a female coupler and a male coupler. The four pins located on the male coupler engage with the female coupler's internal wedge to lock/unlock the fitting. The inlet and outlet pairs are specially designed for error-free tank connections.

PRESSURE DROP VS WATER FLOW

Flow (gpm)	1	2	3	4	5	6	8	10
Drop (psi)	0.001	0.005	0.010	0.017	0.025	0.035	0.060	0.092

SPECIFICATIONS

Pressures:

Operating ..... 0 to 175 psi
Leak ..... 750 psi
Burst ..... 750 psi

End Connections:

Hose barb end fits 3/4 inch ID hose
Threaded end fits 3/4 inch NPT

Structural Materials:

Body ..... Glass Filled Noryl
Collar ..... Light Gray ABS
O-ring ..... EPDM

TESTING

Thermal Testing:

Conditions ..... 150 psi @ 150°F
Duration ..... 30 days
Result ..... No leak

Pulse Testing:

Conditions ..... 150 psi, 5 second pulses
Duration ..... 200K cycles
Result ..... No leak



THIS PRODUCT IS 100% MADE IN USA.

Part Number	Description
WED-075-BE	INLET PAIR — 3/4 inch MPT Female Coupler x 3/4 inch Barb Male Coupler
WED-075-BF	THREADED PAIR — 3/4 inch MPT Female Coupler x 3/4 inch MPT Male Coupler
WED-075-CE	SHOP PAIR — 3/4 inch Barb Female Coupler x 3/4 inch Barb Male Coupler
WED-075-CF	OUTLET PAIR — 3/4 inch Barb Female Coupler x 3/4 inch MPT Male Coupler
WED-075-PLUG	Wedgit Plug — Fits Into Hose Barb End and Threaded End

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1440
EFFECTIVE
NOVEMBER 2016

POLYPROPYLENE CAM COUPLINGS

SWT's Polypropylene (PP) Cam Couplings *are precision molded of sturdy glass-filled polypropylene material for rugged strength and durability, and to insure a uniform and accurate fit. Stainless steel arms, pins, and finger rings are designed for easy opening of the cam levers. Made in USA.*

Operating Conditions

3/8 to 2 inch: Minimum Temperature of moving liquid: 0°F @ 100 psi
Maximum Temperature: 150°F @70 psi; 70°F @ 125 psi

3 to 4 inch: Couplings 75 psi max.; Cap 50 psi



Type A – Male Adapter x Female Thread

Part Number	Description	Max PSI	Gasket
SS-025-AP	3/4" Male Adapter x 1/4" Female Thread	300	N/A
SS-037-AP	3/4" Male Adapter x 3/8" Female Thread	300	N/A
SS-050-AP	3/4" Male Adapter x 1/2" Female Thread	225	N/A
SS-075-AP	3/4" Male Adapter x 3/4" Female Thread	225	N/A
SS-100-AP	1" Male Adapte x 1" Female Thread	300	N/A
SS-150-AP	1-1/2" Male Adapter x 1-1/2" Female Thread	225	N/A
SS-200-AP	2" Male Adapter x 2" Female Thread	225	N/A
SS-300-AP	3" Male Adapter x 3" Female Thread	100	N/A
SS-400-AP	4" Male Adapter x 4" Female Thread	75	N/A



Type B – Female Coupler x Male Thread

Part Number	Description	Max PSI	Gasket
SS-050-BP	3/4" Female Coupler x 1/2" Male Thread	300	EPDM
SS-075-BP	3/4" Female Coupler x 3/4" Male Thread	300	EPDM
SS-100-BP	1" Female Coupler x 1" Male Thread	300	EPDM
SS-150-BP	1-1/2" Female Coupler x 1-1/2" Male Thread	300	EPDM
SS-200-BP	2" Female Coupler x 2" Male Thread	225	EPDM
SS-300-BP	3" Female Coupler x 3" Male Thread	150	EPDM
SS-300-BP-3A	3" Female Coupler with 3 Arms x 3" Male Thread	75	EPDM
SS-400-BP	4" Female Coupler x 4" Male Thread	150	EPDM



Type C – Female Coupler x Hose Shank

Part Number	Description	Max PSI	Gasket
SS-050-CP	3/4" Female Coupler x 1/2" Hose Shank	300	EPDM
SS-075-CP	3/4" Female Coupler x 3/4" Hose Shank	300	EPDM
SS-100-CP	1" Female Coupler x 1" Hose Shank	300	EPDM
SS-150-CP	1-1/2" Female Coupler x 1-1/2" Hose Shank	300	EPDM
SS-200-CP	2" Female Coupler x 2" Hose Shank	225	EPDM
SS-300-CP	3" Female Coupler x 3" Hose Shank	200	EPDM
SS-300-CP-3A	3" Female Coupler with 3 Arms x 3" Hose Shank	200	EPDM
SS-400-CP	4" Female Coupler x 4" Hose Shank	150	EPDM

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1422
EFFECTIVE
OCTOBER 2018

POLYPROPYLENE CAM COUPLINGS



Type D – Female Coupler x Female Thread

Part Number	Description	Max PSI	Gasket
SS-037-DP	3/4" Female Coupler x 3/8" Female Thread	300	EPDM
SS-050-DP	3/4" Female Coupler x 1/2" Female Thread	300	EPDM
SS-075-DP	3/4" Female Coupler x 3/4" Female Thread	300	EPDM
SS-100-DP	1" Female Coupler x 1" Female Thread	300	EPDM
SS-150-DP	1-1/2" Female Coupler x 1-1/2" Female Thread	300	EPDM
SS-200-DP	2" Female Coupler x 2" Female Thread	200	EPDM
SS-300-DP	3" Female Coupler x 3" Female Thread	200	EPDM
SS-400-DP	4" Female Coupler x 4" Female Thread	100	EPDM



Type E – Male Adapter x Hose Shank

Part Number	Description	Max PSI	Gasket
SS-050-EP	3/4" Male Adapter x 1/2" Hose Shank	300	N/A
SS-075-EP	3/4" Male Adapter x 3/4" Hose Shank	300	N/A
SS-100-EP	1" Male Adapte x 1" Hose Shank	300	N/A
SS-150-EP	1-1/2" Male Adapter x 1-1/2" Hose Shank	200	N/A
SS-200-EP	2" Male Adapter x 2" Hose Shank	200	N/A
SS-300-EP	3" Male Adapter x 3" Hose Shank	150	N/A
SS-400-EP	4" Male Adapter x 4" Hose Shank	50	N/A



Type F – Male Adapter x Male Thread

Part Number	Description	Max PSI	Gasket
SS-050-FP	3/4" Male Adapter x 1/2" Male Thread	300	N/A
SS-075-FP	3/4" Male Adapter x 3/4" Male Thread	300	N/A
SS-100-FP	1" Male Adapter x 1" Male Thread	300	N/A
SS-150-FP	1-1/2" Male Adapter x 1-1/2" Male Thread	300	N/A
SS-200-FP	2" Male Adapter x 2" Male Thread	300	N/A
SS-300-FP	3" Male Adapter x 3" Male Thread	100	N/A
SS-400-FP	4" Male Adapter x 4" Male Thread	75	N/A



Type DC – Dust Cap for Male Adapter

Part Number	Description	Max PSI	Gasket
SS-050-DCP	1/2" Dust Cap for Male Adapter	300	N/A
SS-075-DCP	3/4" Dust Cap for Male Adapter	125	EPDM
SS-100-DCP	1" Dust Cap for Male Adapter	125	EPDM
SS-150-DCP	1-1/2" Dust Cap for Male Adapter	125	EPDM
SS-200-DCP	2" Dust Cap for Male Adapter	125	EPDM
SS-300-DCP	3" Dust Cap for Male Adapter	50	EPDM
SS-400-DCP	4" Dust Cap for Male Adapter	50	EPDM

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1422
EFFECTIVE
OCTOBER 2018

POLYPROPYLENE CAM COUPLINGS



Type DP – Dust Plug for Female Coupler

Part Number	Description	Max PSI	Gasket
SS-050-DPP	1/2" Dust Plug for Female Coupler	300	N/A
SS-075-DPP	3/4" Dust Plug for Female Coupler	300	N/A
SS-100-DPP	1" Dust Plug for Female Coupler	300	N/A
SS-150-DPP	1-1/2" Dust Plug for Female Coupler	225	N/A
SS-200-DPP	2" Dust Plug for Female Coupler	225	N/A
SS-300-DPP	3" Dust Plug for Female Coupler	150	N/A
SS-400-DPP	4" Dust Plug for Female Coupler	75	N/A

Replacement Gaskets

	3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch
EPDM:	P/N SS-075-G	P/N SS-100-G	P/N SS-150-G	P/N SS-200-G	P/N SS-300-G	P/N SS-400-G
Buna:	P/N SS-075-GB	P/N SS-100-GB	P/N SS-150-GB	P/N SS-200-GB	P/N SS-300-GB	P/N SS-400-GB
FKM:	P/N SS-075-GV	P/N SS-100-GV	P/N SS-150-GV	P/N SS-200-GV	P/N SS-300-GV	P/N SS-400-GV
Extra Thick EPDM:	P/N SS-075-GXT	P/N SS-100-GXT	P/N SS-150-GXT	P/N SS-200-GXT	P/N SS-300-GXT	P/N SS-400-GXT

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1422
EFFECTIVE
OCTOBER 2018

FITTINGS

INLINE BYPASS VALVE ASSEMBLY



SWT's Inline Bypass Valve Assembly is designed to be used as a stand-alone inline bypass on any cold water supply. It is compatible with any brand of water softener, filter, portable exchange tank, in/out filter, and even cartridge filter system.

Injection molded from non-corrosive engineering plastic, the Inline Bypass Valve Assembly is more versatile than other bypass valves available today. It offers a wide variety of connection fittings options (see below Part Number Matrix for the complete list). This product is NSF/ANSI 61 and 44 certified.

SPECIFICATIONS:

Operating Pressure: ..... 20 to 125 psi
138 to 862 kPa

Temperature: ..... 40 to 110°F
4 to 43°C

Note: Install only on cold water supplies.

INCLUDED:

(1) Bypass Valve

(1) pair of Inline Adapter Fittings

(2) Fittings Kits of choice—
each fitting kit includes
(1) pair of fittings and hardware

OPTIONAL:

Wrench (P/N BP-Wrench)



PART NUMBER MATRIX:

BP-(F1)-(F2)

(F1)(F2) FITTINGS KITS

00	1" PVC male NPT elbow	07	1.25" & 1.5" PVC solvent
01	3/4" x 1" PVC solvent elbow	08	1.25" plastic male BSPT
02LF	1" lead free brass sweat	09LF	1.25" & 1.5" lead free brass sweat
03LF	3/4" lead free brass sweat	12LF	3/4" lead free brass SharkBite®
04	1" plastic male NPT	13LF	1" lead free brass SharkBite®
05	1.25" plastic male NPT	14	3/4" plastic male BSPT
06	1" plastic male BSPT	15	3/4" John Guest® QC elbow

Example: BP-02LF-04 is an Inline Bypass Valve Assembly with 1" lead free brass sweat fittings and 1" plastic male NPT fittings. (See photos above.)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1436
EFFECTIVE
MAY 2016

FLOW METERS

ULTRASONIC INLINE FLOW METERS



Ultrasonic Inline Flow Meters *are engineered to elevate water treatment and usage measurement. The ultrasonic inline flow meter module operates as a pulse generating device with corresponding K Factor for accurate flow measurement when connected to commonly used industry controls. Made in USA.*

FEATURES

- Real-time monitoring allows immediate detection of leaks and water usage irregularities, enabling water conservation
- Innovative use of ultrasonic technology uses no moving parts within the water stream to increase service life
- Stainless steel construction ensures durability and reliability even in the most demanding environments
- Familiar pulse output mode operation allows meter to be applied to wide variety of control devices
- Meter module can be updated or serviced without removing meter body from plumbing
- Accuracy over an extended period of time
- Less clogging, and less wear and tear
- Passivated surfaces and materials resist scaling
- Highly visible LED flow indicator
- Male threaded inlet adapter for direct mating to treatment control valve
- Boss provided on outlet for drilling/tapping 1/4 inch sample port



SPECIFICATIONS

Max Pressure	250 psi (8.6 bar)
Water Temperature Range	34°F (1°C) to 100°F (38°C)
Operating Power	5 to 24VDC*

* Confirmed to work with Clack, Fleck, Autotrol, Culligan, and AQ Matic controllers.

WETTED PARTS

Meter Body	CF8M† Stainless Steel
Signal Reflection Plate	SS316
Transducer Housing	Glass-filled Polyphenylene Sulfide (PPS)
O-ring	EPDM

† CF8M is a cast, molybdenum-bearing austenitic stainless steel alloy, equivalent to the wrought AISI 316 stainless steel, known for its enhanced corrosion resistance, especially in chloride-rich environments.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1550
EFFECTIVE
MARCH 2025

Flow Meters

ULTRASONIC INLINE FLOW METERS

OPERATING RANGE

Part Number	Pipe Size Inches	Thread Type**	Low Flow Threshold	Typical Flow 0.1 ft/sec to 10 ft/sec	Max Flow 16 ft/sec	K Factor Pulses/Gal
QA-FM100	1.0	NPT	0.12 gpm (0.45 lpm)	0.3 to 24.5 gpm (1.1 to 93 lpm)	39 gpm (147 lpm)	40 (10.57/Liter)
QA-FM150	1.5	NPT	0.25 gpm (0.95 lpm)	0.6 to 55.1 gpm (2.3 to 209 lpm)	88 gpm (333 lpm)	30 (7.93/Liter)
QA-FM200	2.0	NPT	0.45 gpm (1.7 lpm)	1.0 to 98.0 gpm (3.8 to 371 lpm)	156 gpm (590 lpm)	20 (5.28/Liter)
QA-FM300	3.0	NPT	1.4 gpm (5.3 lpm)	2.2 to 220.5 gpm (10.6 to 835 lpm)	353 gpm (1336 lpm)	10 (2.64/Liter)

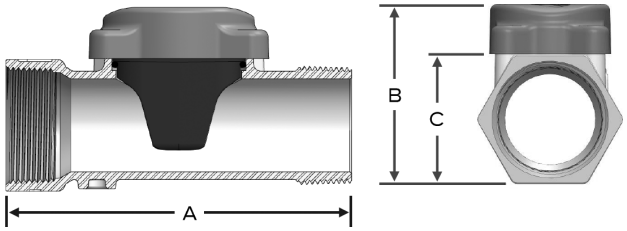
** Available with BSP thread. Add 'BSP' to end of part number. Example: QA-FM100BSP.

NOTES:

Uniform Plumbing Code recommends that water velocity remain below 8 feet per second (2.4 meters per second).

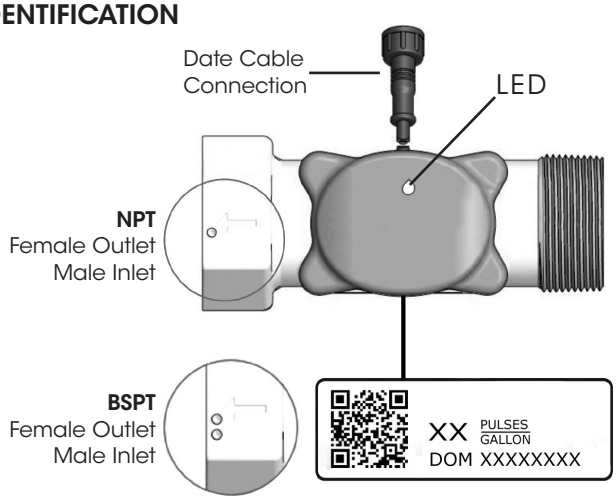
3-foot Meter Cable (P/N QA-FM-CABLE) included. Optional 8-foot Meter Cable Extension (P/N QA-FM-CABLEEXT) available.

DIMENSIONS



Overall Length (Dim A) Inches	Overall Height (Dim B) Inches	Hex Width Flat to Flat (Dim C) Inches	Weight Lbs
5.6	2.5	1.6	1.7
5.6	3.0	2.1	2.0
5.6	3.5	2.6	2.4
6.9	4.5	3.8	4.2

IDENTIFICATION



On Power Up

LED flashes indicator of power applied and sequence to show how dip switches are set for meter size.

# of Flashes	Model	inches
1 Flash	QA-FM100	1 inch
2 Flashes	QA-FM150	1.5 inches
3 Flashes	QA-FM200	2 inches
4 Flashes	QA-FM300	3 inches

During Operation

LED flashes as forward flow is sensed within meter.
Flashing is proportional to the rate of flow sensed.
Higher flow rate generates higher frequency of flashing.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1550
EFFECTIVE
MARCH 2025

INLINE MIXING VALVE



The Inline Mixing Valve *is a convenient device that allows blending raw water back into the water treatment system.*

The external inline mixing valve is commonly used with water softeners to blend a desired amount of hardness back in the line, carbon filters to blend a small amount of chlorine back in the line, and RO systems to blend minerals back into the treated water for various applications.

The mixing valve is an accessory designed to fit SWT's 1-inch and 1.25-inch control valves and SWT's Inline Bypass Valve Assembly.

SPECIFICATIONS:

Part Number:	LC-V4099
Operating Pressure:	20 to 125 psi 1.4 to 8.6 bar
Temperature:	40 to 110°F 4 to 43°C

NOTES:

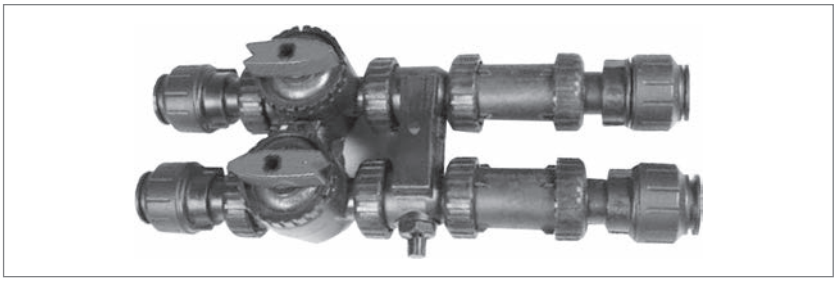
Install on cold water supplies only.

Mixing rates will vary depending on the type of media, depth of media, the use of underbedding, flow rates, and line pressure.

As a general guideline, the inline mixing valve is not recommended for use on tanks larger than 13 inch diameter.

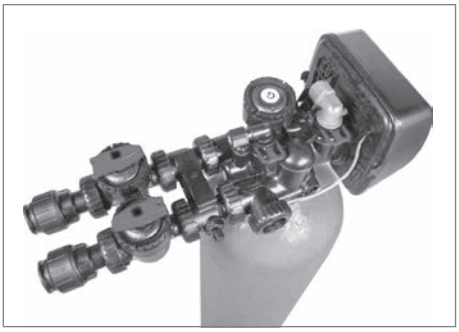
Average mixing rates of the influent hardness or chlorine could be:

- Up to 50% on 6 to 9 inch diameter tanks
- Up to 40% on 10 inch diameter tanks
- Up to 30% on 12 inch diameter tanks
- Up to 20% on 13 inch diameter tanks





COMMON SYSTEM CONFIGURATIONS



Top photo: *Use inline on RO systems to blend minerals back into the treated water for various applications.*

Bottom photos: *Use on SWT Tech water softeners to blend in desired amount of hardness or SWT Tech carbon filters to blend in small amounts of chlorine. Vertical (left) and horizontal (right) configurations are shown.*

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

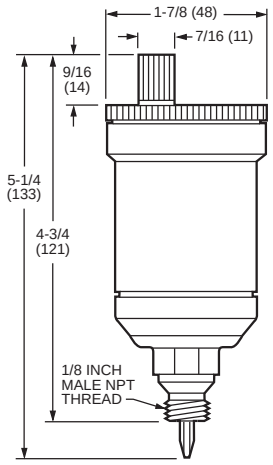
MEMBER Water Quality ASSOCIATION

FORM 1437
EFFECTIVE
APRIL 2018

Air Vents

AUTOMATIC AIR VENT





Dimensions in inches (mm)

Automatic Air Vent (P/N WH-AV125-S0) purges air from high pressure mains and equipment in hot or cold closed water systems.

The vacuum break on the bottom of the valve prevents an air lock from forming and encourages air to be released from water. The air vent can be fitted anywhere in the positive pressure side of the system where air is likely to be trapped.

Air vents should always be fitted in an accessible area, which can be seen and serviced easily.

SPECIFICATIONS

Max. Operating Pressure ..... 90 psi (6 bar)
Max. Operating Temperature ..... 230°F (110°C)
Connection ..... 1/8 inch MNPT

MATERIALS

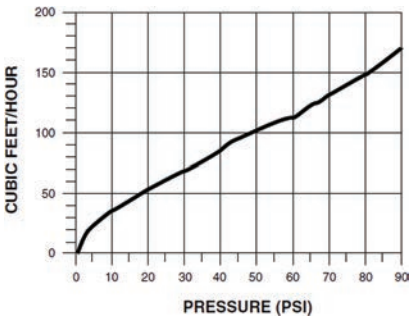
- Brass connection components
- High grade, heat resistant synthetic material float assembly, float housing, and lid
- Heat resistant elastomer seal components

OPTIONAL

Safe Waste Connector (connects top vent to 1/4 inch OD tube)

Note: Air vent is not for use in steam systems.

Flow Capacity with Red Vent Cap



NOTE: Flow capacity indicated is for an automatic air vent with the red vent cap correctly installed and operational. Additional capacity may be obtained by removing the red vent cap and installing a connection between the vent discharge and the drain using a Safe Waste Connector (sold separately).

FEATURES

- Built-in shutoff valve enables service without draining the system
- Vacuum break ensures air collection
- Removable lid and float assembly for easy cleaning
- Corrosion-resistant and chemical-resistant internal parts
- Expanding discs under red vent cap prevent leakage
- Maintains quiet and efficient operation.

FUNCTION

Inside the automatic air vent there is a float which operates a lever according to the water level. When there is no water in the housing, then the float opens the valve. Air can therefore be vented from the system during filling. When the system has been filled, the inflowing water closes the valve and the vent is shut off.

Water usually contains oxygen which bubbles off during operation of the system and collects at the highest point. The automatic air vent must therefore be fitted at the air collection position.

The closing force of the float valve is very small and therefore water-borne dirt can prevent the valve from fully closing, which results in the valve dripping slightly. Expanding discs are built into the valve to prevent this dripping from occurring. These discs expand when wet and then shut off a secondary valve, thereby preventing leakage.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1438
EFFECTIVE
JUNE 2016

Air Vents

INSTALLATION AND SERVICE

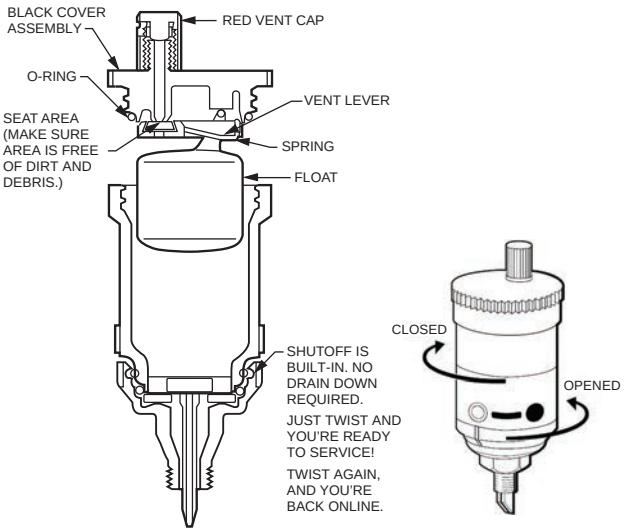
INSTALLATION

CAUTION: *Do not use tools to adjust the air vent or damage to the vent may result. Use hands only to adjust the vent. A wrench may be used only on the hex during installation.*

Location: Install the air vent on the positive side of the system at the point where air will accumulate. This is usually the highest point of the system.

Installation Procedure

1. Fit the air vent in the system at a location as specified above.
2. Hand tighten the air vent until the vent fits tightly to the location. Use a wrench to securely tighten the hex.
3. If a safety drain connection is desired, install a pipe between the vent discharge and the drain using a Safe Waste Connector.
4. Make sure that the red vent cap is securely tight and that the valve is in the closed position by turning the vent body clockwise. Use hands only to avoid damaging the vent.
5. With the valve in the closed position, flush the system as required to remove dirt, debris, and contaminants.
6. Fill the system with the appropriate solution.
7. Operate the air vent by turning the vent body counterclockwise to the open position. Use hands only.
8. Make sure the red vent cap is tightened all the way to the stop position for proper operation. Use hand only to tighten.



SERVICE

CAUTION: *The air vent may become hot due to system temperature extremes. Use caution when adjusting the vent to prevent burning hands.*

The air vent may become accumulated with dirt in the seat area of the float assembly, which may cause the vent to malfunction. Periodic cleaning is recommended to prevent the vent from malfunctioning.

Cleaning Procedure

1. Turn the vent body clockwise to the closed position, isolating the vent from the system.
2. Remove the float assembly by unscrewing the top of the body and lifting up the black cover assembly.

CAUTION: *Make sure not to bend the spring on the float assembly or damage to the vent may result.*

3. Carefully clean the seat area of any dirt or debris.
4. Carefully clean any dirt or debris from inside the vent chamber.
5. Replace the float assembly, making sure that the o-ring is seated properly.
6. Replace the black cover assembly on the vent body. Using hands only, turn until handtight.
7. Operate the air vent by turning the vent body counterclockwise to the open position. Use hands only.
8. Make sure the red vent cap is tightened all the way to the stop position for proper operation. Use hands only to tighten.

TROUBLESHOOTING

Problem	Action
The air vent is not venting air, or there is too much air in the system.	1. Check the red vent cap; make sure the vent passage is open (disks are not swelled). 2. Check that the valve is in the open position. 3. Make sure that the float is attached to the vent lever.
Water is leaking from the air vent.	1. Make sure the red vent cap is tightened all the way to the stop position. 2. Adjust the valve to the closed position by turning the vent body clockwise. 3. Clean the vent as described in the Service section. 4. If internal parts appear damaged or deteriorated, replace the cover assembly.

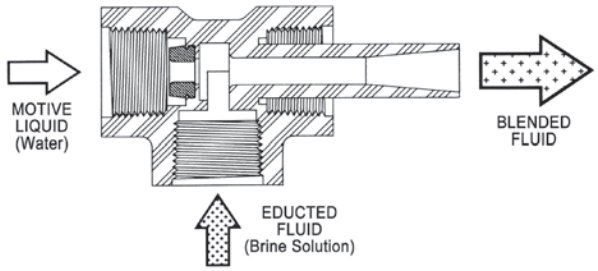
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

ORM 1438
EFFECTIVE
JUNE 2016

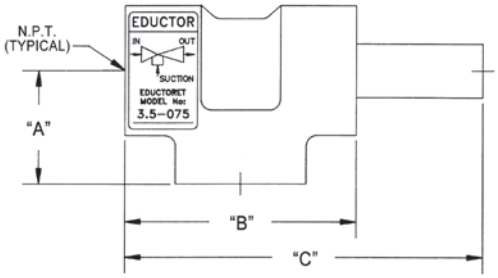
EDUCTORS

EDUCTORET™
FULLY AUTOMATIC WATER JET EDUCTOR





- Flexible flow control orifice automatically keeps constant liquid flow regardless of variations in inlet water pressure.
- Corrosion Resistant Materials of Construction:
  Eductor Body — Schedule 80 PVC, Type 1, Grade 1
  Flow Control Insert — Precision Molded Buna-N
- Wide Operating Pressure Range: 30 to 120 psig
  Maximum Operation Temperature: 100°F
- Custom Configurations Available on Request



Important Application Notes:
The eductors are designed for operation with water as the operating medium. All applications should be carefully tested both for flow characteristics and comparability of the motive liquid and educted chemicals to insure desired results. Swelling of the flow control insert in certain liquids will result in loss of flow rate accuracy.

Part Number	SPECIFICATIONS					TYPICAL WATER SOFTENER APPLICATIONS				
	Motive Water Flow Rate	Pipe Size Inches (NPT)	Dimensions (Inches)			Tank Diameter (Inches)	Area Sq.Ft.	Rinse Volume		Rinse GPM
			"A"	"B"	"C"			Minimum Cu.Ft.	Maximum Cu.Ft.	
OM-09050	0.9 gpm	0.5	1.35	2.74	—	12	0.8	1.6	3.1	0.9
OM-12050	1.2 gpm	0.5	1.35	2.74	—	14	1.1	2.1	4.3	1.2
OM-14050	1.4 gpm	0.5	1.35	2.74	—	16	1.4	2.8	5.6	1.4
OM-20050	2.0 gpm	0.5	1.35	2.74	—	18	1.8	3.5	7.1	2.0
OM-25075	2.5 gpm	0.75	1.62	3.22	4.40	20	2.2	4.4	8.7	2.5
OM-35075	3.5 gpm	0.75	1.62	3.22	4.40	24	3.1	6.3	12.6	3.5
OM-50075	5.0 gpm	0.75	1.62	3.22	4.40	30	4.9	9.8	19.6	5.0
OM-70100	7 gpm	1.0	1.85	3.64	5.45	36	7.1	14.1	28.3	7
OM-10100	10 gpm	1.0	1.85	3.64	5.45	42	9.6	19.2	38.5	10
OM-12150	12 gpm	1.5	2.09	4.16	6.05	48	12.6	25.1	50.3	12
OM-15150	15 gpm	1.5	2.09	4.16	6.05	54	15.9	31.8	63.6	15
OM-20150	20 gpm	1.5	2.09	4.16	6.05	60	19.6	39.3	78.5	20

Data Based On:
Motive Water Flow Rate ±10% @ 30-120 psig and 60°F
Motive Liquid: Educted Liquid = 1:1 with educted fluids similar to water
(e.g. Specific Gravity = 1.0 and Viscosity = Centipoise @ 60°F)
Suction Lift = 4.0 feet and Discharge Head = 0 feet

Typical Water Softener Application Notes:
1) Minimum Rinse Volume based on 24 inch minimum bed depth.
2) Maximum Rinse Volume at minimum 0.25 gpm/cu.ft. rinse rate.
3) Regeneration with saturated salt (NaCl) brine as the educted liquid will yield Brine Flow less than Rinse Flow. The ratio is dependent on many factors including discharge head (pipe design, bed depth, installation, etc.) and suction lift (brine valve design and size, installation, etc.).

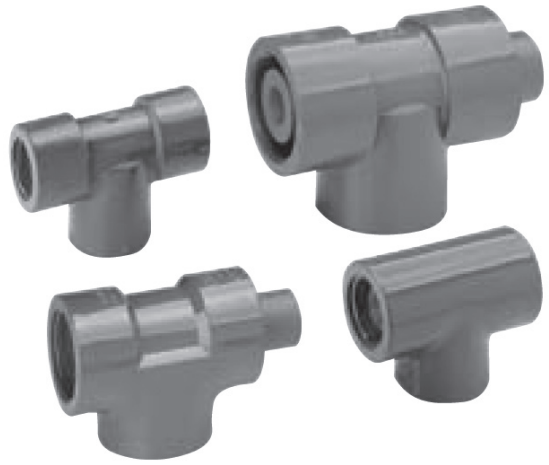
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1347
EFFECTIVE
JUNE 2012

EDUCTORS

FLUID EDUCTORS
540 SERIES

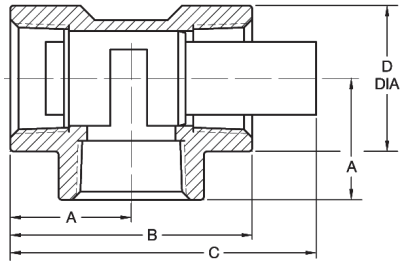


540 Series Fluid Eductors are constructed of corrosion resistant PVC and specifically designed for water treatment applications. The eductor cartridge is chemically bonded inside the housing for years of trouble-free service. For optimum performance, eductors should be installed with a section of the straight pipe extending from the discharge area. These eductors can be installed horizontally or vertically.

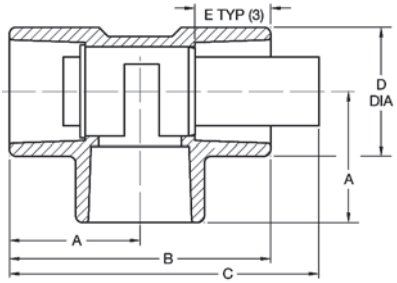
- Available in U.S. Standard socket weld ends* and NPT ends
- Min./max. operating pressure: 20 to 125 psi (1.37 to 8.6 bars)
- Operating temperature up to 140°F (60°)

* Add an "S" to the end of the series number when ordering U.S. Standard socket weld ends.

NPT Dimensions



Socket Dimensions



Part Number	Connection Size Inches	Dimensions (Inches)					Dimensions (mm)				
		"A"	"B"	"C"	"D"	"E"	"A"	"B"	"C"	"D"	"E"
QA-540-# *	0.5 FNPT	1.37	2.75	—	1.31	—	35	70	—	33	—
QA-540S-# *	0.5 Socket	1.37	2.75	—	1.31	0.88	35	70	—	33	22
QA-541-# *	0.75 FNPT	1.72	3.44	—	1.50	—	44	88	—	38	—
QA-541S-# *	0.75 Socket	1.72	3.44	—	1.56	1.00	44	88	—	40	25
QA-542-# *	1.0 FNPT	1.72	3.44	—	1.81	—	44	88	—	46	—
QA-542S-# *	1.0 Socket	1.88	3.75	—	1.81	1.13	48	96	—	46	20
QA-544-# *	1.5 FNPT	2.09	4.19	5.25	2.38	—	53	106	133	60	—
QA-544S-# *	1.5 Socket	2.38	4.75	5.63	2.38	1.38	60	120	143	60	35
QA-546-# *	2.0 FNPT	2.78	5.56	6.63	3.00	—	71	142	168	76	—
QA-546S-# *	2.0 Socket	2.78	5.56	6.63	3.06	1.50	71	142	168	78	38

* Substitute nozzle number for "#" (see second row of Performance Table on next page).

NOTES:

Dimensions are nominal.

Maximum Temperature 140°F (60°C)

Due to the differences in the tees which are supplied by vendor, all dimensions are subject to variations.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1367
EFFECTIVE
DECEMBER 2017

FLUID EDUCTORS
540 SERIES

Performance

Inlet Pressure P.S.I. (Bars)	Nozzle Flow Rates – gals/min (L/min)																								
	Model 540: 1/2 inch						Model 541: 3/4 inch				Model 542: 1 inch				Model 544: 1-1/2 inch						Model 546: 2 inch					
	540-1 Black	540-2 Brown	540-3 Red	540-4 White	540-5 Blue	Draw Factor	541-1 Red	541-2 White	541-3 Blue	Draw Factor	542-1 Red	542-2 White	542-3 Blue	Draw Factor	544-1 Red	544-2 White	544-3 Blue	544-4 Yellow	544-5 Orange	Draw Factor	546-1 Red	546-2 White	546-3 Blue	546-4 Yellow	546-5 Orange	Draw Factor
20	0.13	0.18	0.31	0.62	0.90	0.80	1.07	1.80	2..90	1.15	4.40	5.80	8.20	1.04	8.70	13.4	17.0	21.0	24.5	1.08	29.5	35.7	28.4	45.0	52.0	1.08
(1.37)	(0.52)	(0.73)	(1.22)	(2.44)	(3.50)		(4.30)	(7.20)	(11.2)		(17.3)	(22.0)	(31.7)		(34.2)	(52.5)	(66.0)	(83.0)	(97.6)		(116)	(140)	(152)	(178)	(207)	
30	0.16	0.23	0.38	0.76	1.10	0.78	1.30	2.10	3.50	1.20	5.40	7.10	10.0	0.94	10.6	16.4	20.7	25.7	30.0	1.12	36.0	43.7	47.0	55.0	64.0	1.12
(2.06)	(0.60)	(0.84)	(1.42)	(2.82)	(4.00)		(4.90)	(8.30)	(13.0)		(20.0)	(25.0)	(36.0)		(39.5)	(60.0)	(76.0)	(96.0)	(112)		(134)	(162)	(176)	(205)	(240)	
40	0.19	0.26	0.44	0.88	1.20	0.82	1.50	2.50	4.00	1.26	6.20	8.20	11.7	0.95	12.3	19.0	24.0	29.7	34.7	1.16	41.7	50.0	54.0	64.0	74.0	1.16
(2.75)	(0.74)	(1.00)	(1.74)	(3.50)	(4.90)		(6.00)	(10.2)	(16.0)		(24.5)	(31.0)	(45.0)		(48.4)	(74.4)	(93.4)	(117)	(138)		(164)	(198)	(216)	(252)	(294)	
50	0.21	0.29	0.49	0.98	1.40	0.83	1.70	2.80	4.50	1.25	7.00	9.20	13.0	0.85	13.8	21.2	26.8	33.2	38.8	1.15	46.6	56.5	61.0	71.4	83.0	1.15
(3.44)	(0.86)	(1.20)	(2.02)	(4.00)	(5.70)		(7.00)	(11.8)	(18.4)		(28.4)	(36.0)	(52.0)		(58.0)	(86.0)	(108)	(136)	(160)		(190)	(230)	(250)	(292)	(340)	
60	0.23	0.32	0.54	1.10	1.50	0.85	1.80	3.10	4.90	1.15	7.60	10.0	14.4	0.82	15.0	23.0	29.5	36.3	42.5	0.95	51.0	62.0	66.5	78.0	91.0	0.95
(4.13)	(0.91)	(1.27)	(2.14)	(4.20)	(6.08)		(7.40)	(12.5)	(19.5)		(30.0)	(38.0)	(55.0)		(59.3)	(91.0)	(114)	(144)	(170)		(200)	(244)	(265)	(310)	(360)	
70	0.25	0.35	0.58	1.20	1.65	0.88	2.00	3.30	5.30	1.08	8.20	10.8	15.5	0.80	16.3	25.0	31.8	39.3	46.0	0.90	55.0	67.0	71.0	84.5	98.0	0.90
(4.82)	(0.96)	(1.34)	(2.25)	(4.40)	(6.40)		(7.80)	(13.1)	(20.5)		(31.6)	(40.0)	(58.0)		(62.0)	(96.0)	(120)	(152)	(178)		(212)	(256)	(278)	(325)	(380)	
80	0.27	0.37	0.62	1.30	1.80	0.85	2.15	3.60	5.70	1.00	8.70	11.6	16.6	0.78	17.4	27.0	34.0	42.0	49.0	0.80	59.0	71.0	77.0	90.0	106	0.80
(5.51)	(1.05)	(1.47)	(2.47)	(4.90)	(7.00)		(8.50)	(14.4)	(22.5)		(34.8)	(44.0)	(63.0)		(68.0)	(105)	(132)	(166)	(195)		(232)	(280)	(306)	(357)	(416)	
100	0.30	0.42	0.70	1.40	2.00	0.83	2.40	4.00	6.40	0.95	9.80	13.0	18.5	0.75	19.5	30.0	38.0	47.0	55.0	0.80	66.0	80.0	86.0	100	118	0.80
(6.9)	(1.13)	(1.60)	(2.66)	(5.20)	(7.50)		(9.20)	(15.5)	(24.3)		(37.5)	(47.5)	(68.5)		(74.0)	(113)	(142)	(180)	(210)		(250)	(300)	(330)	(385)	(445)	
120	0.33	0.46	0.76	1.50	2.20	0.80	2.60	4.30	7.00	0.90	10.7	14.2	20.0	0.70	21.3	32.8	41.5	51.5	60.0	0.75	72.0	87.0	94.0	110	130	0.75
(8.27)	(1.21)	(1.70)	(2.84)	(5.60)	(8.10)		(9.80)	(16.6)	(26.0)		(40.0)	(50.7)	(73.0)		(78.0)	(120)	(152)	(190)	(225)		(268)	(325)	(350)	(410)	(480)	
Nozzle Dia. ("E" – inches)	0.038	0.042	0.052	0.070	0.086	–	0.098	.125	.157	–	.188	.219	.250	–	.281	.312	.359	.406	.438	–	.469	.500	.547	.578	.625	–
Throat Dia. ("F" – inches)	0.076	0.086	.104	.140	.172		.196	.250	.312		.375	.438	.500		.562	.625	.719	.812	.875		.938	1.000	1.094	1.156	1.250	

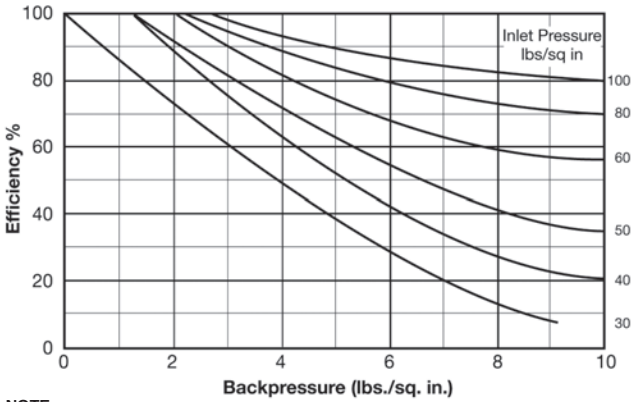
Data based on: 1. Water media specific gravity 1.0; 2. Suction lift 3 ft. (1 meter); 3. Discharge head 0 ft. or meters; 4. Media temperature 60°F (15°C)

Specific Gravity Chart

Fluid	Specific Gravity
Saturated Brine (NaCl)	1.2
Hydrochloric Acid (30%)	1.14
Sodium Hydroxide (50%)	1.52
Sulphuric Acid (20%)	1.13
Sodium Hydroxide (25%)	1.16

Fig. 1: Efficiency vs. Backpressure

At different inlet pressure. Suction lift 3 feet (1 m).



NOTE:

At 5 psi Backpressure: 30 psi Inlet = 39% 40 psi Inlet = 52% 50 psi Inlet = 63%
60 psi Inlet = 74% 80 psi Inlet = 84% 100 psi Inlet = 89%

To Calculate Drawrate

Where A = Nozzle flowrate; B = Specific gravity; C = Draw factor; D = Efficiency factor

$$\text{Drawrate} = \frac{(A)\ (C)\ (D)}{B}$$

Example:

Find drawrate for 30% hydrochloric acid at inlet pressure of 60 psi and back pressure of 5 psi for 1" blue code ejector.

From Nozzle Flowrate Table: At 60 psi, Series 542-3
A = Nozzle flowrate = 14.4 gal./min.
C = Draw factor = 0.82

From Specific Gravity Chart: B = S.G. of 30% HCL = 1.14

From Efficiency Table (Fig. 1): D = 5 psi backpressure @ 60 psi inlet pressure = 74%

$$\text{Drawrate} = \frac{(14.4)\ (0.82)\ (.77)}{1.14} = 7.97 \text{ gal./min.}$$

How to Order

1. Select series number based on required pipe size.
2. Add "S" suffix to series number if socket weld ends desired.
3. Add nozzle size suffix as determined by supply pressure and required flow (see example).

Example:

540-3, 1/2", red code threaded ejector; 540S-3, 1/2", red code socket weld ejector

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1367
EFFECTIVE
DECEMBER 2017

Y-PATTERN GLOBE VALVES



Y-Pattern Globe Valves *are angle seat valves that provide proportional opening to seating disc travel. They are available in sizes 1/2 through 4 inch and are used primarily for throttling purposes. Y-pattern globe valves may be considered general purpose flow control valves. They are generally faster to open and close than gate valves. The seating surfaces are less subject to wear and their high pressure drop makes them useful controlling pressures. The Y-pattern configuration reduces pressure loss over that of standard globe valves.*

- Chemical & Corrosion Resistant PVC Gray, PVC Clear, or CPVC Gray Construction
- Buttress Thread Bonnet
- Fully Serviceable, Replaceable Components
- Standard O-ring Seal Seating Disc & Seals
- EPDM or FKM O-rings
- High Impact Polypropylene Handle
- Assembled with Silicone-Free, Water Soluble Lubricants
- 150 psi @ 73°F for 1/2 to 2 inch models
  90 psi @ 73°F for 3 to 4 inch models
- Made in USA

Cv Values

Size Inches	Cv Value
1/2	6.7
3/4	12.6
1	22.9
1-1/4	33.8
1-1/2	50.7
2	79.2
3	235
4	387

Temperature Pressure Rating

Sys. Op. Temp. °F	Valve Pressure Rating PSI			
	1/2 to 2 inch		3 to 4 inch	
	PVC	CPVC	PVC	CPVC
100	150	150	90	90
110	135	140	85	85
120	110	130	75	80
130	75	120	60	75
140	50	110	40	70
150	—	100	—	60
160	—	90	—	50
170	—	80	—	45
180	—	70	—	40
190	—	60	—	35
200	—	50	—	30

ORDERING INFORMATION

Part Number Matrix: **YGV (CS) (BM) – (OM) – (EC)**

(CS) Connection Size

05 = 1/2 inch
07 = 3/4 inch
10 = 1 inch
12 = 1-1/4 inch
15 = 1-1/2 inch
20 = 2 inch
30 = 3 inch
40 = 4 inch

(BM) Body Material

PC = PVC Clear
PG = PVC Gray
CG = CPVC Gray

(OM) O-ring Material

E = EPDM
F = FKM

(EC) End Connectors

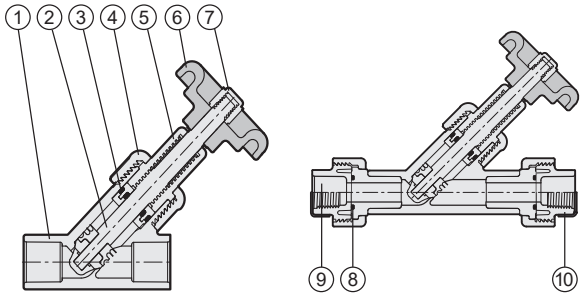
SOC = Socket
SRT = SR Thread
FLG = Flange
SUN = Socket Union
STU = SR Thread Union

Examples:

YGV10PC-E-SOC = Clear PVC Valve with 1 inch socket connections and EPDM o-rings

YGV40CG-F-FLG = Gray CPVC Valve with 4 inch flange connections and FKM o-rings

REPLACEMENT PARTS AVAILABLE



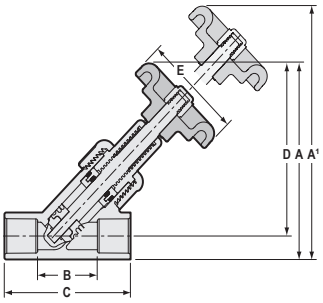
1. Body (Qty 1)
2. Stem Assembly (Qty 1)
3. Seal Carrier O-ring (Qty 1)
4. Bonnet Nut (Qty 1)
5. Bonnet (Qty 1)
6. Handwheel (Qty 1)
7. Stem Nut (Qty 1)
8. Union O-ring (Qty 2)
9. Union Socket End (Qty 2)
10. Union SR Thread End (Qty 2)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

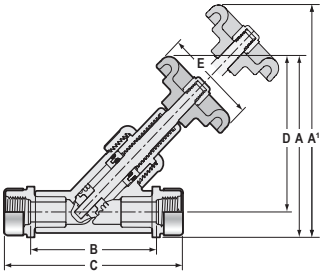
FORM 1448
EFFECTIVE
MAY 2019

Y-PATTERN GLOBE VALVES



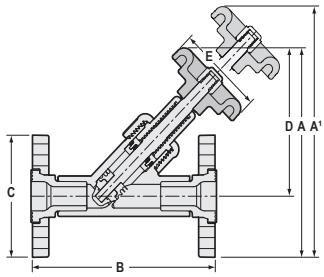
Socket Y-Pattern Globe Valves — Dimensions and Weights

Nominal Size Inches	Dimension Reference Inches, ±1/16						Approx Wt. Lb.	
	A[1]	A	B	C	D	E	PVC	CPVC
1/2	6-3/8	4-9/16	1-5/8	3-3/8	4	2-3/8	0.31	0.33
3/4	7-1/2	5-1/4	2	4	4-9/16	2-3/8	0.50	0.53
1	6-15/16	5-7/8	2-1/2	4-3/4	5-1/8	2-3/8	0.78	0.90
1-1/4	10-15/16	7-5/8	3-1/16	5-9/16	6-1/2	3-1/2	1.21	1.28
1-1/2	12	8-5/8	3-9/16	6-5/16	7-1/2	3-1/2	1.66	1.76
2	13-13/16	9-15/16	4-1/2	7-1/2	8-1/2	3-1/2	2.96	3.10
3	20	14-1/2	6-9/16	10-5/16	12-7/16	6-5/8	5.34	5.64
4	25-1/2	18-1/4	8-5/8	13-1/8	15-5/8	7-15/16	9.97	10.45



SR Thread Y-Pattern Globe Valves — Dimensions and Weights

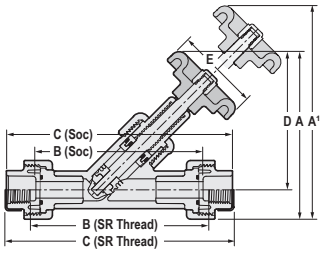
Nominal Size Inches	Dimension Reference Inches ±1/16						Approx Wt. Lb.	
	A[1]	A	B	C	D	E	PVC	CPVC
1/2	6-1/2	4-11/16	3-5/8	5-1/16	4	2-3/8	0.31	0.33
3/4	7-5/8	5-7/16	4-3/8	5-13/16	4-9/16	2-3/8	0.50	0.53
1	8-5/8	6-1/8	5-3/16	7	5-1/8	2-3/8	0.85	0.90
1-1/4	11-1/8	7-3/4	6	7-15/16	6-1/2	3-1/2	1.21	1.28
1-1/2	12-1/4	8-7/8	6-15/16	8-13/16	7-1/2	3-1/2	1.66	1.76
2	14-1/16	10-3/16	8-1/8	10-1/8	8-1/2	3-1/2	2.96	3.10
3	20	14-13/16	11	14-1/4	12-7/16	6-5/8	5.34	5.64
4	25-13/16	18-1/2	14	14-3/4	15-5/8	7-15/16	9.97	10.45



Flange Y-Pattern Globe Valves — Dimensions and Weights

Nominal Size Inches	Dimension Reference Inches ±1/16						Approx Wt. Lb.	
	A[1]	A	B	C	D	E	PVC	CPVC
1/2	7-9/16	5-3/4	5-11/16	3-1/2	4	2-3/8	0.82	0.85
3/4	8-3/4	6-1/2	6-7/16	3-7/8	4-9/16	2-3/8	1.23	1.28
1	9-3/4	7-1/4	7-1/4	4-1/4	5-1/8	2-3/8	1.70	1.81
1-1/4	12-1/4	8-7/8	8-1/8	4-5/8	6-1/2	3-1/2	2.40	2.52
1-1/2	13-3/8	10	9-3/16	5	7-1/2	3-1/2	3.07	3.25
2	15-3/8	11-1/2	10-3/8	6	8-1/2	3-1/2	5.20	5.42
3	21-11/16	16-3/16	12-1/16	7-1/2	12-7/16	6-5/8	9.44	10.07
4	27-7/16	20-3/16	14-9/16	9-1/16	15-5/8	7-15/16	14.87	16.15

NOTE: 4 inch flange Y-Pattern Globe Valves use split flange ring.



True Union Y-Pattern Globe Valves — Dimensions and Weights

Nominal Size Inches	Dimension Reference Inches ±1/16								Approx Wt. Lb.	
	A[1]	A	B		C		D	E	PVC	CPVC
			Socket	SR Thread	Socket	SR Thread				
1/2	7	5-3/16	5-1/8	5-1/2	6-7/8	7	4-1/4	2-5/8	0.59	0.62
3/4	8-3/16	6	5-7/8	6-7/16	7-7/8	7-7/8	4-7/8	2-5/8	0.97	1.02
1	9-1/8	6-5/8	6-1/2	7-3/8	8-3/4	9	5-3/8	2-5/8	1.33	1.41
1-1/4	11-1/2	8-3/16	7-7/16	6-3/16	9-15/16	10-1/8	6-5/8	3-1/2	1.53	1.63
1-1/2	12-13/16	9-3/8	8-3/16	9	10-15/16	10-15/16	7-9/16	3-1/2	3.06	3.25
2	14-9/16	10-11/16	9-7/16	10-13/16	12-7/16	12-13/16	8-5/8	3-1/2	4.90	5.16
3	21-1/8	15-5/8	13-5/8	15-3/8	17-3/8	18-3/16	12-1/2	6-5/8	14.06	14.37
4	25	19-7/16	17-1/16	19-1/4	21-5/8	22-5/16	7-15/16	7-15/16	17.39	19.23

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1448
EFFECTIVE
MAY 2019

Resin Traps

"Y" RESIN TRAPS

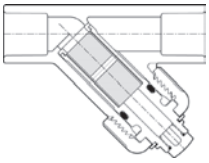


Resin Traps *are an inexpensive form of insurance against the possibility of ion exchange resin or filter media accidentally leaving water treatment equipment and travelling downstream to cause catastrophic damage to process areas or equipment.*

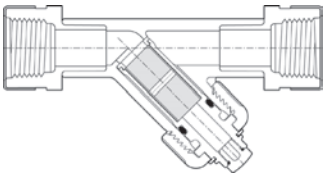
- Removable strainer basket with o-ring sealed drain plug allows quick-flushing or bleed-off valve connection
- Clear PVC body with EPDM or FKM seals
- 50 mesh 316 stainless steel strainer screen
- Horizontal or vertical mounting
- Pressure Rating: 150 psi @ 73°F for 2 inch models; 90 psi @ 73°F for 3 to 4 inch models

Clear Body "Y" Resin Traps

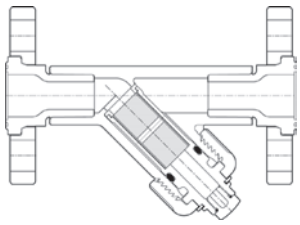
Connection Size	O-ring Material	Socket	SR Thread	Flange	Socket Union	Thread Union	SR Thread Union	1 psid @
2 inch	EPDM	RT200PC-E-SOC	RT200PC-E-SRT	RT200PC-E-FLG	RT200PC-E-SUN	RT200PC-E-TUN	RT200PC-E-STU	47 gpm
	FKM	RT200PC-F-SOC	RT200PC-F-SRT	RT200PC-F-FLG	RT200PC-F-SUN	RT200PC-F-TUN	RT200PC-F-STU	
3 inch	EPDM	RT300PC-E-SOC	RT300PC-E-SRT	RT300PC-E-FLG	RT300PC-E-SUN	RT300PC-E-TUN	RT300PC-E-STU	72 gpm
	FKM	RT300PC-F-SOC	RT300PC-F-SRT	RT300PC-F-FLG	RT300PC-F-SUN	RT300PC-F-TUN	RT300PC-F-STU	
4 inch	EPDM	RT400PC-E-SOC	RT400PC-E-SRT	RT400PC-E-FLG	RT400PC-E-SUN	RT400PC-E-TUN	RT400PC-E-STU	166 gpm
	FKM	RT400PC-F-SOC	RT400PC-F-SRT	RT400PC-F-FLG	RT400PC-F-SUN	RT400PC-F-TUN	RT400PC-F-STU	



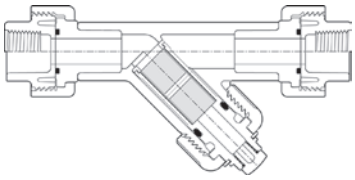
SOCKET



SPECIAL REINFORCED (SR) THREAD



FLANGE



UNION





- PP or SS body with EPDM or FKM seals
- 1/2 to 2 inch: PP ribbed 316 SS strainer screen
  3 inch: 304 SS strainer screen
- Removable strainer basket with o-ring sealed drain plug for easy service
- Female NPT threaded connections

Solid Body "Y" Resin Traps

Part Number	Connection Size	Body Material	Screen Size	Max. Pressure
RT050PP-#-THD	1/2 inch	Polypropylene	60 Mesh	225 psi
RT075PP-#-THD	3/4 inch	Polypropylene	60 Mesh	225 psi
RT100PP-#-THD	1 inch	Polypropylene	80 Mesh	200 psi
RT125PP-#-THD	1-1/4 inch	Polypropylene	80 Mesh	200 psi
RT150PP-#-THD	1-1/2 inch	Polypropylene	50 Mesh	150 psi
RT200PP-#-THD	2 inch	Polypropylene	50 Mesh	150 psi
RT300PP-#-THD	3 inch	Polypropylene	50 Mesh	75 psi
RT300SS-#-THD	3 inch	Stainless Steel	50 Mesh	200 psi

For EPDM o-rings replace with "E". For FKM o-rings replace with "F".
Example: RT200PP-E-THD is a 2 inch resin trap with EPDM o-rings.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1444
EFFECTIVE
DECEMBER 2018

Resin Traps

CENTRIFUGAL RESIN TRAPS



Spin Down Sediment Filter



Sediment Trapper Filter

Spin Down Filters utilize centrifugal force to separate sediment from water. Sediment accumulation can be seen through the clear cover and easily discharged through the bottom flush valve.

Sediment Trapper Filters offer a larger storage area and a unique element that separates the sediment and traps it beneath the element where it collects until flushed away.

Hot Water Filters add resistance to high temperatures (up to 200°F).

Chemical Resistant Filters feature a chemically resistant cover for use in applications with potentially corrosive and damaging chemicals.

- Easily flush sediment from filter by simply opening purge valve
- Sediment is visible through clear cover indicating need for flushing
- Clear cover easily removed for total cleaning
- No tools required (hand tighten only—using tools voids warranty)
- Cleanable and reusable 60 mesh stainless steel filter screen

Centrifugal Resin Traps

Connection	Filter Type	Basic	Hot Water	Chemical Resistant
3/4 inch FPT	Spin Down	UR34-60SS-F	UR34-60HT-F	UR34-60SSCR-F
	Sediment Trapper	UR34-60STSS-F	UR34-60STHT-F	UR34-60STSSCR-F
1 inch Socket	Spin Down	UR1-60SS-F	—	UR1-60SSCR-F
	Sediment Trapper	UR1-60STSS-F	—	UR1-60STSSCR-F
1-1/4 inch FPT	Spin Down	—	UR12-60HT-F	—
1-1/2 inch FPT	Spin Down	—	UR15-60HT-F	—
1-1/2 inch Socket	Spin Down	UR15-60SS-F	—	UR15-60SSCR-F
	Sediment Trapper	UR15-60STSS-F	—	UR15-60STSSCR-F
2 inch Socket	Spin Down	UR2-60SS-F	—	UR2-60SSCR-F
	Sediment Trapper	UR2-60STSS-F	—	UR2-60STSSCR-F

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1444
EFFECTIVE
DECEMBER 2018

SERVICE TOOLS

HIGH FLOW MEDIA EXTRACTORS

The Media Extractor offers an inexpensive way of removing the expelled bed of any size or height tank without moving the tank. It works with water pressure, not suction. It will work on any and all type beds, and will even remove the gravel bed if needed (6mm or 1/4 inch dia. max. particle size).

The Media Extractor has a sealed cavity that is filled with liquid silicone to lubricate the o-ring seals on the riser tube. The main body of the Media Extractor carries a five (5) year guarantee against cracking.

For larger commercial units with a fixed distributor, there is a 4-inch offset extension adapter and a 4-1/2-inch offset extension adapter available that will allow you to leave the distributor with riser in place, and use the Media Extractor with the same ease as on the smaller 2-1/2 inch residential tanks.

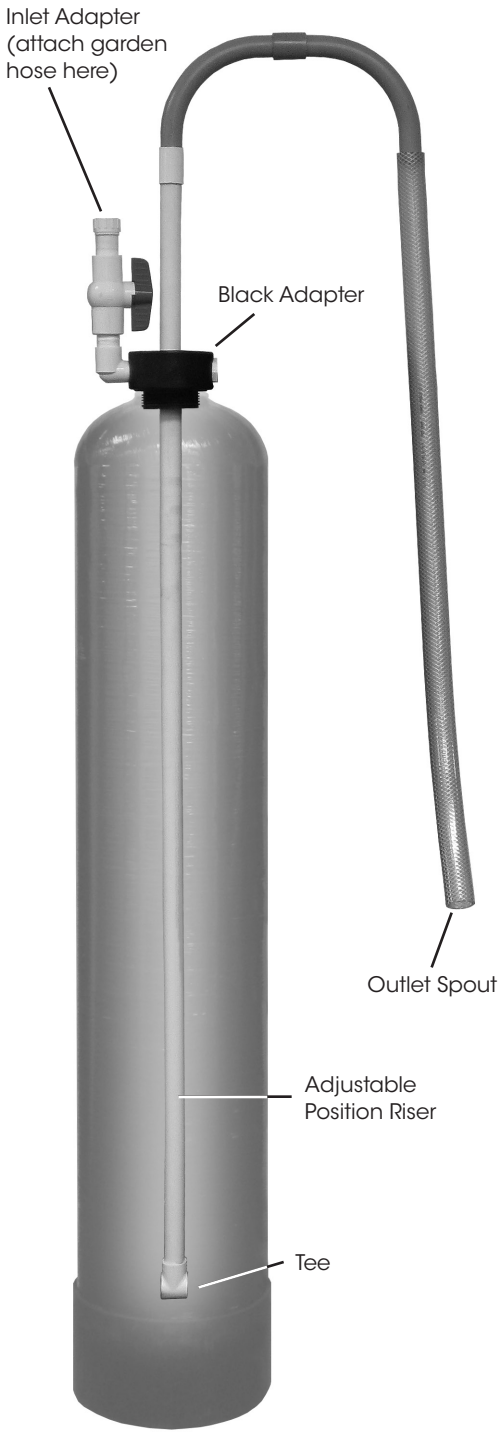
This kit will work on all 2-1/2 inch, 4 inch, and 4-1/2 inch tank threads. In most cases, the Media Extractor will save you its cost every time you use it (not to mention your back). A must for every shop and service truck.

Directions for Use

1. Remove the tank's control valve and riser tube.
2. Slide the Media Extractor's black adapter to the bottom of the adjustable position riser near the tee.
3. Screw the black adapter onto the tank and push the adjustable position riser down to the bottom of the media bed. (The tee will stop at the gravel bed.)
4. Connect a garden hose to the inlet adapter.
5. Turn on the hose water and the water pressure will push the media out of the tank at the outlet spout. (NOTE: The Media Extractor will remove 1 cubic foot of resin in approximately 60 seconds.)

*** * * DO NOT GLUE FITTINGS * * ***

Part Number	Description
PA-ME2.5	High Flow Media Extractor for Tanks with 2-1/2 inch Neck
PA-ME4	High Flow Media Extractor for Tanks with 2-1/2 or 4 inch Neck (includes 4 inch Offset Extension Adapter)
PA-ME45	High Flow Media Extractor for Tanks with 2-1/2 or 4-1/2 inch Neck (includes 4-1/2 inch offset extension adapter)



NOTE: Pressure vessel NOT included.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1320
EFFECTIVE
SEPTEMBER 2025

SERVICE TOOLS

HIGH FLOW MEDIA EXTRACTORS



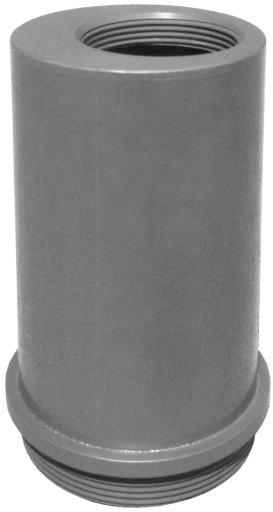
PA-TR258ECO



SM-TR253CULL



SM-ME4-Adaptor



SM-ME45-Adaptor



PA-TR258ECO-CLAMPKIT



SM-FLGRD64



SM-FLGRD64 BOLT KIT

Additional Adapters

PA-TR258ECO Adapter converts ECO-type non-threaded tank opening to 2.5" #8 NPSM
PA-TR258ECO-CLAMPKIT Includes 2 clamp sections and 2 retainer clips
SM-TR253CULL Adapter converts Culligan tank thread opening to 2.5" #8 NPSM
SM-FLGRD64 6" SNA x 4" UN PVC Flange Adapter with EPDM o-ring and SS bolt kit

NOTES:

1. For tanks over 48 inches high, remove the tee and cut a piece of PVC pipe equal to the difference between 48 inches and the height of the tank and connect to the bottom of the adjustable position riser with a coupling.

2. The Media Extractor will remove a maximum size of 6mm (1/4 inch) diameter media. You will need to be careful that you take your time pulling the 6mm media from the tank. The average ID of the riser pipe on the extractor is 0.91 inch. The u-shaped bent pipe at the top of the extractor will have a "traffic jam" if you try to remove the 6mm media too quickly.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1320
EFFECTIVE
SEPTEMBER 2025

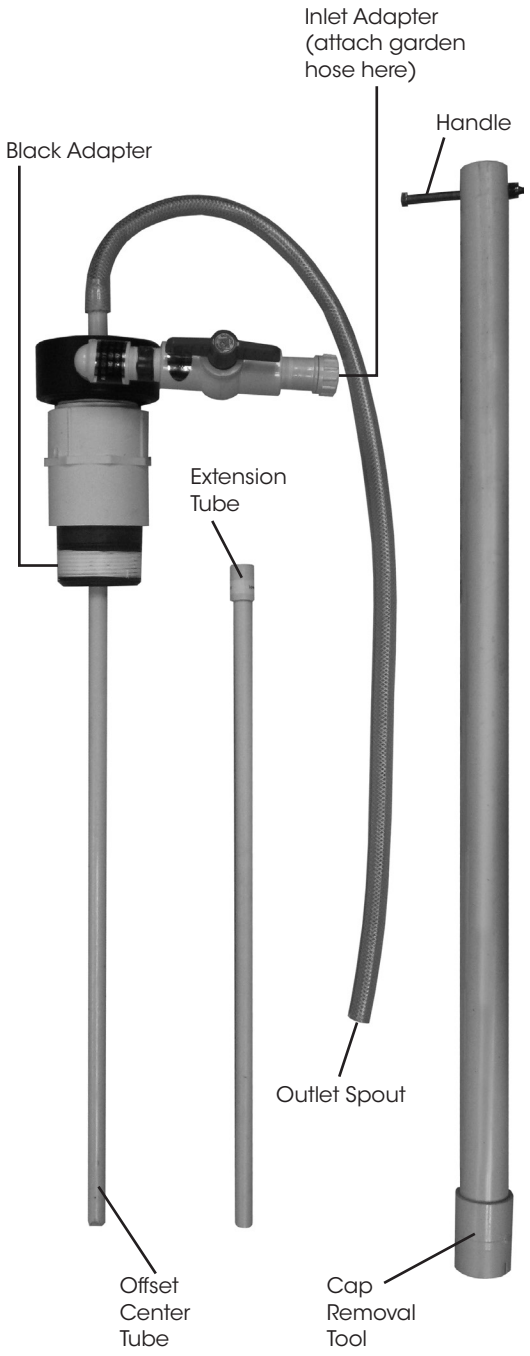
CYCLONIC DISTRIBUTOR SYSTEM AND ENPRESS VORTECH MEDIA EXTRACTOR

Cyclonic Distributor System & Enpress Vortech Media Extractor (P/N PA-ME2.5-V)

The Cyclonic Distributor System & Enpress Vortech Media Extractor is designed for use on chambered tanks with a 2-1/2 inch neck and a fixed riser tube. The offset center tube of the extractor will slide along the side of the tank's stationary riser tube.

Included is a cap removal tool to remove the plugs that separate the chambers. Also included is an extension tube for the removal of media from the lower chamber.

NOTE: The cap removal tool can also be used as a refill tube, by removing the handle and placing a funnel inside the tube to wash in the new media.



NOTE: 6mm (1/4 inch) diameter max. particle size.

Directions for Use

A. Remove Media from the Top Chamber

A.1 Remove the head assembly from the tank top.

A.2 Slide the black adapter to near the bottom of the offset center tube.

A.3 Screw the black adapter onto the tank and push the offset center tube down to the bottom of the chamber.

A.4 Connect a garden hose to the inlet adapter.

A.5 Slowly turn on the water and the media will be pushed out of the tank with water pressure at the outlet spout. **NOTE:** *SLOWLY* turn on the water to remove the media—too fast will clog the extractor.

B. Remove Media from the Lower Chamber

B.1 Remove the extractor assembly from the tank top.

B.2 Using the cap removal tool, slide the tool down over the tank's riser tube to the cap at the bottom of the empty top chamber.

B.3 Align the notches and push down counter-clockwise to release the cap, then slide the tool and cap up over the riser tube and remove.

B.4 Add the extension tube to the end of the offset center tube and repeat steps A.2 through A.5.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1344
EFFECTIVE
JANUARY 2025

RESIN LOADERS

Resin Loaders

SWT Resin Loaders have been designed to work with Ridgid brand or similar type vacuum hose. No gaskets are required for the operation of these resin loaders. Two lengths of 2-1/2 inch O.D. vacuum hose and a vacuum are all that is required to operate the loaders. *(Note: Vacuum, vacuum hose, tank, and media are NOT supplied with loaders.)*



Directions for Use

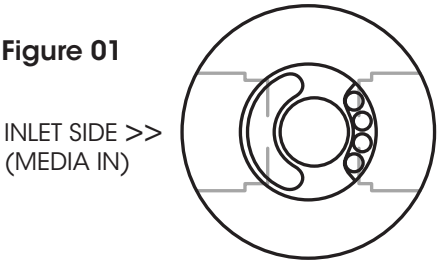
1. Place one hose in the inlet side of the loader. (See Figure 01.)
2. Place one hose in the outlet side of the loader. (See Figure 01.)
3. Attach outlet hose to the vacuum side of the vacuum.
4. Hold end of inlet hose in your hand.
5. Place the loader on the top of the tank over the riser.
6. Switch on vacuum and begin to load resin while moving the inlet hose in a back and forth motion ***allowing air to be drawn in with the resin.***

IMPORTANT WARNINGS!

1. Make sure the hose is not blocked at any time during loading.
2. Do not force the end of the hose into a bag of media.
3. Air needs to be drawn in with the media or your tank may implode.
4. Do not allow unqualified individuals to operate or use the resin loader.
5. Failure to correctly use the resin loader may result in catastrophic tank failure.



Figure 01



SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1343
EFFECTIVE
APRIL 2025

SERVICE TOOLS

RESIN LOADERS



SM-MS800



SM-MS800-4



SM-MS800-6-15
SM-MS800-6-63MM
SM-MS800-6-NR



SM-MS800-4-1
SM-MS800-4-NR



SM-MS800-6-2



SM-MS800-6-3
SM-MS800-6-90MM



SM-MS800-ADPT



SM-FLGRD64



SM-MS800-4-2PP

Part Number	Description
SM-MS800	Resin loader for 2.5 inch NPSM threaded tank opening for 0.812 to 1.375 inch riser
SM-MS800-4	Resin loader for 4"#8-UN and 4-1/2 inch buttress tank openings for 1-1/2 inch riser
SM-MS800-4-1	Resin loader for 4"#8-UN and 4-1/2 inch buttress tank openings for up to 1-1/4 inch riser (riser socket 1.59 inch I.D. avg.)
SM-MS800-4-2PP	Resin loader for 4"#8-UN and 4-1/2 inch buttress tank openings for 2 inch riser and 50 mm O.D. riser
SM-MS800-4-NR	Resin loader for 4"#8-UN and 4-1/2 inch buttress tank openings for no riser
SM-MS800-6-15	Resin loader for 6"#8-UN thread, or 6 inch SNA flange, or 6 inch ANSI flange tank opening for up to 1-1/2 inch riser (riser socket 2.047 inch I.D. average)
SM-MS800-6-2	Resin loader for 6"#8-UN thread, or 6 inch SNA flange, or 6 inch ANSI flange tank opening for 2 inch riser
SM-MS800-6-3	Resin loader for 6"#8-UN thread, or 6 inch SNA flange, or 6 inch ANSI flange tank opening for 3 inch riser
SM-MS800-6-63MM	Resin loader for 6"#8-UN thread, or 6 inch SNA flange, or 6 inch ANSI flange tank opening for 63 mm riser
SM-MS800-6-90MM	Resin loader for 6"#8-UN thread, or 6 inch SNA flange, or 6 inch ANSI flange tank opening for 90 mm riser
SM-MS800-6-NR	Resin loader for 6"#8-UN thread, or 6 inch SNA flange, or 6 inch ANSI flange tank opening for no riser
SM-MS800-ADPT	Optional adapter converts resin loader ports to 2 inch spigot PVC pipe size (2.375 inch O.D.)
SM-FLGRD64	Optional flange adapter converts 6 inch SNA flange to 4"#8-UN thread (includes EPDM o-ring and SS hardware)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1343
EFFECTIVE
APRIL 2025

MEDIA LOADING FUNNELS

Media Loading Funnels

SWT's Media Loading Funnels are simply designed to efficiently load under-bedding and media into residential, commercial, and industrial tanks with 2.5, 4, 4.5, or 6 inch openings.



SM-F250
Resin Funnel for 2.5" Tank Opening (100% PE)

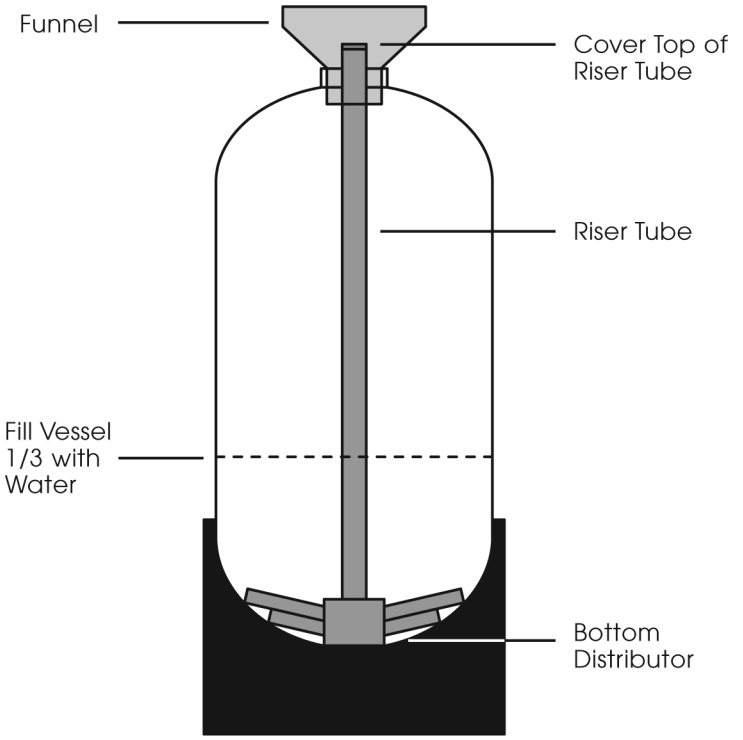
SM-F400
Resin Funnel for 4" to 6" Tank Opening (100% PE)

SM-F400-BLACK
Resin Funnel for 4" to 6" Tank Opening (100% PE)

SM-F600
Resin Funnel for 6" Tank Opening (100% PE)

Directions for Use

1. Place the vessel in the desired location, then level and stabilize it.
2. Cover the top of the riser tube (a PVC plug or cap is recommended) before loading the media. This is necessary to keep the media from going down the riser tube and internally restricting the bottom distributor. Make sure that the riser tube is centered in the vessel before loading the media.
3. Fill the vessel 1/3 full of water. This will reduce the chance of damage to the distribution system when loading the vessel with media.
4. Using a funnel, slowly add the underbedding (gravel, anthracite, garnet, etc.) to the vessel.
5. Using a funnel, slowly add the resin or filtration media to the vessel.
6. After loading the required amount of media, remove the funnel, clean the tank threads, and remove the cover from the riser tube before mounting the control valve assembly.
7. Mount the control valve assembly to the vessel.



Part Number	Wall Thickness	OD Top	OD Bottom	Height Overall	Height Neck
SM-F250	0.20"	9.5"	2.375"	7.5"	2"
SM-F400	0.20"	10.25"	3.75"	7.25"	2"
SM-F400-BLACK	0.14"	8.5 x 11.5"	3.75"	9.25"	2"
SM-F600	0.14"	8.5 x 11.5"	5.75"	7.25"	2"

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1342
EFFECTIVE DECEMBER 2022

SERVICE TOOLS

LEVELING AND ALIGNMENT TOOL



Tank Leveling and Control Valve Alignment Tool
For Use with 4 inch Top Tanks
(P/N LC-D1307)

This installation tool will assist in properly aligning the face of the control valve and leveling the tank.

DIRECTIONS FOR USE

Step 1

Thread the Leveling and Alignment Tool onto the control valve. Make note of the number that is facing the front of the control valve.



Step 2

Unthread the Leveling and Alignment Tool from the control valve and thread it onto the tank that the control valve will be paired with. On the Leveling and Alignment Tool, locate the number that was facing the front of the control valve and rotate the tank so that number is facing the direction you want the front of the tank to be.



Step 3

Level the tank using the four bubble levels built into the Leveling and Alignment Tool.

Remove the Leveling and Alignment Tool from the tank.



SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

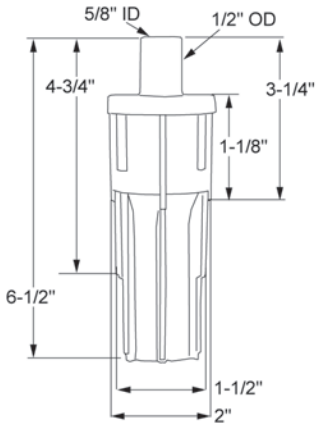
MEMBER Water Quality ASSOCIATION

FORM 1509
EFFECTIVE
DECEMBER 2022

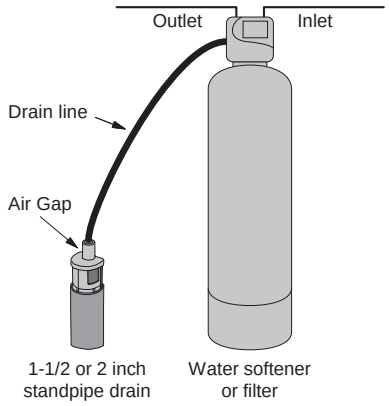
Drain Line Air Gaps

MR. DRAIN™





Dimensions in inches



Mr. Drain Air Gap (P/N SM-I5056) is designed to provide an effective way of connecting water softeners and water filters to 1½ and 2-inch drain lines.

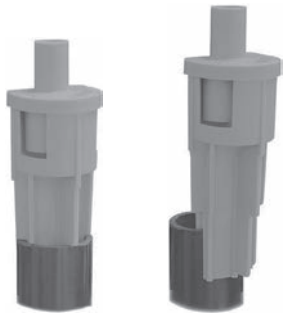
Mr. Drain features a single inlet port that connects 1/2-inch piping or 5/8-inch tubing from a water softener or filter to the drain line. The unique feature of this air gap is being able to accommodate 1½ and 2-inch standpipe drains with ease. In addition, a special design of this air gap enables installation of multiple air gaps into the same drain connection. Up to three Mr. Drain Air Gaps can be installed into the same drainpipe to provide total of six simultaneous water discharge connections.

Mr. Drain uses a special plastic material that minimizes mold growth and provides a strong connection between piping, tubing, and drain line.

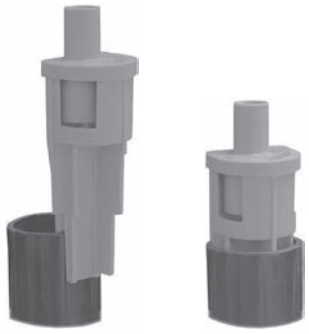
FEATURES

- 1/2-inch OD inlet port for 1/2-inch PVC
- 5/8-inch ID inlet port for polyethylene tubing
- Installs in both 1½-inch and 2-inch standpipes
- Standpipes can accommodate up to three units at a time
- Built-in splash guards assure a completely dry operation
- Legal to install in any state, UPC Listed, IPC and NSF tested

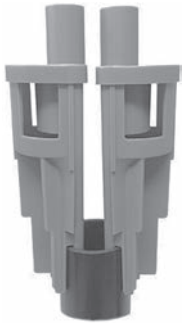
TYPICAL APPLICATIONS



One Air Gap
1-1/2 inch standpipe
mounting



One Air Gap
2 inch standpipe
mounting



Two Air Gaps
1-1/2 inch standpipe
mounting



Three Air Gaps
2 inch standpipe
mounting

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1439
EFFECTIVE
SEPTEMBER 2020

DRAIN LINE AIR GAPS

GAP-A-FLO™



Gap-A-Flo
P/N SM-I5051

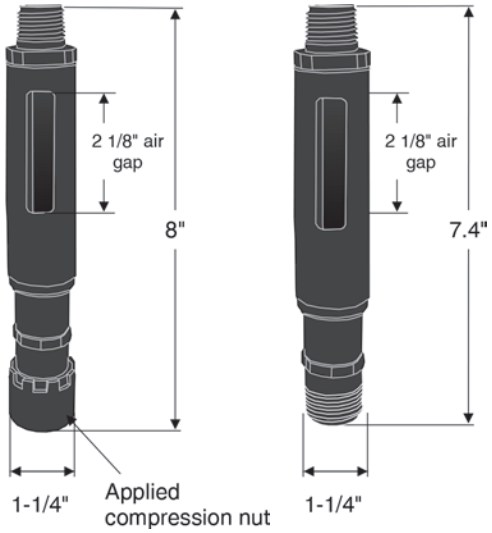


Gap-A-Flo High Flow
P/N SM-I5052

Gap-A-Flo series inline water softener or water filter air gaps are designed to provide a convenient way to install an air gap which may be tilted up to 45 degrees. These air gaps can be connected using flex tubing or rigid PVC pipe. The unique design provides a completely protected air gap without any possibility of water splashing out. The rotating protection sleeve assures long and trouble-free operation and impedes insect ingress. The inlet port can accommodate a 1/4 inch FIP adapter or 1/2 inch threaded PVC adapter. The outlet port can accommodate a 3/4 inch threaded PVC adapter or 5/8 inch compression fitting.

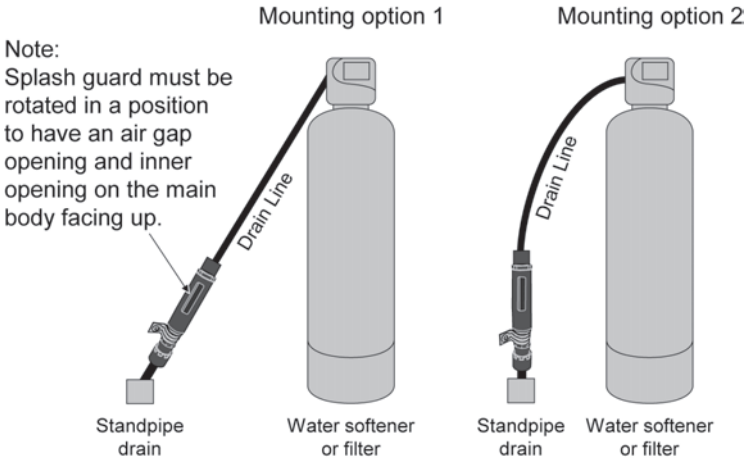
FEATURES

- Provides an inline air gap
- Unit can be tilted up to 45° angle (window opening on top side)
- Easy vertical wall mounting with included "Jiffy Clip"
- Incorporates a rotatable splash guard/splatter shield
- Built-in splash guards assure a completely dry operation
- Recommended flow rate:
  Standard model up to 7 gallons/minute (26.5 liters/minute)
  High Flow model up to 12 gallons/minute (45.5 liters/minute)
- Legal to install in any state, UPC Listed, IPC and NSF tested



Dimensions in inches

TYPICAL APPLICATIONS



SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

ORM 1439
EFFECTIVE
SEPTEMBER 2020

Section 8

Filtration Media & Ion Exchange Resins

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FILTRATION MEDIA

FILTRATION MEDIA GUIDE

Part Number	Description	Mesh Size	Backwash Rate Per Sq.Ft. GPM	Nominal Weight Lb/Cu.Ft.	Qty Per Skid Cu.Ft.	Packaging
Anthracite						
ON10001	Anthracite #1 *	14 x 30	12 – 18	50	30	1 Cu.Ft. Bag
ON10015	Anthracite #1.5 *	10 x 20	18 – 25	50	30	1 Cu.Ft. Bag
ON10002	Anthracite #2 *	4 x 12	N/A	50	30	1 Cu.Ft. Bag
Birm™						
LC10001	Oxygen Catalyst Bed *	10 x 40	10 – 12	35 – 40	40	1 Cu.Ft. Bag
CMX™						
CMX-M1	100% Ceramic Filter Media *	60 x 80	8	97 – 100	—	1/2 Cu.Ft. Box
CMX-M2	100% Ceramic Filter Media *	40 x 60	10	97 – 100	—	1/2 Cu.Ft. Box
CMX-Lite™						
CMX-L18	100% Ceramic Filter Media *	18	10 – 16	34	—	27 Cu.Ft. Bag
Filter-Ag® and Filter-Ag Plus®						
FILTER-AG	Particulate Reduction *	10 x 34	8 – 10	25	70	1 Cu.Ft. Bag
FILTER-AG PLUS	Particulate Reduction *	14 x 30	14 – 18	50	40	1 Cu.Ft. Bag
FilterEase™ and FilterEase-HD™						
HC10001-61	Filtration Aggregate *	10 x 60	8 – 10	25	70	1 Cu.Ft. Bag
HC10002	Filtration Aggregate – Heavy Duty	20 x 40	12 – 15	55	33	1 Cu.Ft. Bag
Garnet						
GARNET#8/12-50	Underbedding *	8 x 12	20	149	25	50 Lb Bag
Gravel						
ON30010	Underbedding ‡	1 x 3/4"	15	50	60	1/2 Cu.Ft. Bag
ON30012	Underbedding ‡	3/4 x 1/2"	15	50	60	1/2 Cu.Ft. Bag
ON30014	Underbedding ‡	1/2 x 1/4"	15	50	60	1/2 Cu.Ft. Bag
ON30016	Underbedding ‡	1/4 x 1/8"	15	50	60	1/2 Cu.Ft. Bag
ON31306	Underbedding ‡	1/8 x 1/16"	15	50	60	1/2 Cu.Ft. Bag
ON30020	Underbedding ‡	1/13 x 1/16"	15	50	60	1/2 Cu.Ft. Bag
	Underbedding ‡	2-1/2 x 1-1/2"	15	50	60	1/2 Cu.Ft. Bag
	Underbedding ‡	1-1/2 x 3/4"	15	50	60	1/2 Cu.Ft. Bag
	Underbedding ‡	5/8 x 3/8"	15	50	60	1/2 Cu.Ft. Bag
	Underbedding ‡	3/8 x 3/16"	15	50	60	1/2 Cu.Ft. Bag
	Underbedding ‡	3/16 x 3/32"	15	50	60	1/2 Cu.Ft. Bag
GreensandPlus™ Equivalent						
METALEASE LITE	Oxidizing Agent Carrier *	18 x 45	12	84	24	1/2 Cu.Ft. Bag
GreensandPlus	Oxidizing Agent Carrier *	18 x 60	12	89	55	1/2 Cu.Ft. Bag
KDF™						
DK10001	Redox Media – Gold * **	–10 x 100	30	171	16	1/3 Cu.Ft. Pail
DK10002	Redox Media – Red * **	–10 x 100	30	171	16	1/3 Cu.Ft. Pail
Manganese Greensand Equivalent						
MTM	Oxidizing Agent Carrier *	12 x 50	8 – 12	45 – 50	40	1 Cu.Ft. Bag

* Certified to NSF/ANSI Standard 61
** Certified to NSF/ANSI Standard 42
‡ Certified to NSF/ANSI Standard 61 & 372, and Meets or exceeds all ASI, AWWA, or ASME standards and protocols.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1069
EFFECTIVE
JUNE 2025

FILTRATION MEDIA

FILTRATION MEDIA GUIDE

Part Number	Description	Mesh Size	Backwash Rate Per Sq.Ft. GPM	Nominal Weight Lb/Cu.Ft.	Qty Per Skid Cu.Ft.	Packaging
MetalEase™, MetalEase-61™, MetalEase-AS™, and MetalEase-ALF™						
METALEASE	Oxidation Bed	12 x 40	15 – 20	114	30	1/2 Cu.Ft. Bag
METALEASE 61	Oxidation Bed *	12 x 40	15 – 20	114	30	1/2 Cu.Ft. Bag
METALEASE AS	Oxidation Bed – Advanced Structure	20 x 60	20	120	30	1/2 Cu.Ft. Bag
METALEASE AS NSF 61	Oxidation Bed – Advanced Structure *	20 x 60	20	120	30	1/2 Cu.Ft. Bag
METALEASE ALF	Absorption Bed *	12 x 40	N/A	50	—	1 Cu.Ft. Box
METALEASE LITE	Oxidizing Agent Carrier *	18 x 45	12	84	24	1/2 Cu.Ft. Bag
Neutralizing Media						
PH10001	pH Adjusting Media (4.5 – 6 pH)	6 x 16	10 – 12	75	60	50 Lb Bag
PH10003	pH Adjusting Media (5 – 7 pH)	16 x 40	8 – 12	90	50	50 Lb Bag
ProActive™ Carbon (GAC)						
IT50001	Coal Based * †	8 x 30	10 – 12	27.5	40	1 Cu.Ft. Box
IT50002	Coal Based * †	12 x 40	8 – 10	27.5	40	1 Cu.Ft. Box
IT50002-USA	Coal Based – Made in USA †	12 x 40	8 – 10	27.5	80	2 Cu.Ft. Bag
IT50003	Coal Based * †	20 x 50	6 – 8	27.5	40	1 Cu.Ft. Box
IT50004	Coal Based – Acid Washed * †	8 x 30	10 – 12	27.5	40	1 Cu.Ft. Box
IT50005	Coal Based – Acid Washed * †	12 x 40	8 – 10	28	40	1 Cu.Ft. Box
IT50006	Coal Based – Acid Washed * †	20 x 50	6 – 8	27.5	40	1 Cu.Ft. Box
IT51230C	Coconut Shell **	12 x 30	8 – 10	27.5	40	2 Cu.Ft. Bag
IT50003C	Coconut Shell *	20 x 50	6 – 8	27.5	40	2 Cu.Ft. Bag
IT50002SC	SuperCat™ Coconut Shell *	12 x 40	8 – 10	28	40	1 Cu.Ft. Bag
IT50003SC	SuperCat™ Coconut Shell *	20 x 50	6 – 8	28	40	2 Cu.Ft. Bag
IT50610SB	Sub-Bituminous – Water Washed	6 x 10	10 – 12	22	37.5	Super Sack
Sand						
ON40001-50	Multi Media Layer (.45 x .55mm) ‡	30 x 35	15 – 20	50	60	1/2 Cu.Ft. Bag
ON40002-50	Multi Media Layer (.30 x .40mm) ‡	40 x 48	15 – 20	50	60	1/2 Cu.Ft. Bag
ON40003-50	Multi Media Layer (.80 x 1.2mm) ‡	12 x 20	15 – 20	50	60	1/2 Cu.Ft. Bag
ON40004-50	Multi Media Layer (.35 x .45mm) ‡	25 x 40	15 – 20	50	60	1/2 Cu.Ft. Bag
	Multi Media Layer (.20 x .30mm) ‡	35 x 70	15 – 20	50	60	1/2 Cu.Ft. Bag
	Multi Media Layer (.60 x .65mm) ‡	18 x 35	15 – 20	50	60	1/2 Cu.Ft. Bag
	Multi Media Layer (.65 x .75mm) ‡	14 x 30	15 – 20	50	60	1/2 Cu.Ft. Bag
	Multi Media Layer (1.2 x 1.6mm) ‡	7 x 16	15 – 20	50	60	1/2 Cu.Ft. Bag
	Multi Media Layer (1.65 x 2 mm) ‡	6 x 12	15 – 20	50	60	1/2 Cu.Ft. Bag
	Multi Media Layer (2.0 x 3.0mm) ‡	5 x 10	15 – 20	50	60	1/2 Cu.Ft. Bag
Zeolite-61						
HC10003	Filtration Aggregate *	14 x 40	12 – 22	55	40	1 Cu.Ft. Bag

* Certified to NSF/ANSI Standard 61
** Certified to NSF/ANSI Standard 42
† Meets Food Chemicals Codex and AWWA Standard
‡ Certified to NSF/ANSI Standard 61 & 372, and Meets or exceeds all ASI, AWWA, or ASME standards and protocols.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1069
EFFECTIVE
JUNE 2025

Ion Exchange Resins

PRORESIN™ GUIDE

ProSoft™ Family of Cation Softening Resins

Part Number †	Description	Crosslink Percent	Softening Capacity		Backwash gpm/sq.ft. 50% Expansion @ 60°F	Approx. Weight lb/cu.ft.
			10 lb/cu.ft.	15 lb/cu.ft.		
ER10001	Gold *	7	29,000	33,000	5.5	50
ER10002	Premium *	8	29,000	33,000	4.5	52
ER10003	Fine Mesh *	8	29,000	33,000	5.5	52
ER10006	Heavy Duty *	10	30,900	35,400	7.0	54
ER10009	High Porosity *	12 +	24,600	28,000	6.2	50

* Certified to NSF/ANSI Standard 61

† Part Numbers listed are for the sodium form of the resin. Hydrogen form is also available.

ProSelect™ Family of Specialty Resins

Part Number	Description	Backwash gpm/sq.ft. 50% Expansion @ 60°F	Approx. Weight lb/cu.ft.
ER20002	Nitrate Selective *	1.8	42
ER20003	Silica Removal *	1.7	43
ER20004	General Purpose — High Capacity Anion used in D.I. *	2.7	44
ER20006-HP	Tannin and Organic Removal *	1.7	44
ER20009	Organics and Strong Acid Ions Removal	0.85	40
ER20011	Hexavalent Chromium (Chromium-6) Removal *	1.3	40
ER20012	PFAS Removal *	1.3	40 to 42
ER20013	Boron/Borate Removal	1.2	38 to 40

* Certified to NSF/ANSI Standard 61

ProBlend™ Family of Mixed Bed Resins

Part Number	Description	Backwash gpm/sq.ft. 50% Expansion @ 60°F	Approx. Weight lb/cu.ft.
ER30001	Nuclear Grade High Efficiency — Bulk Demineralizing	3.3	44
ER30008	Nuclear Grade High Capacity	3.2	43
ER30004	Semiconductor High Capacity	3.2	43
ER30005	Low TOC Throw High Capacity	3.2	43
ER30009	Ultra Low TOC Throw High Capacity	3.2	43
ER30003	Nuclear Grade High Porosity	2.8	43
ER30002	Semiconductor High Porosity	2.8	43
ER30011	Low TOC Throw High Porosity	2.8	43
ER30012	Ultra Low TOC Throw High Porosity	2.8	43

ProBond™ Family of Chelating Resins

Part Number	Description	Backwash gpm/sq.ft. 50% Expansion @ 60°F	Approx. Weight lb/cu.ft.
ER10112	Cation Iminodiacetate for Heavy Metal Ions	3.8	43

ProBead™ Family of Inert Resins

Part Number	Description	Backwash gpm/sq.ft. 50% Expansion @ 60°F	Approx. Weight lb/cu.ft.
ER40001	Separation between Active Resin Layers in Mixed Bed Demineralizers	NA	45

These are SWT's most popular brand resins. We also have an extensive line of resins to fit any requirement, plus technical support. If you have a particular need or an application for which you cannot find information, give us a call and let us help.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1151
EFFECTIVE
JUNE 2025

Ion Exchange Resins

CLOSEST COMPETITIVE RESIN EQUIVALENTS

Cation Exchange Resins

SWT ProSoft	Resin Tech	Rohm & Haas Amberlite	Dow Dowex	Sybron Ionac	Purolite
Gold	CGS	—	—	—	C-100E
Premium	CG8	IR-120PLUS	HCR-S	C-249	C-100
Fine Mesh	CG8-F	—	—	—	—
Heavy Duty	CG10-Na	IR-122	HGR	C-250	C-100X10
High Porosity	SACMP	IR-252	MSC-1	CFP-110	C-150

Anion Exchange Resins

SWT ProSelect	Resin Tech	Rohm & Haas Amberlite	Dow Dowex	Sybron Ionac	Purolite
Silica	SBG1P	IRA-402	SBRP	ASB1-P	A-400
General Purpose	SBG2	IRA-410	SAR	ASB2	A-300

Mixed Bed Resins

SWT ProBlend	Resin Tech	Rohm & Haas Amberlite	Dow Dowex	Sybron Ionac	Purolite
NG-HE	MBD-20NG	—	—	—	NRW-38
SC-HP	MBD-15SC	IRN-150/MB-1	MR-3	NM-60	NRW-37

Specialty Grade Resins

SWT ProSelect	Resin Tech	Rohm & Haas Amberlite	Dow Dowex	Sybron Ionac	Purolite
Tannin-HP	SBACR-MP-HP	—	—	A-642	Tannex
Nitrate	SIR-100-HP	—	—	SR-6	A-520E

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1151
EFFECTIVE
FEBRUARY 2024

IRON REMOVAL COMPARISON CHART

Iron Removal Comparison Chart

Media Name	Fe^{+2}	Fe^{+3}	Fe_2O_3	Organic Iron	Ferrous Capacity mg/cu.ft.	pH Range	Active Manganese
MetalEase-AS™	Yes	Yes	Yes	Bulk	≥ 312,000	5 to 9	≥ 90%
MetalEase™	Yes	Yes	Yes	Bulk	[1]	5 to 9	≥ 74%
ProSoft™ Premium or ProSoft™ Gold [2]	Yes [3]	No	Slight	No	[3]	1 to 12	N/A
ProSelect™ Tannin-HP	N/A	N/A	Slight	Yes [4]	N/A	1 to 14	N/A
Greensand	Yes	Yes	Yes	Slight	≥ 16,000	6.6 to 8.0	0.5 to 1.0%
GreensandPlus™	Yes	Yes	Yes	Slight	≥ 16,000	6.2 to 8.5	3.2 to 4.8%
Filter-Ox™	Yes	Yes	Yes	Slight	N/A	6.2 to 8.5	12.5%
Birm®	Yes	Yes	Yes	No	≥ 566	6.6 to 8.0 [5]	2.3%
Zeolite-61	N/A	Yes	Yes	No	N/A	[6]	N/A
FilterEase™ or FilterEase-HD™	N/A	Yes	Yes	No	N/A	[6]	N/A

[1] Application dependent.

[2] Sodium form.

[3] 5 ppm maximum total iron level typical.

[4] Compatible for adding to softener bed.

[5] Requires dissolved oxygen to be 15 percent of the iron level.

[6] Wide range.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1088
EFFECTIVE
FEBRUARY 2024

FILTRATION MEDIA

FILTEREASE™ OXIDIZED METAL AND PARTICULATE REDUCTION MEDIA

FilterEase (P/N HC10001-61) is SWT's popular sediment filter media that water treatment professionals are using as a substitute for sand or other filter aggregates. The material is extremely hard and durable. It has a highly porous, ragged surface area that is excellent for use in the removal of oxidized materials such as iron. The filtration characteristics will typically allow for particle filtration of 5 to 10 micron.

One of the best features of FilterEase media is that it will perform its duties while requiring less water in the backwash than traditional sediment filter media or sand. The media is extremely light in water so that the backwash rate is typically the same as the service flow rate. This makes FilterEase excellent for low pressure and low flow applications. It can actually save the customer money by allowing smaller pumps to be installed.

Since the media has a broad range of particle shapes and sizes, it will take the place of most multi-layered filter beds.

Typical applications include: residential well water, pool filters, car washes, post air injector filtration, prefiltration for softeners, RO systems, or carbon beds. Due to the extreme durability of FilterEase, it also may be used in commercial and industrial applications requiring extreme velocities and rigorous backwash.

FEATURES

- Sediment Filtration, Turbidity & Silt Reduction
- Oxidized Iron Removal
- Oxidized Metal and Particulate Reduction
- Depth Bed Filtration
- Prefiltration
- Certified to NSF/ANSI Standard 61

US Standard Mesh Size

US Mesh	% Retained
14	8
30	80
60	11
Pan	1

Specifications

Service Flow Rate	
@ 24 inch bed depth	6 gpm/sq.ft.
@ 36 inch bed depth	10 gpm/sq.ft.
Freeboard	50% minimum
Backwash Rate (@ 60°F)	8 to 10 gpm/sq.ft.
Minimum Bed Depth	24 inches
Color	Light gray
Physical Form	Granular
Mesh Size	10 x 60
Bulk Density	25 lb/cu.ft.
Taste and Odor	None
Active Ingredients	Inert
Life Expectancy	Virtually unlimited

Packaging

Plastic lined, heavy duty paper bag. Each bag contains 1 cu.ft. (25 lb net weight).

Warning

For safety and handling purposes avoid contact with eyes, skin, and clothing. Avoid breathing the dust and always use adequate ventilation.

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1097
EFFECTIVE
JULY 2018

FILTRATION MEDIA

FILTEREASE-HD™ HEAVY DUTY PARTICULATE REDUCTION MEDIA

FilterEase-HD (P/N HC10002) is SWT's reliable sediment filter media that is superior to sand in its filtration abilities. At 55 lbs/cu.ft., FilterEase-HD features the superior filtration characteristics of our original FilterEase™, yet has backwash rates similar to that of anthracite. Water treatment professionals can use FilterEase-HD as a substitute for sand, anthracite, or other filter aggregates. The material is extremely hard and durable. It has a highly porous, ragged surface area that is excellent for use in the removal of all types of sediment and oxidized materials such as iron. The filtration characteristics will typically allow for particle filtration of nominal 25 micron or less.

One of the best features of FilterEase-HD is that it will perform its duties while requiring less water in the backwash than traditional sediment filter media or sand. But still it will provide enough bed stability to allow for a forceful bed cleaning. Since the media has a controlled range of particle shapes and sizes, it will take the place of most sand filters and multi-layered filter beds. Swimming pools will look bluer and cleaner than ever.

Typical applications include: residential well water, pool filters, car washes, post air injector filtration, prefiltration for softeners, RO systems, or carbon beds. Due to the extreme durability of FilterEase-HD, it also may be used in commercial and industrial applications requiring extreme velocities and rigorous backwash.

FEATURES

- Sediment Filtration
- Turbidity and Silt Reduction
- Oxidized Iron Removal
- Oxidized Metal and Particulate Reduction
- Depth Bed Filtration
- Prefiltration

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

Specifications

Service Flow Rate @ 30 inch bed depth	5 to 20 gpm/sq.ft.
Freeboard	50% minimum
Backwash Rate (@ 60°F)	12 to 15 gpm/sq.ft.
Minimum Bed Depth	24 inches
Color	Light gray
Physical Form	Granular
Mesh Size	20 x 40
Bulk Density	55 lb/cu.ft.
Taste and Odor	None
Active Ingredients	Inert
Life Expectancy	Virtually unlimited

Packaging

Plastic lined, heavy duty paper bag. Each bag contains 1 cu.ft. (55 lb net weight).

Warning

For safety and handling purposes avoid contact with eyes, skin, and clothing. Avoid breathing the dust and always use adequate ventilation.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1097
EFFECTIVE
SEPTEMBER 2006

FILTRATION MEDIA

CMX™

100% CERAMIC FILTER MEDIA FOR 1 TO 5 MICRON FILTRATION

CMX is manufactured in kilns in a tightly controlled process that allows a variety of choices for your filtration requirements. Unlike natural zeolites or sand, each grade of our CMX material (M1 and M2) is precision engineered with a 1.25 typical uniformity coefficient to provide the right media for the right application — be it residential, commercial, or municipal.

The result? The best of all worlds. High volume throughputs, the finest in micron particulate filtration, and ultra-low backwash requirements. *The cost savings are huge!* Smaller and fewer tanks are needed per system. Smaller pump requirements mean less wasted backwash water and lower operating costs, while producing superior clarity. And because CMX is ceramic, it withstands heat, chemicals, abrasion, and pressure shock — meaning bed replacement is rare.

Designed for flow rates of 6 to 12 gpm per sq.ft. with a short 24 inch bed depth, CMX is capable of filtering particles as small as 1 micron with very little pressure loss.

CMX also forms a critical barrier to cyst contaminants like Giardia and Cryptosporidium. It can remove significantly more cyst-based contaminants than other conventional aggregate media.

Available in two different mesh sizes and molecular weights, CMX can serve as its own underbedding or pre-filtration.

CMX is considered inert and non-reactive and is compatible with acid, caustic, and all types of oxidants. CMX can be used in harsh industrial filtration applications, chemical filtration, and in high temperature processes up to 1,000°F (538°C).

CMX media is extremely clean with virtually no dust.

FEATURES

- Sediment Filtration
- Turbidity and Silt Reduction
- Oxidized Iron and Manganese Filtration
- Giardia and Cryptosporidium Removal
- Certified Arsenic Removal
- Cleanable and Sanitizable
- Certified to NSF/ANSI Standard 61

Applications include industrial filtering, municipal water works, commercial process water, pressure filters, surface water, ground water.

Physical Properties

Material	Fired ceramic
Color	Tan
Surface Characteristics	Highly textured
Shape	Spherical
Uniformity Coefficient	< 1.3 (1.25 typical)
Bulk Density	97 lb/cu.ft.
Specific Gravity	3.0
Acid Solubility	< 1% (0.1% typical)
Surface Area	9,677 sq.ft./cu.ft.
Moh's Hardness	7.0
Sphericity	0.96
Friability	< 1% (± 0.5%)

Packaging

1/2 cu.ft. box (53 lb) or 20 cu.ft. supersack (2,120 lb)

Part Number	Applications	Nominal Micron Rating	Effective Size	Mesh Size	Recommended Backwash Rate
CMX-M1	Pressure Filters, Surface Water, GWUDI	3	0.15 mm to 0.25 mm	60 x 80	8 to 10 gpm/sq.ft.
CMX-M2	Pressure Filters, Fe, Mn, As, Silt/TSS	5	0.24 mm to 0.35 mm	40 x 60	8 to 10 gpm/sq.ft.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

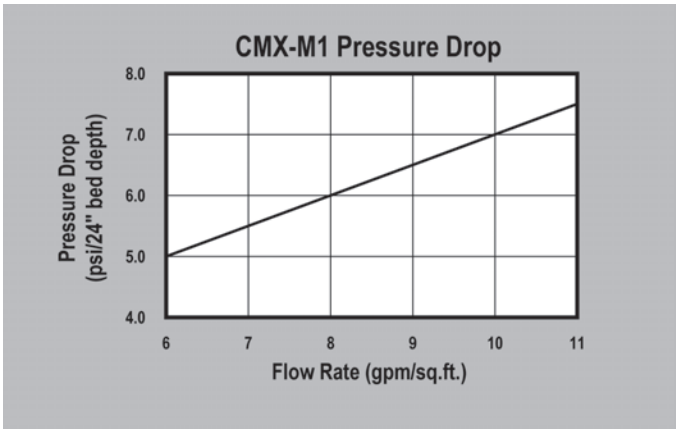
MEMBER Water Quality ASSOCIATION

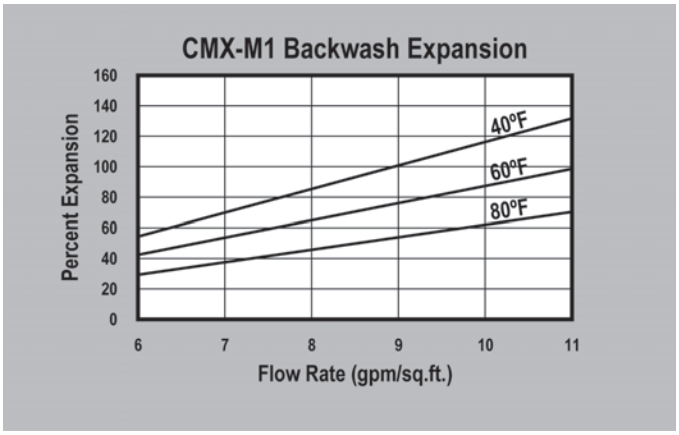
FORM 1341
EFFECTIVE
NOVEMBER 2021

FILTRATION MEDIA

CMX™

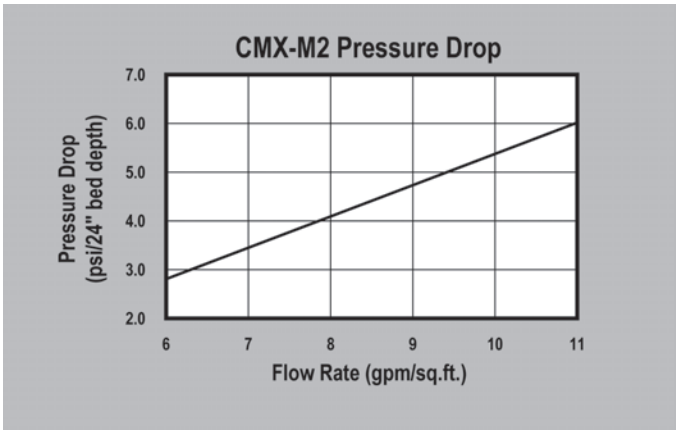
100% CERAMIC FILTER MEDIA FOR 1 TO 5 MICRON FILTRATION

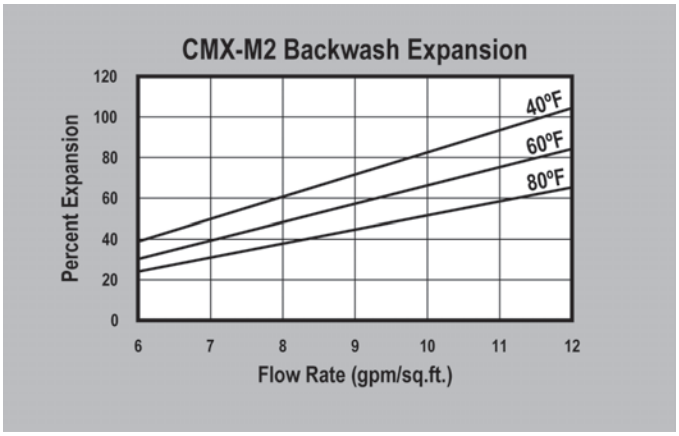




CMX-M1 PRESSURE DROP — The graph above shows the expected pressure loss per 24 inches of bed depth as a function of flow rate.

CMX-M1 BACKWASH — The graph above shows the expansion characteristics as a function of flow rate at various temperatures.





CMX-M2 PRESSURE DROP — The graph above shows the expected pressure loss per 24 inches of bed depth as a function of flow rate.

CMX-M2 BACKWASH — The graph above shows the expansion characteristics as a function of flow rate at various temperatures.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality Association

FORM 1341
EFFECTIVE
NOVEMBER 2021

FILTRATION MEDIA

CMX™

100% CERAMIC FILTER MEDIA FOR 1 TO 5 MICRON FILTRATION

PRESSURE FILTRATION – SERVICE OPERATION

In service, water is normally pumped down through approximately 24 inches of media that is retained within a pressure vessel. Loading rates range from 6 to 12 gpm per square foot. The vessel has some type of diffusion system at the top and a bottom distribution/collection system. These systems are designed to ensure the feed water passes evenly through the media.

Upper Diffusion System

The top diffuser is generally not designed to retain media because the solids removed by the filter must exit through this diffuser. The primary purpose of this upper diffuser is to modify the flow direction of influent water so it does not drop directly onto the surface of the media and penetrate that surface. If a slot-type distributor is used, the slot opening must be large enough to allow coagulated solids to escape the vessel during backwash.

Media Layering and Depth

In most pressure filtration applications only one grade of CMX is required at a depth of 24 inches. Specific applications may require as little as 12 inches or as much as 36 inches. Typical iron and manganese removal requires 24 inches, as does arsenic removal.

Underbedding is usually recommended as follows*:
From bottom to top: 1/2 x 3/4 gravel to 4 inches over lower distributor; then 4 inches of 1/4 x 1/8 gravel; then 4 inches of #10-#20 garnet; then CMX.

* Alternate underbedding configurations may be required depending on the underdrain and tank configurations chosen.

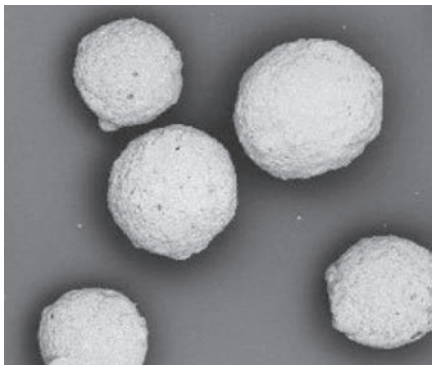
Lower Distribution System

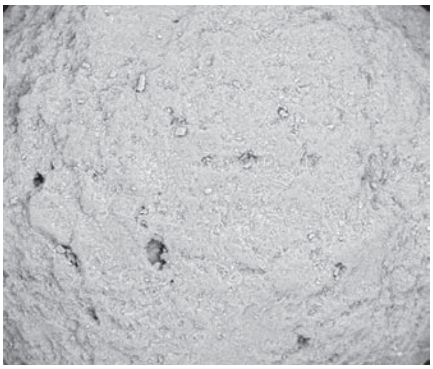
Careful distributor design is required for sustained, low pressure drop across the media/distributor interface. Manufacturer recommends hubs with slotted Schedule 80 plastic laterals or a stainless steel wedge-wire distributor, although other distributor designs have been used successfully including porous plates, caps, and stainless punch designs. Selection of slot size is important because CMX is very uniform. This is particularly true for applications without underbedding. Below are recommended ranges for slot sizing for each media:

Recommended Lower Distributor Slot Sizes for Direct Retention Underdrains***

CMX-M1: ≤ 0.005 inch (≤ 0.130 mm)
CMX-M2: ≤ 0.0065 inch (≤ 0.17 mm)

** Larger slots may be used in conjunction with underbedding.





SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

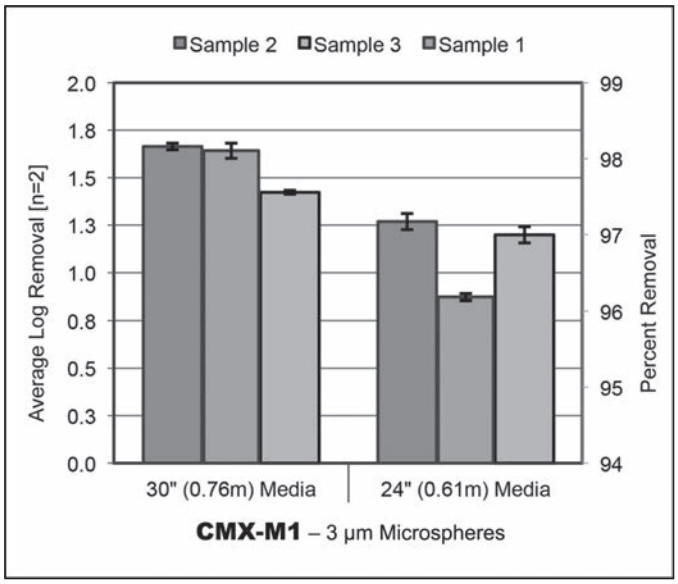
MEMBER Water Quality ASSOCIATION

FORM 1341
EFFECTIVE
NOVEMBER 2021

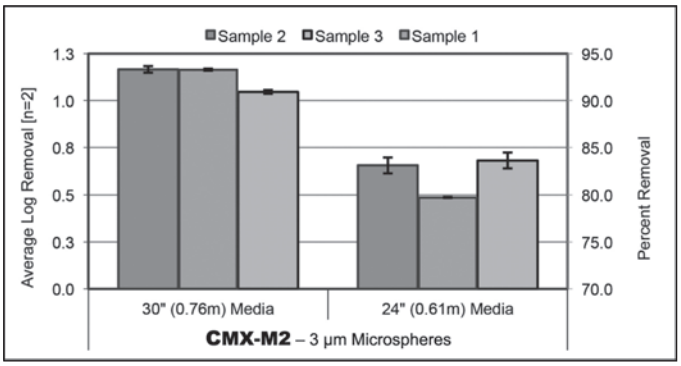
FILTRATION MEDIA

CMX™

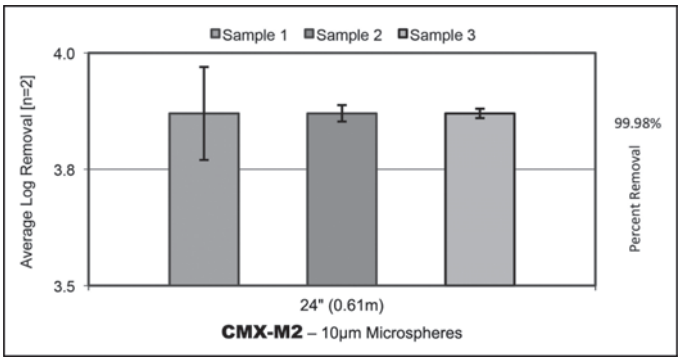
100% CERAMIC FILTER MEDIA FOR 1 TO 5 MICRON FILTRATION



3 to 5 micron microsphere log removal
Average removal 30 inches of media 97.1%
Average removal 24 inches of media 94.8%



3 to 5 micron microsphere log removal
Average removal 30 inches of media 90%
Average removal 24 inches of media 79%



10 micron microsphere log removal
for 24 inches of media >99.9%

PERFORMANCE TESTING

Test Conditions

Test Column: 2 inch diameter
Filtration Rate: 9.4 gpm/sq.ft. (22.5 m^3)
pH: 7.6
Alkalinity: 100 mg/l as $CaCO_3$
Hardness: 74 mg/l as $CaCO_3$
Free Chlorine: 2.0 mg/l
Total Dissolved Solids: 425 mg/l
Total Organic Carbon: 4.2 mg/L
Coagulation: None

Luminescent microspheres are dosed at the 140 to 160 spheres per ml into new filter media.

Three samples are taken at 3, 5, and 7 minutes and the feed water and effluent samples are counted.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality Association
FORM 1341
EFFECTIVE
NOVEMBER 2021

FILTRATION MEDIA

CMX-LITE™
100% CERAMIC FILTER MEDIA

CMX-Lite (P/N CMX-L18) is a uniquely engineered medium-to-coarse crushed angular grain ceramic media, offering superior performance and significantly lower operational costs than traditional filtration media. Various effective sizes and uniformity coefficients are available upon request.

CMX-Lite is a lightweight, expanded granular material that has ten times more surface area than anthracite in the optimal micron range for filtration. This extraordinary amount of surface area increases particle removal as compared to all other filter media and at a lower cost than anthracite. CMX-Lite is 20% lighter than anthracite, resulting in reduced wastewater production which saves users valuable water.

CMX-Lite outperforms anthracite as a filtration media and backwashes at lower rates saving backwash water. It can also be used to cap anthracite to increase filter UFRV's.

CMX-Lite has an exceptionally high surface area making it excellent for growing biofilm and it can be coated with all types of metal oxides including MnO2 for iron and manganese removal.

CMX-Lite is an inert and non-reactive media that is compatible with acid, caustic, and all types of oxidants. CMX-Lite can be used in harsh industrial filtration applications, chemical filtration, and in high temperature processes up to 1000ºF (538ºC).

CMX-Lite media is manufactured in the USA and certified to NSF/ANSI-61 standard for use in drinking water.

FEATURES

- Biological Filtration
- Surface Water Filtration
- Ground Water Filtration
- Iron and Manganese Removal
- Commercial, Industrial, and Municipal Filtration
- Certified to NSF/ANSI Standard 61
- Manufactured in the USA

Suitable for:

- Treating highly coagulated or turbid water
- Removing inorganic contaminants, heavy metals, and organic particulate
- Mono-media gravity filtration applications, or used in conjunction with a traditional sand filter
- Propagating and/or protecting biofilms

Physical Properties

Material	Fired ceramic
Surface Characteristics	Highly textured
Shape	Angular
Effective Size *	0.039 inch (1 mm) (18 Mesh)
Uniformity Coefficient *	< 1.5 (< 1.3 typical)
Density (hydrated) **	49 lb/cu.ft.
Bulk Density (dry)	34 lb/cu.ft.
Acid Solubility	< 5% (< 1.0% typical)
Surface Area (1 to 150 microns)	34,600 sq.ft./cu.ft.
Surface Pore Size Range	1 to 70 micron
Moh's Hardness	2.3
Floating Material	< 4%

Backwash: 10 to 16 gpm/sq.ft. @ 55 to 65°F

Packaging: 27 cu.ft. bulk bags (918 lb)

* Effective sizes from 0.039 to 0.196 inches (1 to 5 mm) and a variety of uniformity coefficients are available upon request.

** Requires 24 hours minimum soak time to hydrate.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

FORM 1473
EFFECTIVE
DECEMBER 2018

FILTRATION MEDIA

ZEOLITE-61
PARTICULATE REDUCTION MEDIA

Zeolite-61 (P/N HC10003) is a high purity natural zeolite. The surface area of Zeolite-61 is 100-times greater than sand/anthracite thus allowing smaller particles to be trapped. Its larger surface area greatly improves water clarity and increases the time between backwashes. This product is Certified to NSF/ANSI Standard 61.

BENEFITS

- Safe, natural, nontoxic, inexpensive replacement for sand/anthracite and multimedia beds
- High surface area holds up to 55% its weight in water and up to 2.1% nitrogen
- High potassium and low sodium content
- Long filter bed life (approx. 10 years)
- Reduced backwash time and frequency
- Certified to NSF/ANSI Standard 61
- Certified to NSF/ANSI Standard 372

APPLICATIONS

- Bottle water and drinking water plants
- Economical pre-filter for RO systems
- Well water and industrial wastewater filtration
- Cooling tower, chillers, heat exchanger water filtration

Physical filtration barriers for accumulation or collection of microorganisms in water that endanger human health have been in focus during the last several years. Zeolite-61 will be an ideal collector of pathogens such as Giardia, Cryptosporidium, and other oocyst and protozoa and their spores. Most of these organisms and their spores are in the size range of 0.5 to 10 micrometers (microns). In contrast, the water permeable pores in Zeolite-61 are mostly smaller than 0.05 microns; therefore the zeolite fragment or granule can surface collect a high percentage of these microorganisms while the water passes through the zeolite fragment. The U.S. drinking water standards for microorganism pathogens and turbidity can be easily met using a natural, low-cost material, such as Zeolite-61 rather than sand which is chiefly quartz grains.

Specifications

Part Number	HC10003
Mineral	Clinoptilolite zeolite
Mesh Size	14 x 40
Particle Size	0.42 mm to 1.4 mm
Smaller than 0.42 mm	Less than 2%
Larger than 1.4 mm	Less than 2%
Effective Size	0.62 mm (d_{10})
Uniformity Coefficient	1.6 (d_{60}/d_{10})
Average Size	0.88 mm (d_{50})
BET Surface Area	29.3 square meters/gram
Surface Absorption	Hydrophillic
Porosity	High porosity, irregular surface
Surface Charge	Negative
Cation Exchange Capacity	1.5 to 1.8 meq/gram (as ammonium, -N)
Water Retention (max.)	Holds 55% of its weight
Hardness	Moh's no. 4
Service Flow Rate *	10 to 20 gpm/sq.ft.
Backwash Rate (@ 60°F)	12 to 22 gpm/sq.ft.
Backwash Expansion	40 to 50%
Minimum Bed Depth	24 inches
Solids Loading	High (1.7 x multimedia)
Filtration Rating (nominal)	3 to 10 micron
Color	Light gray green
Packaging	55 lb (1 cu.ft.) bags, or 2,000 lb supersack

* A general sizing guideline for 5 micron filtration would be 15 gpm/sq.ft. service flow rate.

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

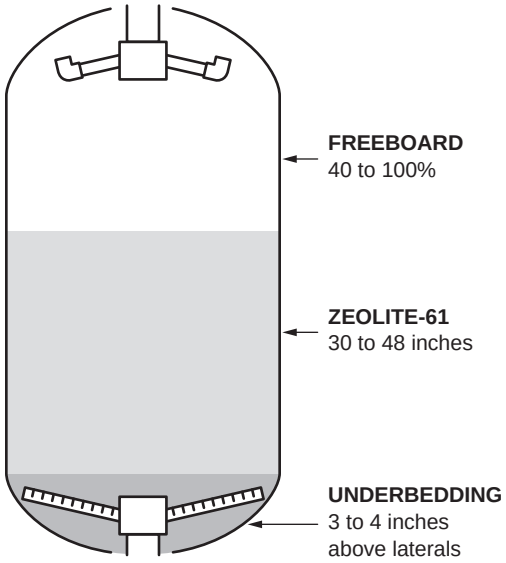
FORM 1324
EFFECTIVE
OCTOBER 2020

FILTRATION MEDIA

ZEOLITE-61
PARTICULATE REDUCTION MEDIA

Zeolite-61 vs. Conventional Media Performance (Pressure Vessels)

Filter Media	Filter Rating (nominal)	Solids Loading Capacity
Sand (20 x 40 Mesh)	~20 micron	1x
Sand/Anthracite (20 x 40 Mesh & Anthracite)	~15 micron	~1.4x
Multimedia (8 x 12 Garnet, 30 x 40 Garnet, 0.45–0.55 Sand, Anthracite #1)	~12 micron	~1.6x
Zeolite-61 (14 x 40 Mesh)	< 5 micron	~2.7x



Typical Backwash Flow Requirements

Water Temperature	Backwash Flow Rate*	
	gpm/sq.ft.	m/h
40°F (4.5°C)	12.5	30.6
50°F (10°C)	14.8	36.2
60°F (16°C)	17.2	42.0
70°F (21°C)	19.8	48.4
80°F (27°C)	22.3	54.5

* 40% bed expansion for 50% freeboard.

Zeolite-61 Filter Loading and Startup

1. Load and level the underbedding.
2. Backwash for 20 to 30 minutes to clean and level the underbedding.
3. Load the Zeolite-61.
4. Check that the correct backwash flow rate has been determined based on the water temperature. (See Typical Backwash Flow Requirements Table.)
5. Allow the tank to slowly fill with water from the bottom. This is most easily accomplished by setting the control valve to the backwash position and partially opening the inlet valve until water flows from the drain line.
6. Allow the Zeolite-61 to soak for at least 30 minutes.
7. Fully open the inlet valve and set the control valve to the backwash position.
8. Allow the filter to backwash for 20 to 30 minutes. Continue the backwash until the water is clear and free of particles.
9. Allow the filter to settle for 10 to 15 minutes. Do not allow the control valve to enter the fast rinse cycle.
10. Allow the filter to backwash again for 15 to 20 minutes.
11. Allow the filter to fast rinse (downflow) for 5 to 8 minutes.
12. The filter is now ready for service.

Optional Air Scour

Use 2 to 3 scfm/sq.ft. air @ 90 psi with 3 to 5 gpm/sq.ft. water backwash (@77°F).

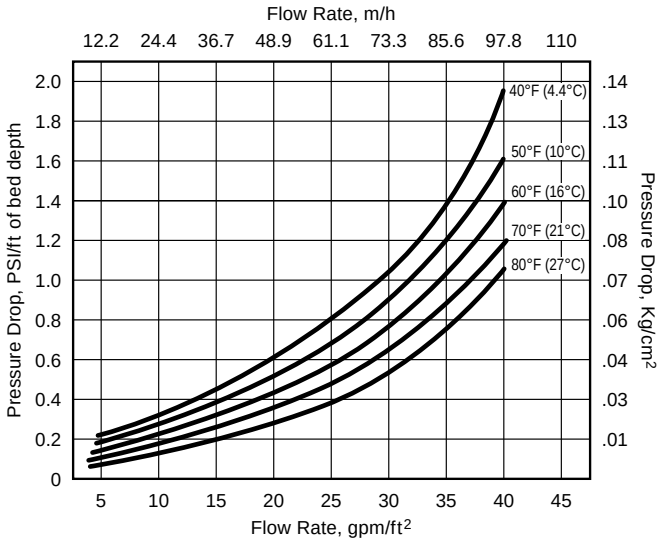
NOTE: Above times are application dependent.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1324
EFFECTIVE
OCTOBER 2020

ZEOLITE-61
PARTICULATE REDUCTION MEDIA

Pressure Drop vs Flow Rate



The examples below illustrate the advantages of Zeolite-61 by comparing two systems designed for the same service flow; one system based on Zeolite-61, and one multimedia system (gravel, garnet, fine garnet, anthracite). Each system is based on best design practices for the respective media.

EXAMPLE 1: 15 gpm Service Flow

	Zeolite-61	Multimedia
Surface Loading	15 gpm/sq.ft.	5 gpm/sq.ft.
Surface Area Required	1.0 sq.ft.	3.0 sq.ft.
Tank Dimensions	14 x 65 inch	24 x 72 inch
Media Volume Required (with underbedding)	3.7 cu.ft.	10.8 cu.ft.
Media Weight (with underbedding)	216 lb	1,057 lb
Backwash Flow Required @ 60°F	17 gpm	51 gpm
Daily Backwash Volume	179 gallons	510 gallons
Filtration	< 5 micron	<10 micron
Ion Exchange Capacity	1.5–1.8 meq/g	None
Comparative Cost	1x	3x

EXAMPLE 2: 45 gpm Service Flow

	Zeolite-61	Multimedia
Surface Loading	15 gpm/sq.ft.	5 gpm/sq.ft.
Surface Area Required	3.0 sq.ft.	9.0 sq.ft.
Tank Dimensions	24 x 72 inch	42 x 72 inch
Media Volume Required (with underbedding)	11 cu.ft.	35.3 cu.ft.
Media Weight (with underbedding)	672 lb	3,469 lb
Backwash Flow Required @ 60°F	53 gpm	153 gpm
Daily Backwash Volume	556 gallons	1,530 gallons
Filtration	< 5 micron	<10 micron
Ion Exchange Capacity	1.5–1.8 meq/g	None
Comparative Cost	1x	3.3x

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1324
EFFECTIVE
OCTOBER 2020

FILTRATION MEDIA

METALEASE™ HEAVY METALS REMOVAL MEDIA

MetalEase (P/N METALEASE) is a relatively new technology, and a simple method of iron and heavy metals filtration that is quickly becoming a popular alternative to chemical oxidation (chlorine feeders, greensand / potassium permanganate, etc.). Although MetalEase works on a similar principle of bringing dissolved metals out of solution, most MetalEase filter applications require no chemical regeneration, just a simple vigorous backwashing.

MetalEase is capable of removing high levels of iron, hydrogen sulfide, and other metals such as lead and manganese. The media first brings the metals out of solution into a solid form and then traps the particle in the MetalEase bed until the particle is flushed out of the tank in the backwash cycle.

MetalEase is designed to be used in place of traditional forms of iron treatment and can be installed on either well or municipal water supplies. It is the perfect companion to softeners, RO systems, and carbon filters.

MetalEase is capable of removing virtually unlimited amounts of the above contaminants, but tends to work better in some geographic areas than others depending on the levels of TDS or heme iron (organics) in the local water supplies. If you have had success in the past with greensand, Birm®, Pyrolox™, or Filox-R™, then MetalEase will work for you using the same parameters. In addition, MetalEase can also be pushed beyond the listed removal capabilities by adding such things as air injectors or extended contact times, but not in all areas or on all waters. There is a learning curve, and sometimes trial and error. But for those who have mastered the applications, this is a wonderful method of treatment and a great way to give your customers good water without the messy chemicals.

FEATURES

- Iron, Hydrogen Sulfide, and Manganese Removal
- Taste and Odor Reduction
- Turbidity Reduction
- Virtually Unlimited Life Expectancy

Specifications

Active Ingredients	75 to 85%
Service Flow Rate	4 to 5 gpm/cu.ft.
Freeboard	30 to 40%
Backwash Rate (@ 60°F)	15 to 20 gpm/sq.ft.
Bed Depth	24 inch minimum
pH Range	5.0 to 9.0
Suggested Operating Capacity	
Iron	10 ppm
Hydrogen Sulfide	5 ppm
Manganese	3 ppm
Color	Grey–Black
Physical Form	Granular
Mesh Size	12 x 40
Bulk Density	114 lb /cu.ft.
Taste and Odor	None
Life Expectancy	Virtually unlimited for low contaminant conditions

Packaging

Heavy duty paper bag. Each bag contains 1/2 cu.ft. (57 lb net weight).

Warning

For safety and handling purposes avoid contact with eyes, skin, and clothing. Avoid breathing the dust and always use adequate ventilation. Wash thoroughly after handling. Keep away from heat and easily oxidizable materials.

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

MetalEase™ is a trademark of Safe Water Technologies, Inc.
Filox-R™ is a trademark of Matt-Son, Inc.
Birm® is a registered trademark of Clack Corporation.
Pyrolox™ is a trademark of American Minerals.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1093
EFFECTIVE
OCTOBER 2001

FILTRATION MEDIA

METALEASE-AS™ (ADVANCED STRUCTURE) HEAVY METALS REMOVAL MEDIA

MetalEase-AS (P/N METALEASE AS) is a highly processed version of our standard MetalEase™ oxidation technology. MetalEase-AS (Advanced Structure) works on a similar principle of bringing dissolved metals out of solution, and the metals have an affinity for media. Most MetalEase-AS filter applications require no chemical regeneration.

MetalEase-AS is capable of removing high levels of iron, hydrogen sulfide, and other metals such as lead, copper, arsenic, and manganese. The media first brings the metals out of solution into a solid form and then adheres the particle in the MetalEase-AS media bed.

MetalEase-AS is designed to be used in place of traditional forms of iron treatment and can be installed on either well or municipal water supplies. It is used in cartridge form and as a backwashable media bed. It can be used as a stand-alone unit or as the perfect companion to softeners, RO systems, carbon filters, etc.

MetalEase-AS is capable of removing contaminants, but tends to work better in some geographic areas than others, depending on the levels of TDS or heme iron (organics) in the local water supplies.

Available with NSF/ANSI Std. 61 Certification.

FEATURES

- Iron, Hydrogen Sulfide, and Manganese Removal
- More Active Ingredients for a Broader Range of Metal Oxidation
- Dust-free
- Faster Kinetics
- Finer Particulate Filtration
- Turbidity, Taste & Odor Reduction
- Virtually Unlimited Life Expectancy
- Available with NSF/ANSI Standard 61 Certification

Specifications

Active Ingredients	Greater than 90%
Service Flow Rate	3.5 gpm/cu.ft.
Freeboard	30 to 40%
Backwash Rate (@ 60°F)	20 gpm/sq.ft.
Bed Depth (Application Dependent)	24 inch minimum for backwashing systems
pH Range	5.0 to 9.0
Suggested Operating Capacity	
Iron	10 ppm
Hydrogen Sulfide	5 ppm
Manganese	3 ppm
Chromium-3	5 ppm
Barium	2 ppm
Cadmium	2 ppm
Copper	1 ppm
Gross Alpha, Beta & Gamma	1 ppm
(Affinity Order: Co & Ra => Ba => U => Sr)	
Color	Grey–Black
Physical Form	Granular
Mesh Size	20 x 60
Bulk Density	120 lb /cu.ft.
Taste and Odor	None
Life Expectancy	Virtually unlimited for low contaminant conditions

Packaging

Heavy duty paper bag. Each bag contains 1/2 cu.ft. (60 lb net weight).

Warning

For safety and handling purposes avoid contact with eyes, skin, and clothing. Avoid breathing the dust and always use adequate ventilation. Wash thoroughly after handling. Keep away from heat and easily oxidizable materials.

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1093
EFFECTIVE
DECEMBER 2016

FILTRATION MEDIA

METALEASE-61™ METALS & SEDIMENT REMOVAL MEDIA FOR MUNICIPAL WATER TREATMENT

MetalEase-61 (P/N METALEASE 61) is designed for use in small community water filtration applications. It can help to ensure that your treatment plant becomes, or remains, EPA compliant.

MetalEase-61 has excellent filtration capabilities and has the added ability of oxidizing and capturing dissolved metals such as iron, arsenic, hydrogen sulfide, lead, copper, etc. It also has been successfully used on uranium, barium, and radium.

It can be used as a stand alone filtration media or as an added layer in a sand or multimedia filter system. Many times, existing equipment can be utilized just by changing the existing filter media to MetalEase-61 and adjusting the backwash rate. The media requires no chemical regeneration. Vigorous backwashing keeps the bed clean.

FEATURES

- Iron, Hydrogen Sulfide, and Manganese Removal
- Taste and Odor Reduction
- Turbidity Reduction
- Virtually Unlimited Life Expectancy
- Certified to NSF/ANSI Standard 61

Warning

For safety and handling purposes avoid contact with eyes, skin, and clothing. Avoid breathing the dust and always use adequate ventilation. Wash thoroughly after handling. Keep away from heat and easily oxidizable materials.

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.



MetalEase-61 Installation in Elk Grove, California

MetalEase-61 is NSF/ANSI Standard 61 Certified. It covers a wide range of applications. The 12 x 40 mesh particle distribution and angular shape make this an excellent media for depth filtration.

To learn more about MetalEase-61 and how it can save your town money and pass the next inspection, contact your SWT representative today.

Specifications

Active Ingredients	75 to 85%
Service Flow Rate	3.5 gpm/cu.ft.
Freeboard	30 to 40%
Regenerate	Vigorous backwash
Backwash Rate (@ 60°F)	15 to 20 gpm/sq.ft.
Bed Depth	24 inch minimum
pH Range	5.0 to 9.0
Suggested Operating Capacity	
Iron	10 ppm
Hydrogen Sulfide	5 ppm
Manganese	3 ppm
Color	Grey–Black
Physical Form	Granular
Mesh Size	12 x 40
Bulk Density	114 lb /cu.ft.
Taste and Odor	None
Life Expectancy	Virtually unlimited for low contaminant conditions

Packaging

Heavy duty paper bag. Each bag contains 1/2 cu.ft. (57 lb net weight).

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1092
EFFECTIVE
JUNE 2005

METALEASE-ALF™ ARSENIC, LEAD, & FLUORIDE REMOVAL MEDIA

FEATURES & BENEFITS

- Does not release arsenic, lead, or fluoride except during regeneration and can be sent to landfill when used in single pass applications (ie. cartridges, exchange tanks, rebedding, etc.)
- Removes metals through a combination of adsorption and chemical reaction with the media, thus the removal is not dependent on ion exchange
- Uniform particle size with minimal shrinkage or swelling and low pressure loss
- Physically stable and can be used over a wide pH range
- Certified to NSF/ANSI Standard 61 for drinking water applications

Typical Properties

Chemical Structure	Crystalline Aluminum Oxide
Active Ingredients	92% minimum
Physical Form	Tough Uniform Granules
Color	White
Surface Area	315 to 330 m^2/gr
Mesh Size	28 x 48
pH Range	4 to 10
Water Retention	Less than 5%
Solubility	Nil
Net Weight	47 to 48 lb/cu.ft.
Shipping Weight	50 lb/cu.ft.
Packaging	1 cu.ft. box or 37 cu.ft. supersack

Suggested Operating Conditions

Maximum Temperature	100°C (212°F)
Maximum Free Chlorine	1 ppm
Minimum Bed Depth	36 inch minimum (5 to 7 foot preferred)
Backwash Rate	To achieve 10 to 25% expansion
Continuous Flow Rate	1 to 2 gpm/cu.ft.
Intermittent Flow Rate	1 to 5 gpm/cu.ft.

MetalEase-ALF (P/N METALEASE ALF) is a high capacity synthetic adsorbent media that is highly selective for arsenic, lead, and fluoride. The extremely high surface area and pore distribution gives this media the highest possible operating capacity and lowest possible leakage.

Arsenic Removal

Inorganic arsenic (arseniite and arsenate) can be removed by MetalEase-ALF. The process is very pH sensitive and capacity decreases rapidly when the pH is below 5.5 or above 6.0. Arsenite is not removed nearly as well as arsenate; therefore, prechlorination to convert arsenite to arsenate may be required. Arsenic removal is also affected by temperature and by the TDS of the feedwater. Increasing temperature increases capacity while increasing TDS decreases capacity.

Equilibrium capacity for arsenate (1,000 ppm TDS, 25°C, 1 mg/l As) is approximately 0.66 lbs/cu.ft. Operating capacity to a 10% leakage end point is approximately 10% of the equilibrium capacity. Regeneration can be accomplished by using 3 to 4 lbs/cu.ft. of 2 to 4% sodium hydroxide, over 20 to 30 minutes, followed by nuetralization with acid to a pH of 5 to 6.

Lead Removal

Dissolved lead is adsorbed by MetalEase-ALF and is not normally regenerable. Capacity for lead is at least 0.4 lbs/cu.ft. while maintaining greater than 98% lead removal. This process is not dramatically affected by flow rate, temperature, or TDS. However, pH should be maintained above 6.0 as lead removal drops under acidic conditions, and below 10 as lead precipitates under basic conditions.

Fluoride Removal

Fluoride is removed by MetalEase-ALF by a chemical reaction with the media. The process is flow and pH sensitive. The best results are obtained when the flow is limited to about 1 gpm/cu.ft. and the pH is held at 5.5. Higher flows and higher or lower pH causes a significant loss of capacity. The best capacity obtainable is approximately 0.2 lbs/cu.ft. Leakage of fluoride is generally less than 0.1 mg/l to breakthrough.

Regeneration can be accomplished using 3 to 4 lbs/cu.ft. of 2 to 4% sodium hydroxide over 20 to 30 minutes, followed by neutralization with acid to a pH of 5 to 6.

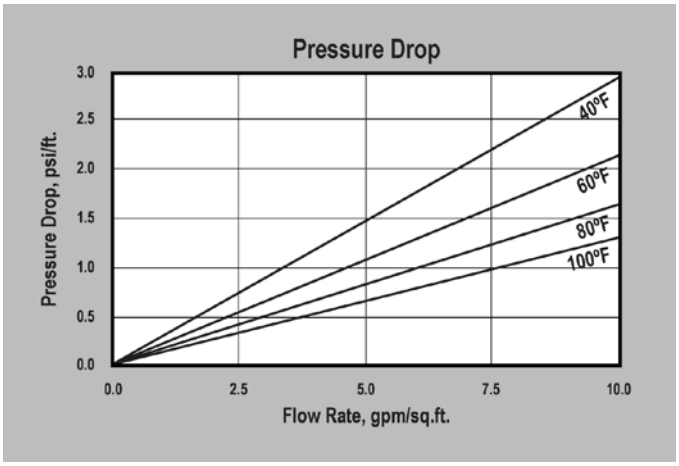
This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation, and verification.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

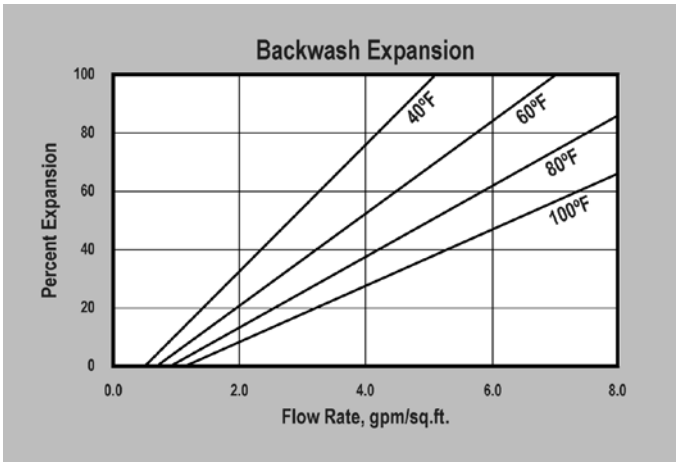
MEMBER Water Quality Association

FORM 1096
EFFECTIVE
DECEMBER 2015

METALEASE-ALF™ ARSENIC, LEAD, & FLUORIDE REMOVAL MEDIA



PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.



BACKWASH — The graph above shows the expansion characteristics as a function of flow rate at various temperatures.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1096
EFFECTIVE
DECEMBER 2015

FILTRATION MEDIA

METALEASE-AS5™ ARSENIC REMOVAL MEDIA

MetalEase-AS5 is a chloride form arsenic selective hybrid anion exchange resin. It has hydrated iron oxide monoatomically dispersed throughout the polymer. The media captures arsenate first by ion exchange and then by absorption into the iron oxide hybrid. MetalEase-AS5 is intended for arsenic removal from potable water, and can also be used as an ion exchanger for removal of uranium and other trace level contaminants.

FEATURES & BENEFITS

- Highest arsenic removal capacity of any organic based arsenic removal media
- No arsenic dumping
- Superior physical stability
- Controlled particle size, low pressure drop
- Conforms to paragraph 21CFR173.25 of the Food Additives Regulations of the US FDA
- NSF/ANSI-61 Certified for Material Safety *

* NSF/ANSI-61 compliance requires conditioning with a minimum 20 bed volume rinse prior to first use.

Physical Properties

Polymer Structure	Styrene/DVB
Polymer Type	Gel
Functional Group	Hybrid
Physical Form	Spherical beads
Resin Color	Black
Ionic Form, as shipped	Chloride
Water Retention	
Chloride Form	35 to 45%
Screen Size Distribution	16 to 50 (US mesh)
Maximum Fines Content	1% (< 50 mesh)
Minimum Sphericity	93%
Uniformity Coefficient	1.6 approx.
Approximate Shipping Weight	
Chloride Form	50 lb/cu.ft.

Part Number

Chloride Form	METALEASE AS5

Suggested Operating Conditions

Maximum Temperature	
Chloride Form	170°F (77°C)
Minimum Bed Depth	24 inches
Backwash Expansion	50 to 75%
Maximum Pressure Loss	25 psi
Operating pH Range	4 to 8
Service Flow Rate	1 to 5 gpm/cu.ft.

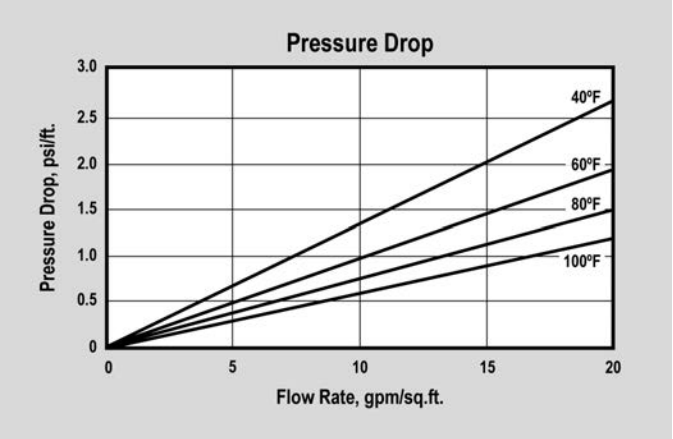
CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

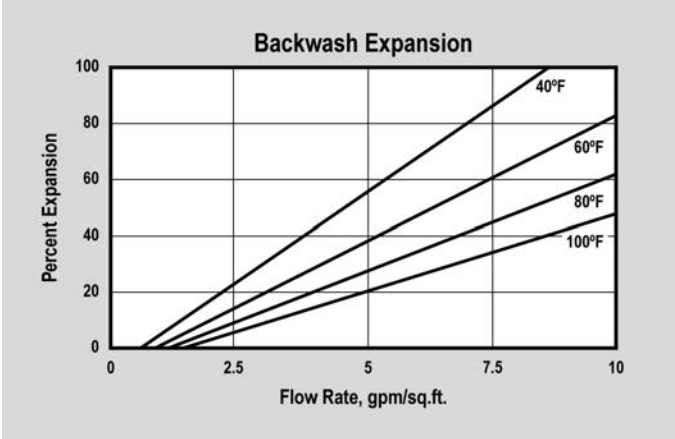
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1098
EFFECTIVE
DECEMBER 2021

METALEASE-AS5™ ARSENIC REMOVAL MEDIA



PRESSURE DROP — *The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.*

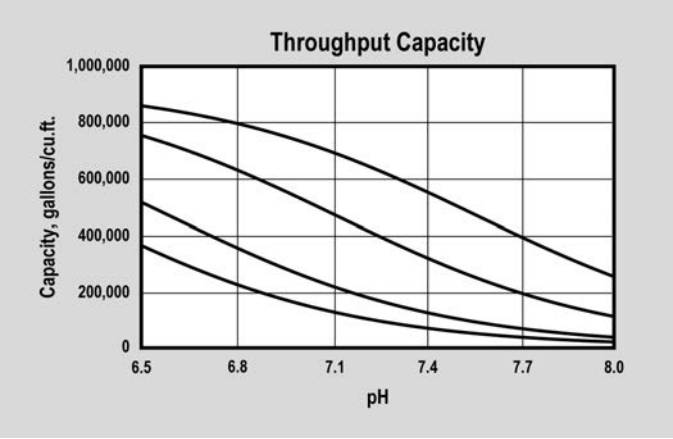


BACKWASH — *The graph above shows the expansion characteristics as a function of flow rate at various temperatures.*

APPLICATIONS

Arsenic Removal

Under ideal conditions MetalEase-AS5 will reduce 50 ppb of arsenate to less than 10 ppb for more than 500,000 gallons per cubic foot. Limiting factors are high pH, high silica concentration, and high sulfate concentration. Capacity can also be reduced by intermittant operation and various foulants, notably suspended solids.

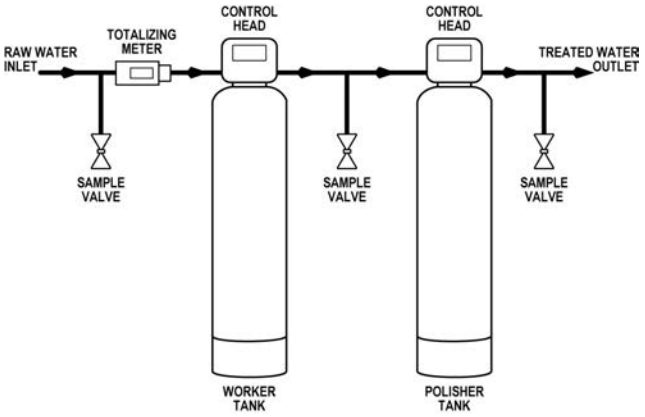


THROUGHPUT CAPACITY — *Capacity is based on clean waters that do not contain significant levels of organics, iron, manganese, or other contaminants. The graph above is based on 50 ppb of arsenate (As^{+5}) in the feed, and TDS less than 500 ppm. MetalEase-AS5 removes only modest amounts of As^{+3}, therefore pre-oxidation to As^{+5} may be required. No engineering downgrade has been applied.*

Silica Removal

MetalEase-AS5 can be used at moderate pH to remove silica. At a flow rate of 0.5 BV/min, removal efficiency of ninety percent is possible for several hundred bed volumes of throughput. Silica does not dump as the resin exhausts. Even though silica removal is not complete, some lowering of silica occurs for hundred of thousands of bed volumes.

Suggested System Configuration



SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1098
EFFECTIVE
DECEMBER 2021

FILTRATION MEDIA

PROACTIVE™ 8 X 30 CARBON

ProActive 8 x 30 Granular Activated Carbon (P/N IT50001) is made from a superior quality anthracite and non-viscous coal. The 8 x 30 mesh carbon is recommended as the choice for whole house and commercial/industrial applications where little pressure drop is preferred. ProActive 8 x 30 Carbon is rated at a 950 minimum iodine number, making it a premium grade carbon for chlorine removal. It is tough enough to withstand frequent backwashing with its abrasion number of 90 minimum.

FEATURES

- High adsorption capacity and efficiency
- Super durability that stands up well to backwash
- Low fines, no floats, rinses fast
- Certified to NSF/ANSI Standard 61

Specifications

US Standard Mesh Size	8 x 30
Larger than 8	5% maximum
Smaller than 30	3% maximum
Backwash Expansion	35% to 40%
Backwash Rate	12 gpm/sq.ft. @ 55°F
Chlorine Reduction @ 1 ppm Influent	
2 gpm flow rate per cu.ft.	1,000,000 gal
4 gpm flow rate per cu.ft.	260,000 gal
Iodine Number	950 mg/g minimum
Molasses Number	200 mg/g minimum
Abrasion Number	90 ASTM minimum
Methylene Blue	150 mg/g minimum
Benzene Number	38 minimum
CTC	55 minimum
Mean Particle Diameter	1.5 to 1.7 mm
Ash Content	12% maximum
Moisture	3% maximum
Bulk Density	0.51 g/cc

Typical Properties

Total Surface Area (N2 BET method)	950 to 1000 m^2/g
Pore Volume	0.85 cc/g
Backwash & Drained Density	0.45 g/cc
Uniform Coefficient	2.0
Effective Size	0.90 mm

Packaging

Plastic lined, corrugated box. Each box contains 1 cu.ft. (27.5 lb net weight).

Warning

For safety and handling purposes, we recommend appropriate protective measures when entering a wet vessel containing granular activated carbon, because wet activated carbon depletes oxygen from air and therefore, dangerously low levels of oxygen may be encountered. In such a case, the oxygen level inside the vessel shall be determined before entering and appropriate protective equipment should be worn when entering, or leave the vessel open until the oxygen level in the vessel is normal.

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1159
EFFECTIVE
AUGUST 2024

FILTRATION MEDIA

PROACTIVE™ ACID WASHED 8 X 30 CARBON

ProActive Acid Washed 8 x 30 Granular Activated Carbon (P/N IT50004) is made from a superior quality anthracite and non-viscous coal with naturally low ash, sulphur, and phosphorous content. It is manufactured through high temperature steam activation under stringent quality control. It has a large surface area, high pore volume, high mechanical hardness and chemical stability, longer operating life, and it is easy to regenerate. It is used in liquid filtration and water treatment for removal of organic contaminates, odor, taste, color, and turbidity. The product meets the standards of Food Chemical Codex for activated carbon.

FEATURES

- High adsorption capacity and efficiency
- Super durability that stands up well to backwash
- Low fines, no floats, rinses fast
- Low pH
- Certified to NSF/ANSI Standard 61

Specifications

US Standard Mesh Size	8 x 30
Larger than 8	5% maximum
Smaller than 30	3% maximum
Backwash Expansion	35% to 40%
Backwash Rate	17 gpm/sq.ft. @ 55°F
Chlorine Reduction @ 1 ppm Influent	
2 gpm flow rate per cu.ft.	1,000,000 gal
4 gpm flow rate per cu.ft.	260,000 gal
Iodine Number	950 mg/g minimum
Molasses Number	200 mg/g minimum
Abrasion Number	90 ASTM minimum
Methylene Blue	150 mg/g minimum
Benzene Number	38 minimum
CTC	55 minimum
Mean Particle Diameter	1.5 to 1.7 mm
Ash Content	7% maximum
pH	7
Moisture	3% maximum
Bulk Density	0.51 g/cc

Typical Properties

Total Surface Area (N2 BET method)	950 to 1000 m^2/g
Pore Volume	0.85 cc/g
Backwash & Drained Density	0.45 g/cc
Uniform Coefficient	2.0
Effective Size	0.90 mm
Acid Soluble Ash	None
Acid Soluble Iron	0.5% maximum

Packaging

Plastic lined, corrugated box. Each box contains 1 cu.ft. (27.5 lb net weight).

Warning

For safety and handling purposes, we recommend appropriate protective measures when entering a wet vessel containing granular activated carbon, because wet activated carbon depletes oxygen from air and therefore, dangerously low levels of oxygen may be encountered. In such a case, the oxygen level inside the vessel shall be determined before entering and appropriate protective equipment should be worn when entering, or leave the vessel open until the oxygen level in the vessel is normal.

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1162
EFFECTIVE
AUGUST 2024

PROACTIVE™ 12 X 30 COCONUT SHELL CARBON

ProActive™ 12 x 30 Coconut Shell Carbon (P/N IT51230C) is a granular activated carbon produced from coconut shell by a high temperature activation process under stringent quality control. It has a large surface area, high mechanical hardness, high pore volume, and chemical stability.

FEATURES

- High adsorption capacity and efficiency
- Hard and durable
- Highly developed pore structure
- Certified to NSF/ANSI Standard 61

Specifications

US Standard Mesh Size	12 x 30
Larger than 12	5% maximum
Smaller than 30	4% maximum
Iodine Number	1,100 mg/g minimum
CTC	55% minimum
Hardness Number	98 minimum
Moisture (as packed)	5% maximum
Apparent Density	0.50 g/cc typical
Total Ash Content	3% maximum

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

Packaging

55 lb (2 cu.ft.) bags or 1,100 lb supersacks.

Warning

For safety and handling purposes, we recommend appropriate protective measures when entering a wet vessel containing granular activated carbon, because wet activated carbon depletes oxygen from air and therefore, dangerously low levels of oxygen may be encountered. In such a case, the oxygen level inside the vessel shall be determined before entering and appropriate protective equipment should be worn when entering, or leave the vessel open until the oxygen level in the vessel is normal.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1306
EFFECTIVE
NOVEMBER 2013

FILTRATION MEDIA

PROACTIVE™ 12 X 40 CARBON

ProActive 12 x 40 Granular Activated Carbon (P/N IT50002) is made from a superior quality anthracite and non-viscous coal. It is recommended for residential applications. This carbon is almost twice as effective at chlorine removal than our 8 x 30 grade. ProActive 12 x 40 Carbon has a superior iodine rating of 1000 minimum and it is great for organics too.

FEATURES

- High adsorption capacity and efficiency
- Super durability that stands up well to backwash
- Low fines, no floats, rinses fast
- Certified to NSF/ANSI Standard 61

Specifications

US Standard Mesh Size	12 x 40
Larger than 12	5% maximum
Smaller than 40	3% maximum
Backwash Expansion	35% to 40%
Backwash Rate	10 gpm/sq.ft. @ 55°F
Chlorine Reduction @ 1 ppm Influent	
4 gpm flow rate per cu.ft.	1,000,000 gal
8 gpm flow rate per cu.ft.	260,000 gal
Iodine Number	1000 mg/g minimum
Molasses Number	210 mg/g minimum
Abrasion Number	90 ASTM minimum
Methylene Blue	180 mg/g minimum
Benzene Number	38 minimum
CTC	65 minimum
Mean Particle Diameter	0.9 to 1.1 mm
Ash Content	12% maximum
Moisture	3% maximum
Bulk Density	0.50 g/cc
Apparent Density	0.44 g/cc

Typical Properties

Total Surface Area (N2 BET method)	1000 to 1050 m^2/g
Pore Volume	0.95 cc/g
Backwash & Drained Density	0.42 g/cc
Uniform Coefficient	1.8
Effective Size	0.60 mm

Packaging

Plastic lined, corrugated box. Each box contains 1 cu.ft. (27.5 lb net weight).

Warning

For safety and handling purposes, we recommend appropriate protective measures when entering a wet vessel containing granular activated carbon, because wet activated carbon depletes oxygen from air and therefore, dangerously low levels of oxygen may be encountered. In such a case, the oxygen level inside the vessel shall be determined before entering and appropriate protective equipment should be worn when entering, or leave the vessel open until the oxygen level in the vessel is normal.

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1160
EFFECTIVE
AUGUST 2024

FILTRATION MEDIA

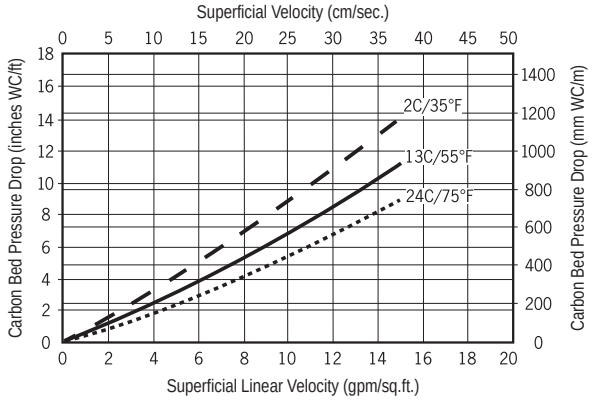
PROACTIVE™ 12 X 40
100% USA BITUMINOUS CARBON

ProActive 12 x 40 100% USA Bituminous Granular Activated Carbon (P/N IT50002-USA) is made for the removal of dissolved organic compounds from water and wastewater as well as industrial and food processing streams. These contaminants include taste and odor compounds, organic color, total organic carbon (TOC), and industrial organic compounds such as TCE and PCE. It is formulated to comply with all the applicable provisions of the AWWA Standard for Granular Activated Carbon (B604) and Food Chemicals Codex.

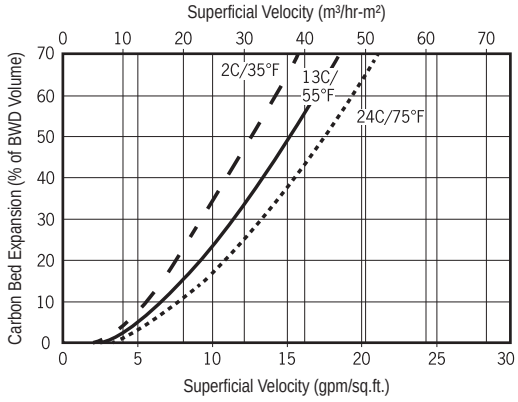
FEATURES

- High adsorption capacity and efficiency
- Super durability that stands up well to backwash
- Low fines, no floats, rinses fast
- 100% mined and manufactured in USA

TYPICAL PRESSURE DROP



TYPICAL BED EXPANSION DURING BACKWASH



Specifications

US Standard Mesh Size	12 x 40
Larger than 12	5% maximum
Smaller than 40	4% maximum
Iodine Number	1000 mg/g minimum
Moisture by Weight	2% maximum
Effective Size	0.55 to 0.75 mm
Uniformity Coefficient	1.9 maximum
Abrasion Number	75 minimum

Typical Properties

Apparent Density (tamped)	0.54 g/cc
Water Extractables	< 1%
Non-wettable	< 1%

Packaging

2 cu.ft. bags / 80 cu.ft. per skid
(27.5 lb per cu.ft.)

Warning

For safety and handling purposes, we recommend appropriate protective measures when entering a wet vessel containing granular activated carbon, because wet activated carbon depletes oxygen from air and therefore, dangerously low levels of oxygen may be encountered. In such a case, the oxygen level inside the vessel shall be determined before entering and appropriate protective equipment should be worn when entering, or leave the vessel open until the oxygen level in the vessel is normal.

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1432
EFFECTIVE
APRIL 2016

FILTRATION MEDIA

PROACTIVE™ ACID WASHED 12 X 40 CARBON

ProActive Acid Washed 12 x 40 Granular Activated Carbon (P/N IT50005) is made from a superior quality anthracite and non-viscous coal with naturally low ash, sulphur, and phosphorous content. It is manufactured through high temperature steam activation under stringent quality control. It has a large surface area, high pore volume, high mechanical hardness and chemical stability, longer operating life, and it is easy to regenerate. It is intended for use in dechlorinating water, reducing organic impurities, and as pretreatment for reverse osmosis and ion exchange systems.

FEATURES

- High adsorption capacity and efficiency
- Super durability that stands up well to backwash
- Low fines, no floats, rinses fast
- Low pH
- Dust free
- Acid washed in the USA

Physical Properties

Part Number	IT50005
Carbon Type	Coal
US Standard Mesh Size	12 x 40
Larger than 12	5% maximum
Smaller than 40	5% maximum
Mean Particle Size	0.9 to 1.1 mm
Uniform Coefficient	1.9 maximum
Abrasion Number	75 minimum
Wet Density (as typically shipped)	42-44 lb/cu.ft.
Dry Density	33 lb/cu.ft.
Ash	<0.5%
Iodine Number	950 mg/g minimum

Acid Washed Specifications

Acid Soluble Ash *	Less than 0.5%
Total Ash (typical) †	8 to 9%
pH (as shipped)	5 to 8
Acid Soluble Metallic Impurities (as mg/kg of moist carbon)	
Aluminum	Less than 2000
Copper	Less than 100
Moisture (as shipped)	20 to 30% typical

* acid soluble ash = minerals that are easily dissolved in acid such as: calcium carbonate, iron oxide, magnesium salts, sodium and potassium compounds
† total ash = minerals that don't dissolve such as: silicates and aluminum

These suggestions and data are based on information we believe to be reliable. They are offered in good faith. However we do not make any guarantee or warranty. We caution against using these products in an unsafe manner or in violation of any patents; further we assume no liability for the consequences of any such actions.

Suggested Operating Conditions

Maximum Temperature	212°F (100°C)
Minimum Bed Depth	
Chlorine Removal	24 inch
Organics Removal	36 inch minimum
Chloramine Removal	36 inch minimum
Support Bed	12 inch graded gravel or coarse sand
Backwash Expansion	15 to 25%
Flow Rate	
Chlorine Removal	1.0 to 2.0 gpm/cu.ft.
Organics Removal	0.5 to 1.0 gpm/cu.ft.
Chloramine Removal	0.5 to 1.0 gpm/cu.ft.

Packaging

1 cu.ft.
Plastic lined, corrugated box.
(42-44 lbs net weight).

Warning

For safety and handling purposes, we recommend appropriate protective measures when entering a wet vessel containing granular activated carbon, because wet activated carbon depletes oxygen from air and therefore, dangerously low levels of oxygen may be encountered. In such a case, the oxygen level inside the vessel shall be determined before entering and appropriate protective equipment should be worn when entering, or leave the vessel open until the oxygen level in the vessel is normal.

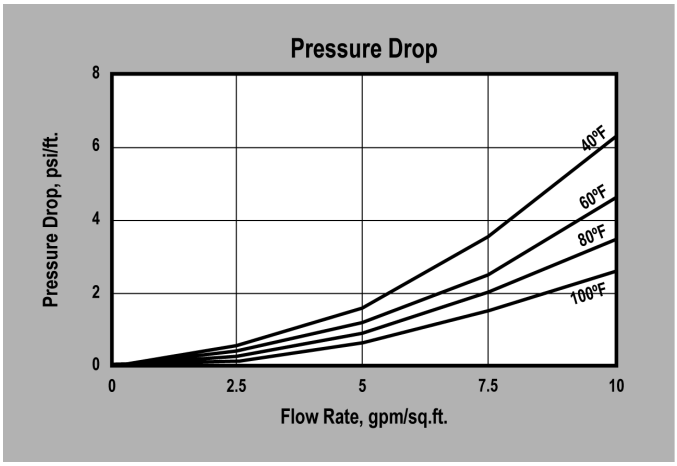
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION

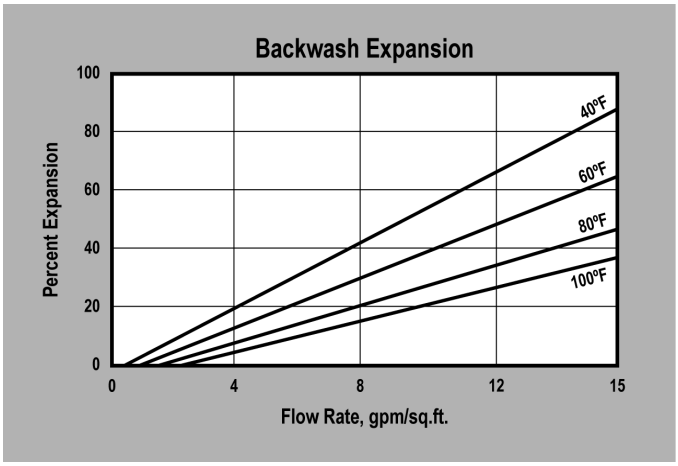
FORM 1163
EFFECTIVE
OCTOBER 2025

FILTRATION MEDIA

PROACTIVE™ ACID WASHED 12 X 40 CARBON



PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

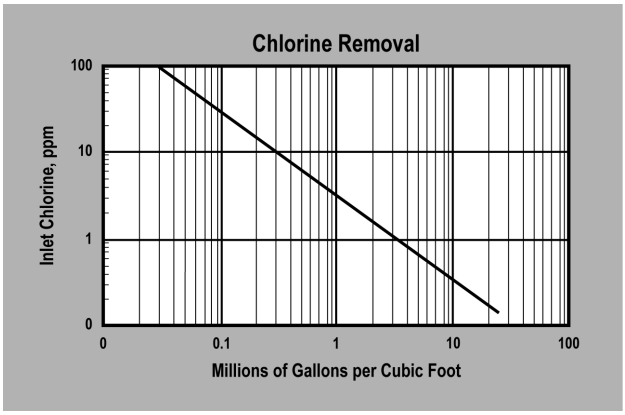


BACKWASH — The carbon bed should be backwashed at least once per week with chlorinated water to expand the bed 15 to 20 percent. This helps keep the carbon bed sterile and removes any foreign matter and carbon fines.

OPERATING CAPACITY

Chlorine Removal

ProActive Acid Washed 12 x 40 Carbon (IT50005) can be expected to remove a minimum of one pound of chlorine per pound of carbon. A 24 inch deep bed of IT50005 will reduce 1 ppm of inlet chlorine to below the limit of detection.



The graph above shows throughput capacity for chlorine removal using 2 gpm/cu.ft. of deionized water at 77°F with 0.1 ppm chlorine leakage endpoint.

Chlorine removal efficiency is affected by the following:

- Increasing temperature increases removal
- Increasing pH reduces removal (above pH 8.0 consult SWT for recommendations)
- Increasing TOC usually improves removal
- High flow rate reduces removal

Organics Removal

Removal of organics by activated carbon is variable and is site specific. In general, large organic molecules are removed more completely than smaller molecules. The probable mechanism of removal is adsorption into the carbon pores. Organics with fewer than 6 carbon atoms are not well removed. Aromatic organic molecules are generally removed better than aliphatic molecules. Organic ions are generally not well removed. Polar molecules are not removed as well as non-polar molecules.

Steam Regeneration

IT50005 can be regenerated with steam to remove organics and/or chlorine that has been adsorbed. Contact your representative for additional information.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1163
EFFECTIVE
OCTOBER 2025

PROACTIVE™ 12 X 40 SUPERCAT™ COCONUT SHELL CARBON

ProActive™ 12 x 40 SuperCat™ Coconut Shell Carbon (P/N IT50002SC) is a high activity coconut shell based granular carbon that is specifically designed for the reduction of chloramines and hydrogen sulfide from potable water.

BENEFITS

- Outstanding for applications requiring chloramine, hydrogen sulfide, and dissolved organic compound reduction
- Can be used for filtering water having a wide range of pH levels
- Large surface area results in an exceptionally high capacity and efficiency
- Balanced pore structure gives a more efficient adsorption range
- Very high carbon / low ash content
- Imparts a high "polish" to the filtered water
- Certified to NSF/ANSI Standard 61

Specifications

Mesh Size	12 x 40
Bulk Density	28 lb/cu.ft.
Effective Size	0.55 to 0.75 mm
Ash Content	4% maximum
Iodine Number	1000 mg/g
Moisture as packed	5% maximum
pH	10
Packaging	28 lb (1 cu.ft.) bag

Operating Conditions

Bed Depth	26 to 30 inch
Freeboard	50% of bed depth min.
Empty Bed Contact Time	3 minutes minimum
Dissolved Oxygen Concentration	4 ppm (mg/L)
Service Flow Rate	5 gpm/sq.ft
Backwash Flow Rate	8 to 10 gpm/sq.ft
Backwash Expansion	30% to 40% of bed depth

NOTES:

1) The water to be filtered should preferably be free of oil and suspended matter.
2) The water to be filtered should be relatively free of turbidity for maximum service life.
3) Upon installation, backwash to remove carbon fines before placing unit into service.

ProActive 12 x 40 SuperCat Carbon is manufactured from select grades of coconut shell coal to produce a high density, durable granular product capable of withstanding the abrasion and dynamics associated with repeated hydraulic transport, backwashing, and mechanical handling. Activation is carefully controlled to produce exceptionally high internal surface area with optimum pore size for the adsorption of a broad range of low molecular weight organic contaminants and oxidizing agents like chlorine and ozone.

Catalytic Contaminant Removal

The catalytic activity of ProActive 12 x 40 SuperCat Carbon makes it highly effective for the reduction of chloramines and hydrogen sulfide from potable water. Its large micropore volume also makes it particularly well suited for the removal of low molecular weight organic compounds and their chlorinated by-products such as chloroform and other trihalomethanes (THMs).

Increased Efficiency and Capacity

To obtain maximum efficiency of the activated carbon in the adsorption process, it is desirable to have the greatest possible surface area in the smallest practical volume. This is necessary because the rate of adsorption is proportional to the amount of surface area of the adsorbing media. ProActive 12 x 40 SuperCat Carbon has a surface area of 1,060 square meters per gram. This results in high efficiency and greater system economy.

ProActive 12 x 40 SuperCat Carbon requires dissolved oxygen concentration of 4ppm (mg/L) to insure effective removal of iron and hydrogen sulfide.

ProActive 12 x 40 SuperCat requires periodic backwashing to eliminate accumulated suspended matter and to re-grade the filter bed. It has an extremely high capacity but must be replaced when the filter bed loses the capacity for reduction of chloramines and hydrogen sulfide. The carbon may be used in either domestic or industrial applications using gravity flow or pressurized filter vessels.

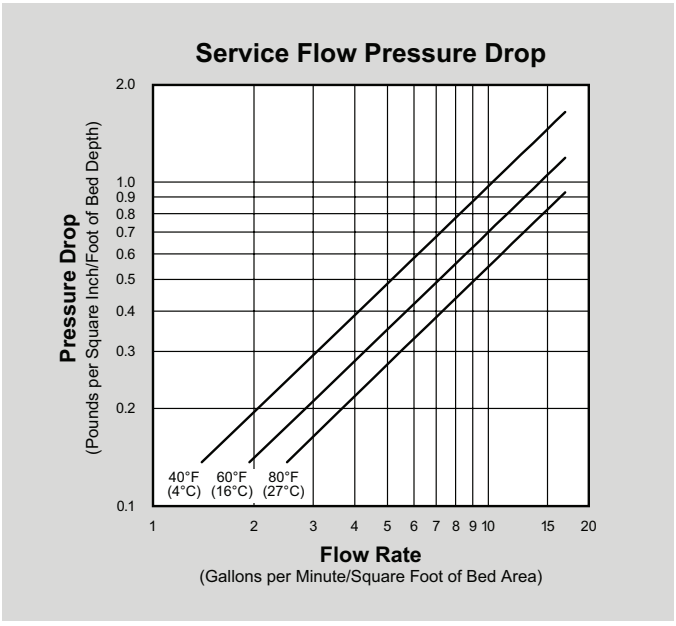
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

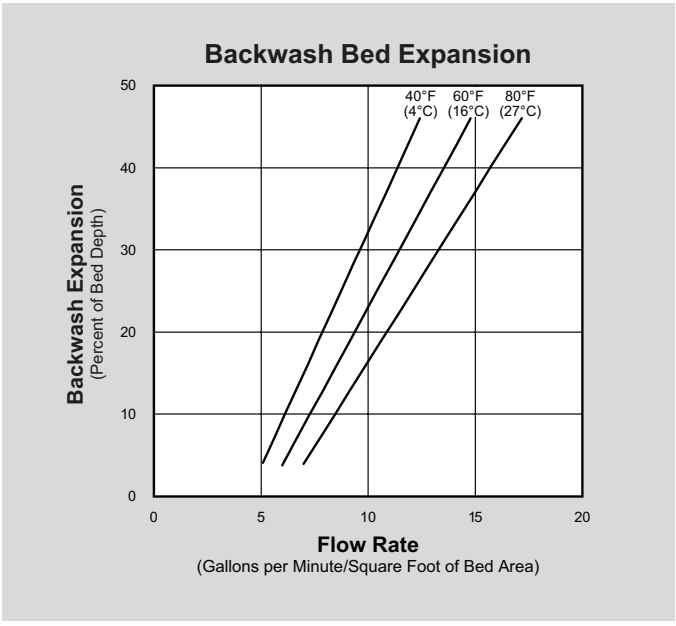
MEMBER Water Quality ASSOCIATION

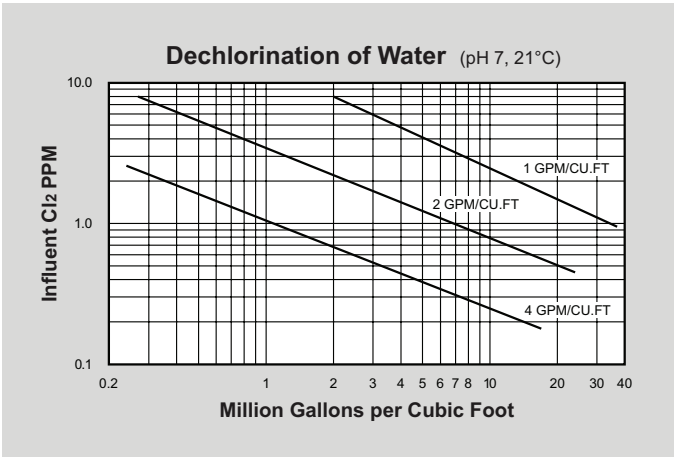
FORM 1301
EFFECTIVE
NOVEMBER 2013

FILTRATION MEDIA

PROACTIVE™ 12 X 40
SUPERCAT™ COCONUT SHELL CARBON







Warning

For safety and handling purposes, we recommend appropriate protective measures when entering a wet vessel containing granular activated carbon, because wet activated carbon depletes oxygen from air and therefore, dangerously low levels of oxygen may be encountered. In such a case, the oxygen level inside the vessel shall be determined before entering and appropriate protective equipment should be worn when entering, or leave the vessel open until the oxygen level in the vessel is normal.

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1301
EFFECTIVE
NOVEMBER 2013

FILTRATION MEDIA

PROACTIVE™ 20 X 50 CARBON

ProActive 20 x 50 Granular Activated Carbon (P/N IT50003) is made from a superior quality anthracite and bituminous, non-viscous coal. This 20 x 50 mesh carbon is the top of the line for chlorine reduction and is recommended for cartridge application or heavy chlorinated water. It is the best carbon we have for the removal or reduction of organic contaminates, odor, taste, color, and turbidity.

FEATURES

- High adsorption capacity and efficiency
- Super durability that stands up well to backwash
- Low fines, no floats, rinses fast
- Low pH
- Certified to NSF/ANSI Standard 61

Specifications

US Standard Mesh Size	20 x 50
Larger than 20	5% maximum
Smaller than 50	5% maximum
Backwash Expansion	35% to 40%
Backwash Rate	6 to 8 gpm/sq.ft. @ 55°F
Chlorine Reduction @ 1 ppm Influent	
2 gpm flow rate per cu.ft.	5,000,000 gal
Iodine Number	1000 mg/g minimum
Molasses Number	210 mg/g minimum
Abrasion Number	90 ASTM minimum
Methylene Blue	180 mg/g minimum
Benzene Number	38 minimum
CTC	65 minimum
Mean Particle Diameter	0.5 to 0.8 mm
Ash Content	12% maximum
pH	7
Moisture	3% maximum
Bulk Density (g/ml)	0.47 g/cc

Typical Properties

Total Surface Area (N2 BET method)	1000 to 1050 m^2/g
Pore Volume (ml/g)	0.95 cc/g
Backwash & Drained Density	0.42 g/cc

Packaging

Plastic lined, corrugated box. Each box contains 1 cu.ft. (27.5 lb net weight).

Warning

For safety and handling purposes, we recommend appropriate protective measures when entering a wet vessel containing granular activated carbon, because wet activated carbon depletes oxygen from air and therefore, dangerously low levels of oxygen may be encountered. In such a case, the oxygen level inside the vessel shall be determined before entering and appropriate protective equipment should be worn when entering, or leave the vessel open until the oxygen level in the vessel is normal.

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1161
EFFECTIVE
AUGUST 2024

FILTRATION MEDIA

PROACTIVE™ ACID WASHED 20 X 50 CARBON

ProActive Acid Washed 20 x 50 Granular Activated Carbon (P/N IT50006) is made from a superior quality anthracite and non-viscous coal with naturally low ash, sulphur, and phosphorous content. It is manufactured through high temperature steam activation under stringent quality control. It has a large surface area, high pore volume, high mechanical hardness and chemical stability, longer operating life, and it is easy to regenerate. It is used in liquid filtration and water treatment for removal of organic contaminates, odor, taste, color, and turbidity. The product meets the standards of Food Chemical Codex for activated carbon.

FEATURES

- High adsorption capacity and efficiency
- Super durability that stands up well to backwash
- Low fines, no floats, rinses fast
- Low pH
- Certified to NSF/ANSI Standard 61

Specifications

US Standard Mesh Size	20 x 50
Larger than 20	5% maximum
Smaller than 50	5% maximum
Backwash Expansion	35% to 40%
Backwash Rate	6 to 8 gpm/sq.ft. @ 55°F
Chlorine Reduction @ 1 ppm Influent	
2 gpm flow rate per cu.ft.	5,000,000 gal
Iodine Number	1000 mg/g minimum
Molasses Number	210 mg/g minimum
Abrasion Number	90 ASTM minimum
Methylene Blue	180 mg/g minimum
Benzene Number	38 minimum
CTC	65 minimum
Mean Particle Diameter	0.5 to 0.8 mm
Ash Content	7% maximum
pH	7
Moisture	3% maximum
Bulk Density	0.47 g/cc

Typical Properties

Total Surface Area	
(N2 BET method)	1000 to 1050 m^2/g
Pore Volume	0.95 cc/g
Backwash & Drained Density	0.42 g/cc
Acid Soluble Ash	None
Acid Soluble Iron	0.5% maximum

Packaging

Plastic lined, corrugated box. Each box contains 1 cu.ft. (27.5 lb net weight).

Warning

For safety and handling purposes, we recommend appropriate protective measures when entering a wet vessel containing granular activated carbon, because wet activated carbon depletes oxygen from air and therefore, dangerously low levels of oxygen may be encountered. In such a case, the oxygen level inside the vessel shall be determined before entering and appropriate protective equipment should be worn when entering, or leave the vessel open until the oxygen level in the vessel is normal.

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1164
EFFECTIVE
AUGUST 2024

PROACTIVE™ 20 X 50 COCONUT SHELL CARBON

ProActive 20 x 50 Coconut Shell Carbon (P/N IT50003C) is designed specifically for high-efficiency water purification. It is manufactured from coconut shells by high-temperature steam activation under rigidly controlled conditions. The physical characteristics of ProActive 20 x 50 Coconut Shell Carbon, including its high microporosity, superior hardness and low dust make it an ideal choice for point-of-use and point-of-entry filtration applications, as well as industrial applications with stringent water purity requirements. The carbon is especially effective for adsorbing trace organic compounds such as THMs and pesticides, chlorine and disinfection by-products. It is Certified to NSF/ANSI Standard 61.

FEATURES

- High adsorption capacity and efficiency
- Super durability that stands up well to backwash
- Highly developed pore structure
- Certified to NSF/ANSI Standard 61

Warning

For safety and handling purposes, we recommend appropriate protective measures when entering a wet vessel containing granular activated carbon, because wet activated carbon depletes oxygen from air and therefore, dangerously low levels of oxygen may be encountered. In such a case, the oxygen level inside the vessel shall be determined before entering and appropriate protective equipment should be worn when entering, or leave the vessel open until the oxygen level in the vessel is normal.

Specifications

Part Number	IT50003C
US Standard Mesh Size	20 x 50
Greater than 20	5% maximum
Less than 50	4% maximum
Iodine Number	1100 mg/g minimum
Carbon Tetrachloride Number	60% minimum
Hardness Number	97 minimum
Moisture (as packed)	5% maximum
Total Ash	4% maximum
Apparent Density	0.49 g/cc typical
pH	8.5 to 9.0 typical
Packaging	55 lb (2 cu.ft.) bag

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1322
EFFECTIVE
MAY 2009

PROACTIVE™ 20 X 50 SUPERCAT™ COCONUT SHELL CARBON

ProActive™ 20 x 50 SuperCat™ Coconut Shell Carbon (P/N IT50003SC) is a dual-function activated carbon. It offers a high activity for the removal of both chloramines and chlorine from water, while, at the same time, it retains the inherent superiority of coconut shell carbons for removing trace organics. Like other coconut carbons, it has a higher hardness, lower dust level, and lower levels of soluble ash than standard coal-based carbons. ProActive SuperCat Coconut Shell Carbon is Certified to NSF/ANSI Standard 61.

Specifications

Gas Adsorption Capacity	55% minimum
Moisture Content	5% maximum
Particle Size	20 x 50 mesh
Iodine Number	1250 minimum
Ash Content	3% maximum
Ball Pan Hardness	98
Bulk Density	46 g/cm^3
Packaging	56 lb (2 cu.ft.) bag

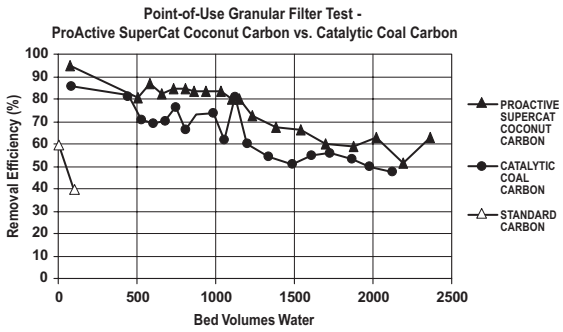
Particle size distribution will be 5% maximum on the top screen and 5% maximum through the bottom screen. If the moisture exceeds 5%, BSC weight adjusts.

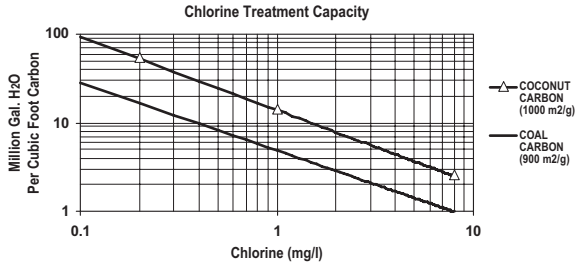
Catalytic Chloramine Removal

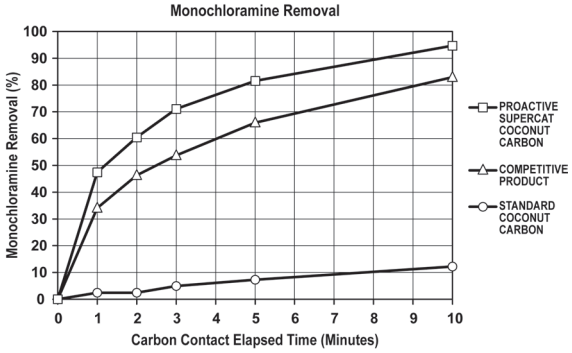
Many municipalities now use chloramines instead of chlorine to disinfect water supplies; chloramines can also form after conventional chlorination via reaction with nitrogen-containing organics. Because standard activated carbons do not remove chloramines well, SWT is introducing this surface-modified carbon, designed specifically to catalyze monochloramine (NH_2Cl) decomposition.

Trace Organic Capacity

ProActive SuperCat Coconut Shell Carbon, a highly microporous carbon, also offers superior removal of chloroform, THM, and MTBE when compared to other coconut shell or coal-based carbons.







ProActive SuperCat Coconut Carbon Performance Comparison

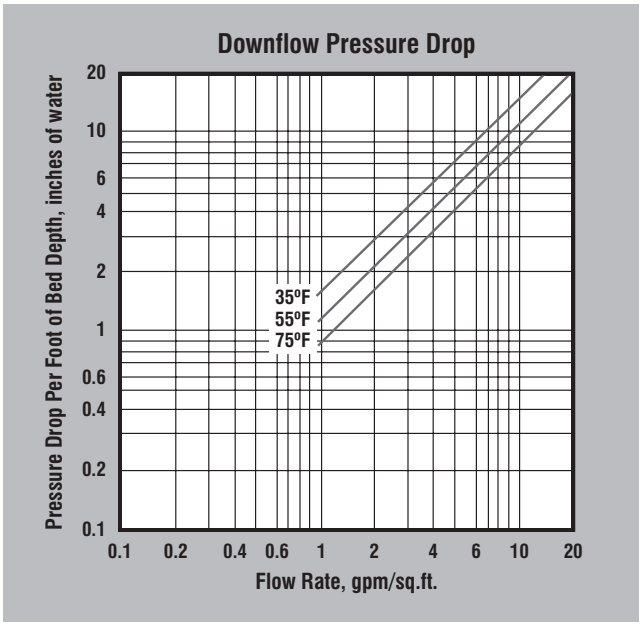
The *top left figure* shows an accelerated test of ProActive SuperCat Coconut Carbon and a coal-based catalytic carbon. Standard 2.5 x 9 inch water filter cartridges containing granular carbon were tested at 1 gpm water flow (11 sec. empty bed contact time). At higher empty bed contact times (greater than 2 minutes), ProActive SuperCat Coconut Carbon reduced monochloramine from 3 ppm to non-detect levels. The *bottom left figure* shows kinetic tests of the monochloramine decomposition reaction with several different carbons.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

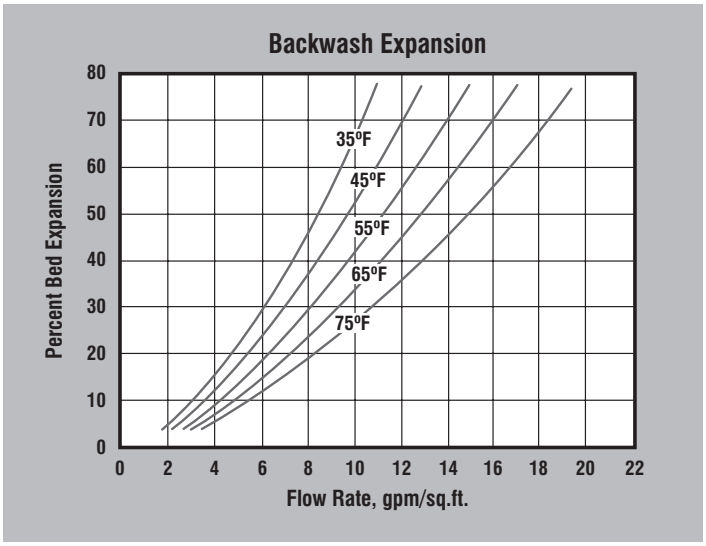
MEMBER Water Quality ASSOCIATION

FORM 1302
EFFECTIVE
OCTOBER 2011

PROACTIVE™ 20 X 50
SUPERCAT™ COCONUT SHELL CARBON



PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.



BACKWASH — After each cycle the carbon bed should be backwashed at a rate that expands the bed 30 to 50 percent. This will remove any foreign matter and reclassify the bed. The graph above shows the expansion characteristics of ProActive 20 x 50 SuperCat Coconut Shell Carbon.

Warning

For safety and handling purposes, we recommend appropriate protective measures when entering a wet vessel containing granular activated carbon, because wet activated carbon depletes oxygen from air and therefore, dangerously low levels of oxygen may be encountered. In such a case, the oxygen level inside the vessel shall be determined before entering and appropriate protective equipment should be worn when entering, or leave the vessel open until the oxygen level in the vessel is normal.

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1302
EFFECTIVE
OCTOBER 2011

FILTRATION MEDIA

BIRM® FILTRATION MEDIA

Birm (P/N LC10001) is an efficient and economical method of removing dissolved iron and manganese compounds from raw water supplies. It may be used in either gravity fed or pressurized water treatment systems. Birm acts as an insoluble catalyst to enhance the reaction between dissolved oxygen and the iron compounds. In ground waters, the dissolved iron is usually in the ferrous bicarbonate state—due to the excess of free carbon dioxide—and is not filterable. Birm, acting as a catalyst between the oxygen and the soluble iron compounds, enhances the oxidation rate of Fe++ to Fe+++ and produces ferric hydroxide which precipitates and may be easily filtered.

The physical characteristics of Birm provide an excellent filter media which is easily cleaned by backwashing to remove the precipitant. Birm is not consumed in the iron removal operation and therefore offers a tremendous economic advantage over many other iron removal methods.

FEATURES

- No chemicals needed for maintenance when used under proper conditions. Regeneration is not required.
- Iron removal efficiency is extremely high.
- Negligible labor cost: only periodic backwashing is required.
- Durable material with a long life and a wide temperature range.
- Certified to NSF/ANSI Standard 61.

Physical Properties

Color	Black
Bulk Density	35 to 40 lb per cu.ft.
Mesh Size	10 x 40
Specific Gravity	2.0 gm/cc
Effective Size	0.48 mm
Uniform Coefficient	2.7

Influent and Backwash Limitations

Free Chlorine Concentration	0.5 ppm maximum
Hydrogen Sulfide	Remove prior to contact with Birm
Oil	None present
Polyphosphates	None present

Suggested Operating Conditions

Service Flow Rate	3.5 to 5 gpm per sq.ft.
Maximum Temperature	100°F (38°C)
Alkalinity	Greater than two times the combined sulfate and chloride concentration
pH	6.8 to 9.0
Dissolved Oxygen	Equal to at least 15% of the iron (or iron and manganese) content
Bed Depth	30 to 36 inches
Backwash Bed Expansion	20 to 40% of bed depth minimum
Backwash Rate	10 to 12 gpm per sq.ft. (See graph on next page)
Freeboard	50% of bed depth minimum

Packaging

Woven polypropylene bag. Each bag contains 1 cu.ft. (35 to 40 lb net weight).

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

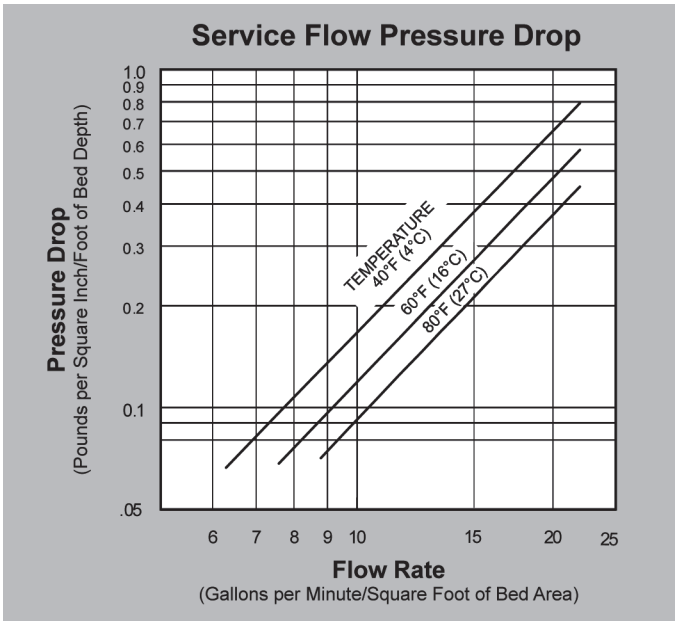
Birm® is a registered trademark of Clack Corporation.

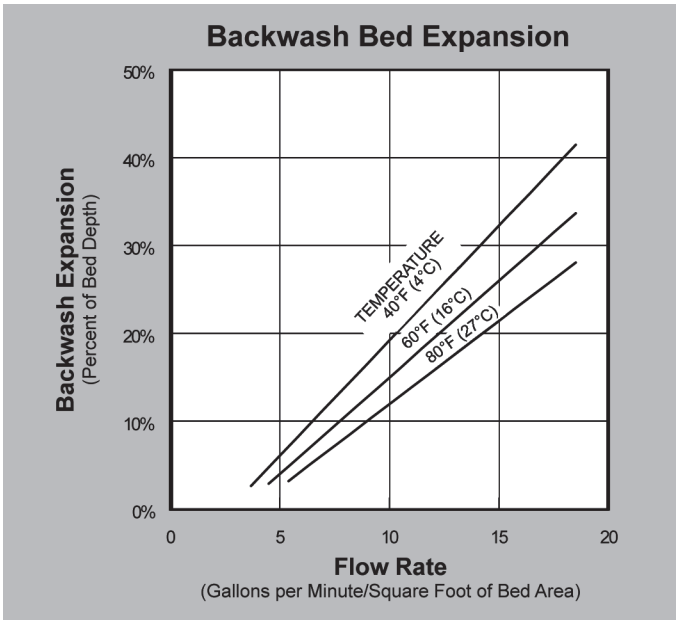
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1180
EFFECTIVE
JANUARY 2010

BIRM® FILTRATION MEDIA





PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH — After each cycle the media bed should be backwashed at a rate that expands the bed 20 to 40 percent.

NOTES ON USING BIRM

When using Birm for iron removal, it is necessary that the water: contain no oil or hydrogen sulfide, organic matter not to exceed 4 to 5 ppm, the dissolved oxygen content equal at least 15% of the iron content with a pH of 6.8 or more. If the influent water has a pH of less than 6.8, neutralizing additives such as SWT Neutralizing Medias (P/N PH10001 or P/N PH10003) or soda ash may be used prior to the Birm filter to raise the pH. A water having a low dissolved oxygen level may be pretreated by aeration.

Additions of chemicals to influent or backwash water which contacts Birm media may inhibit iron or manganese removal or may break down or coat Birm media. Chlorination greatly reduces Birm's activity. High concentrations of chlorine compounds may deplete the catalytic coating. Polyphosphates are known to coat Birm and reduce Birm's ability to remove iron or manganese. Before adding any chemical to the influent or backwash water, the chemical's compatibility with Birm should be thoroughly tested.

Birm may also be used for manganese reduction with the same dependability as iron removal. In these applications the water to be treated should have a pH of 8.0 to 9.0 for best results. If the water also contains iron, the pH should be below 8.5. High pH conditions may cause the formulation of colloidal iron which is very difficult to filter out. All other conditions remain the same for either manganese or iron removal.

CALIFORNIA PROPOSITION 65 WARNING: This product contains crystalline silica which is known to the State of California to cause cancer and other substances which are known to the State of California to cause cancer, birth defects and reproductive harm.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1180
EFFECTIVE
JANUARY 2010

FILTRATION MEDIA

METALEASE-LITE™ FILTRATION MEDIA
(GREENSANDPLUS™ EQUIVALENT)

Metalease-Lite (P/N METALEASE LITE) is a highly effective filter media capable of reducing arsenic, iron, manganese, and hydrogen sulfide from water through oxidation and filtration. Soluble iron and manganese are oxidized and precipitated by contact with the catalytic coating on the Metalease-Lite granules. The hydrogen sulfide is oxidized to an insoluble sulfur precipitate. Precipitates are then filtered and removed by backwashing.

Metalease-Lite is an engineered media that utilizes a super high purity manganese dioxide coating bonded to a durable, lightweight silica substrate. Manganese dioxide is a powerful oxidizer and Metalease-Lite contains more manganese dioxide than other manganese based filter medias. Metalease-Lite contains almost no fines and does not require long initial backwash times. A standard sterilization treatment using chlorine is all that is needed at start up. Made in the USA.

FEATURES

- Iron reduction over wide pH range
- Effective reduction of hydrogen sulfide in addition to iron and/or manganese
- No harmful effects from a chlorine feed
- Low attrition for long bed life
- Made in USA
- Certified to NSF/ANSI/CAN Standard 61

Regeneration Methods and Requirements

- Continuous regeneration using chlorine feed or air are recommended
- Mg/l Cl_2 (1x mg/l Fe) + (3x mg/l Mn)
- Air draw or air injection
- Use an injector size that is two sizes larger than a typical softener application
- Draw/slow rinse time greater than 50 minutes
- Downflow rinse (fast rinse) 4 minutes minimum

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

Physical Properties

Color	Black free-flowing sand
Particle Shape	Sub-angular
Manganese Dioxide %	12.5%
Bulk Density	84 lb per cu.ft.
True Density	170 lb per cu.ft
Effective Size	0.52 mm
Media Substrate	Silica Sand
Uniformity Coefficient	1.5
Moisture	< 1%
Porosity	50%
1000µm x 354µm Mesh Size	18 x 45
18M Retain (1000µm)	< 3%
20M Retain (841µm)	10%
30M Retain (595µm)	64%
40M Retain (400µm)	22%
70M Retain (210µm)	< 1%

Conditions for Operation

pH	5.5 to 10
Maximum Temperature	100°F (38°C)
Bed Depth	12 inches minimum
Freeboard	40% of bed depth minimum
Service Flow Rate (Continuous)	2 to 10 gpm per sq.ft.
Backwash Rate @ 55°F (20-30% bed expansion)	12-18 gpm per sq.ft. (warmer waters require higher flow rates)
Backwash Time	5 minutes
Free Chlorine Concentration	< 0.5 ppm
Empty Bed Contact Time (EBCT)	4 minutes minimum
Adsorption Capacity	1000 mg / kg

Packaging

1/2 cu.ft. bags (42 lb net weight)
48 bags per pallet (2,066 lb net weight)

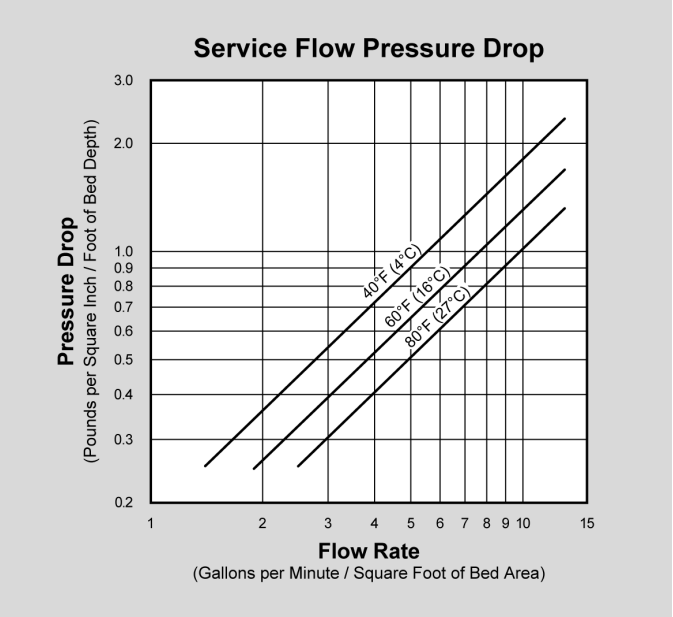
Metalease-Lite™ is a trademark of Safe Water Technologies, Inc.
GreensandPlus™ is a trademark of The Inversand Company.

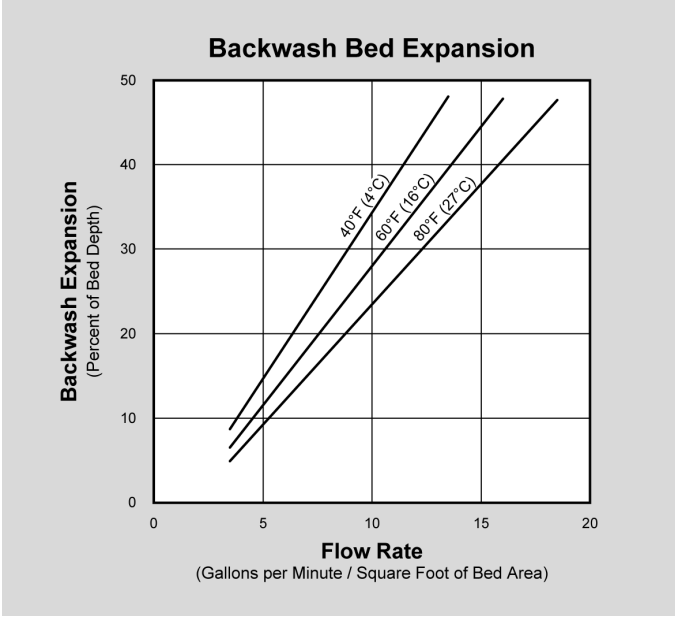
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1475
EFFECTIVE
NOVEMBER 2025

FILTRATION MEDIA

METALEASE-LITE™ FILTRATION MEDIA
(GREENSANDPLUS™ EQUIVALENT)





PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH — The graph above shows the expansion characteristics as a function of flow rate at various temperatures.

NOTES ON USING METALEASE-LITE

Untreated water should periodically be monitored for raw water parameters. Treated water should periodically be monitored for manganese, iron, and hydrogen sulfide shortly before a regeneration and immediately after a regeneration to monitor how the filter system is functioning. Elevated treated water concentrations before regeneration may mean that the filter media reduction capacity has been exceeded. Take corrective actions as necessary.

Low pH or high pH are the most likely conditions leading to media destruction.

CATALYTIC OXIDATION (CO)

Catalytic Oxidation (CO) operation is recommended in applications where iron removal is the main objective in well waters with or without the presence of manganese. This method involves the feeding of a predetermined amount of chlorine (Cl_2) or other strong oxidant directly to the raw water before the Metalease-Lite filter.

Chlorine should be fed at least 10 to 20 seconds upstream of the filter, or as far upstream of the filter as possible to insure adequate contact time. A free chlorine residual carried through the filter will maintain Metalease-Lite.

CALIFORNIA PROPOSITION 65 WARNING: This product contains crystalline silica which is known to the State of California to cause cancer and other substances which are known to the State of California to cause cancer, birth defects and reproductive harm.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1475
EFFECTIVE
NOVEMBER 2025

FILTRATION MEDIA

METALEASE-LITE™ FILTRATION MEDIA
(GREENSANDPLUS™ EQUIVALENT)

Comparison Chart	METALEASE-LITE	GREENSANDPLUS
Shipping Weight	84 lb/cu.ft.	90 lb/cu.ft.
Packaging	0.5 cu.ft. bags 48 bags/pallet	0.5 cu.ft. bags 55 bags/pallet
Service Flow Rate	2 to 12 gpm/sq.ft. continuous	2 to 12 gpm/sq.ft. continuous
Backwash Flow Rate	12 gpm/sq.ft. @ 55°F	12 gpm/sq.ft. @ 55°F
Clean Filter Pressure Drop @ 5 gpm/sq.ft.	0.8 psi per foot of bed depth	0.8 psi per foot of bed depth
Methods of Regeneration	Intermittent or continuous feed using Cl_2 or O_2	Intermittent or continuous feed using Cl_2
Active Ingredient	12.5% Manganese Dioxide	< 5% Manganese Dioxide
Certification	NSF tested and certified to NSF/ANSI/CAN Standard 61 REACH pending	WQA tested and certified to NSF/ANSI/CAN Standard 61 REACH registered
Initial Startup	Cl_2 sterilization recommended but not required	Requires minimum 4 hours Cl_2 regeneration
Commercial Systems Larger than 36 inch Tanks	Air/water scour backwash	Air/water scour backwash
Made in USA	Yes	No

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1475
EFFECTIVE
NOVEMBER 2025

FILTRATION MEDIA

GREENSANDPLUS™

GreensandPlus is a black filter media used for removing soluble iron, manganese, hydrogen sulfide, arsenic, and radium from water supplies.

The manganese dioxide coated surface of GreensandPlus acts as a catalyst in the oxidation reduction reaction of iron and manganese.

The silica sand core of GreensandPlus allows it to withstand operating conditions in waters that are low in silica, TDS, and hardness. When using GreensandPlus, you can eliminate the aluminate feed.

GreensandPlus is effective at higher operating temperatures and higher differential pressures than ordinary manganese greensand. Tolerance to higher differential pressure can provide for longer run times between backwashes and a greater margin of safety.

Systems may be designed using either vertical or horizontal pressure filters, as well as open gravity filters.

GreensandPlus is a proven technology for iron, manganese, arsenic, radium, and hydrogen sulfide removal. Unlike in-situ treated media, there is no need for extensive preconditioning of filter media or lengthy startup periods, during which required water quality may not be met.

GreensandPlus is an exact replacement for manganese greensand. It can be used in CR or IR applications and requires no changes in backwash rate or times or chemical feeds.

GreensandPlus has the WQA Gold Seal Certification for compliance with NSF/ANSI 61.

FEATURES

- Concurrent treatment of iron, manganese, and hydrogen sulfide
- Effective over wide pH range
- High tolerance of oxidizers such as chlorine
- Low attrition for long bed life
- Certified to NSF/ANSI Standard 61

Physical Properties

Physical Form	Black, nodular granules (shipped in a dry form)
Apparent Density	85 lb/cu.ft.
Specific Gravity	2.4 approx.
Porosity	0.45 approx.
Screen Grading (Dry)	18 x 60 mesh
Effective Size	0.30 to 0.35 mm
Uniformity Coefficient	< 1.60
pH Range	6.2 to 8.5
Maximum Temperature	No limit
Minimum Backwash Rate	12 gpm/sq.ft. @ 55°F
Service Flow Rate	2 to 5 gpm/sq.ft.
Minimum Bed Depth	24 in. (15 to 18 in. of each media for dual media beds)

Suggested Operating Conditions

Bed Type – Dual media: Anthracite 15 to 36 in. and GreensandPlus 15 to 24 in.

Capacity – 700 to 1200 grains of oxidized iron and manganese/sq.ft. of bed area based on oxidant demand and operation to iron break through

Backwash – Sufficient rate using treated water to produce 40% bed expansion

Air/Water Scour – Optional using 0.8 to 2.0 cfm/sq. ft. with a simultaneous treated water backwash at 4.0 to 4.5 gpm/sq. ft.

Raw Water Rinse – At normal service flow rate for 3 to 5 minutes or until effluent is acceptable.

Flow Rate – Recommended flow rates with CR operation are 2 to 5 gpm/sq. ft. Extremely high concentrations of iron and manganese usually require lower flow rates for equivalent run lengths. Higher flow rates can be considered with very low concentrations of iron and manganese. For optimum design parameters, pilot plant testing in recommended.

Packaging

1/2 cu.ft. bag (44.5 lb) or 1 metric ton (2,205 lb)

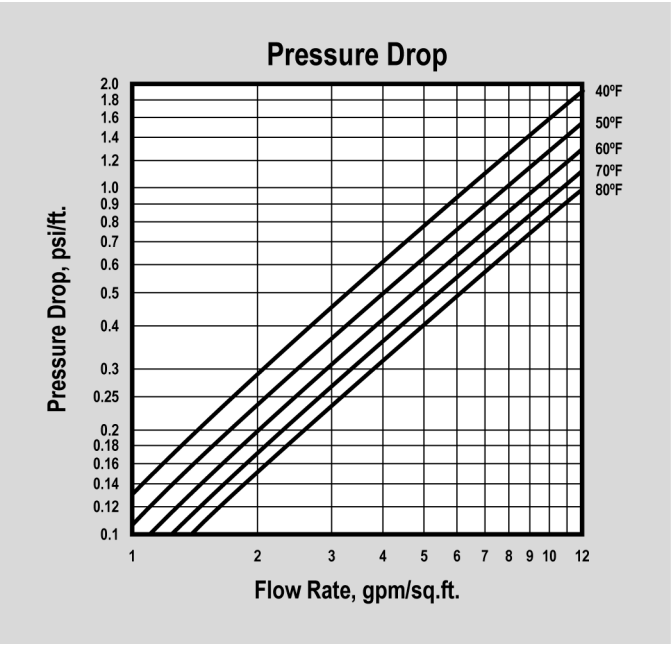
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

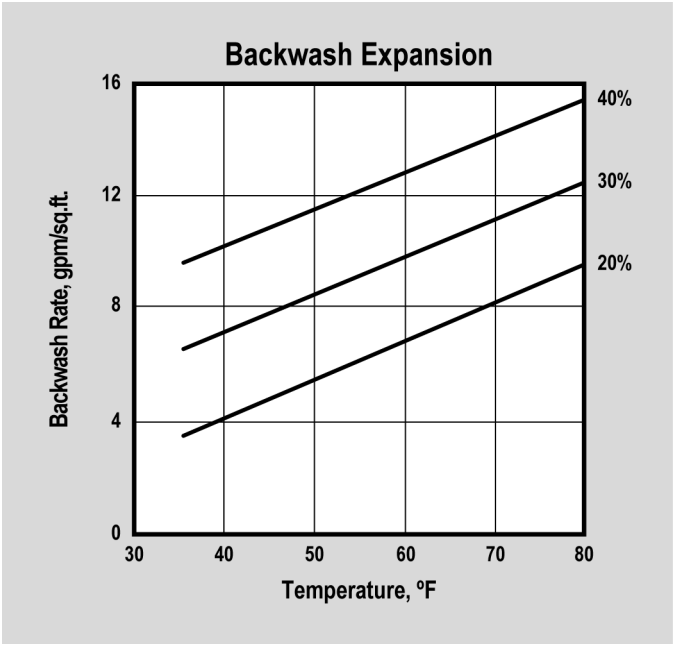
MEMBER Water Quality ASSOCIATION

FORM 1479
EFFECTIVE
OCTOBER 2022

FILTRATION MEDIA

GREENSANDPLUS™





GENERAL NOTES

pH
Raw waters having natural pH of 6.2 or above can be filtered through GreensandPlus without pH correction. Raw waters with a pH lower than 6.2 should be pH-corrected to 6.5 to 6.8 before filtration. Additional alkali should be added following the filters if a pH higher than 6.5 to 6.8 is desired in the treated water. This prevents the possible adverse reaction and formation of a colloidal precipitate that sometimes occurs with iron and alkali at a pH above 6.8.

Radium and Arsenic Removal Using GreensandPlus
The GreensandPlus CR process has been found to be successful in removing radium and arsenic from well water. This occurs via adsorption onto the manganese and/or iron precipitates that are formed. For radium removal, soluble manganese must be present in or added to the raw water for removal to occur. Arsenic removal requires iron to be present in or added to the raw water to accomplish removal. Pilot plant testing is recommended in either case.

Removing Fines and Initial Conditioning
Prior to placing the anthracite in the filter or placing the filter into service, GreensandPlus should be thoroughly backwashed and the top layer of fine material removed by undercutting in accordance with AWWA B 100, paragraph 4.5.2. This is especially important if anthracite is placed on top of the GreensandPlus bed. Each cubic foot of GreensandPlus shipped contains sufficient material to compensate for the removal of this final material.

GreensandPlus is NOT shipped in a regenerated form; therefore it is necessary, prior to use, to regenerate it contacting the bed for a minimum of 4 hours. A regeneration level of 4 ounces of KMn0 or chlorine per cubic foot of GreensandPlus is recommended. Before placing into service, the filter must be rinsed of all remaining traces of potassium permanganate.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1479
EFFECTIVE
OCTOBER 2022

FILTRATION MEDIA

FILTER-AG® FILTRATION MEDIA
PARTICULATE REDUCTION MEDIA

Filter-Ag (P/N Filter-Ag) is a very efficient filter medium for the removal of suspended material and turbidity. Less pressure loss and finer filtration is possible because of its light weight and irregular surface characteristics. Filter-Ag granules have irregular surface characteristics affording maximum removal of suspended matter throughout the filter bed. Filter-Ag can be applied to systems designed for either pressure or gravity flow.

Filter-Ag has many outstanding advantages over the more common granular filter media used for suspended solids removal. A substantial savings can be realized with Filter-Ag because equipment can be smaller, requiring less square footage. Filter-Ag is a lightweight substance which means additional savings in backwash rates. Filter-Ag typically removes the normal suspended solids, down to the 20 to 40 micron range.

FEATURES

- Larger particle size creates less pressure loss, higher sediment loading, and longer filter runs
- Light weight provides lower backwash rates and better bed expansion
- High sediment reduction capacity
- High service rates result in lower equipment costs
- Certified to NSF/ANSI/CAN Standard 61

NOT FOR INSTALLATION IN CALIFORNIA

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

Filter-Ag® is a registered trademark of Clack Corporation.

Physical Properties

Color	Light gray to near white
Bulk Density	24 to 26 lb per cu.ft.
Effective Size	0.67 mm
Uniformity Coefficient	2.1 ± 0.1
Hardness (Mohs scale)	6
Mesh Size	10 x 34
Specific Gravity	2.25 gm per cc

Conditions for Operation

pH	Wide range
Maximum Temperature	140°F (60°C)
Bed Depth	24 to 36 inches
Freeboard	50% of bed depth minimum
Service Flow Rate	5 gpm per sq.ft.
Backwash Flow Rate	8 to 10 gpm per sq.ft.
Backwash Bed Expansion	20 to 40% of bed depth

NOTE: Upon installation allow bed to soak overnight before backwashing

Packaging

1 cu.ft. bags (25 lb net weight)
70 bags per pallet (1,800 lb net weight)

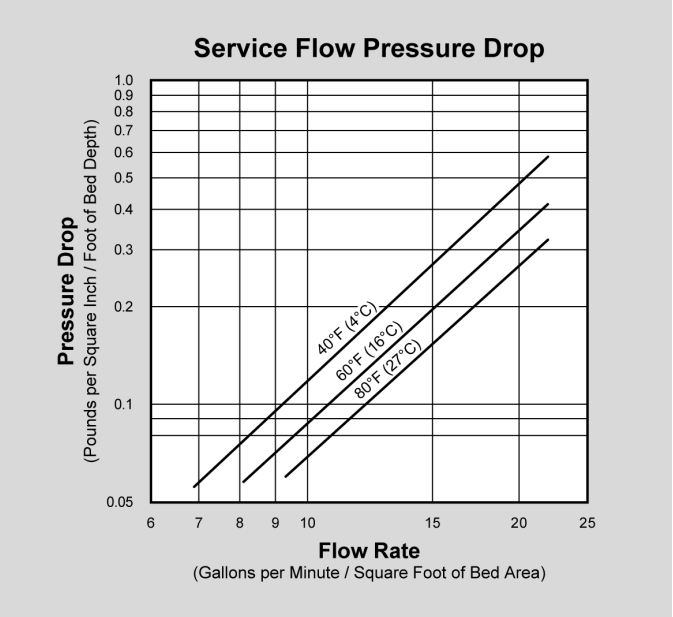
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

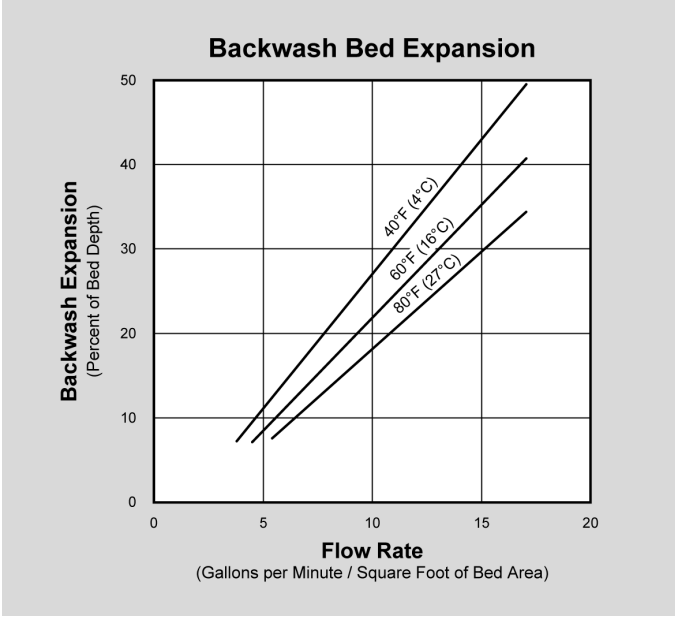
MEMBER Water Quality ASSOCIATION

FORM 1477
EFFECTIVE
DECEMBER 2020

FILTRATION MEDIA

FILTER-AG® FILTRATION MEDIA
PARTICULATE REDUCTION MEDIA





PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH — The graph above shows the expansion characteristics as a function of flow rate at various temperatures.

CALIFORNIA PROPOSITION 65 WARNING: This product can expose you to crystalline silica and quartz, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1477
EFFECTIVE
DECEMBER 2020

FILTRATION MEDIA

FILTER-AG PLUS® FILTRATION MEDIA
PARTICULATE REDUCTION MEDIA

Filter-Ag Plus (P/N Filter-Ag Plus) is a clinoptilolite natural media with a large surface area and microporous structure, which can be used as a highly efficient filter media for the reduction of suspended matter.

Due to void spaces as small as 3 microns, Filter-Ag Plus creates a surface area over 100 times greater than silica sand. The angularity of the granules and the tapered internal pore spaces allow for reduction of dirt, silt, and organic matter suspended in water by bridging, straining, and adhesion.

Filter-Ag Plus can be applied to systems designed for either pressure or gravity flow. Because of its unique physical characteristics, Filter-Ag Plus can be used to replace multimedia (graded density) filter designs.

FEATURES

- Particle structure creates less pressure loss, higher sediment loading, longer filter runs, and reduced backwash frequency
- Deep bed filtration results in superior water quality and reduces the load on downstream equipment
- High service rates result in lower equipment costs
- All-natural, environmentally safe product
- Certified to NSF/ANSI/CAN Standard 61

Notes

1. Influent water quality and effluent requirements may affect operating parameters.
2. A gravel support bed is required.
3. Allow bed to saturate before initial backwash.

This information has been gathered from standard materials and or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

Filter-Ag Plus® is a registered trademark of Clack Corporation.

Physical Properties

Color	White to off white
Bulk Density	50 lb per cu.ft.
Effective Size	0.55 mm
Uniformity Coefficient	1.8
Hardness (Mohs scale)	4 to 5
Mesh Size	14 x 30
Specific Gravity	2.2 gm per cc

Conditions for Operation

pH	Wide range
Maximum Temperature	140°F (60°C) *
Bed Depth	24 to 48 inches **
Freeboard	50% of bed depth
Service Flow Rate	6 to 15 gpm per sq.ft. ***
Backwash Flow Rate	14 to 18 gpm per sq.ft.
Backwash Bed Expansion	30 to 40% of bed depth

Packaging

1 cu.ft. bags (50 lb net weight)
40 bags per pallet (2,050 lb net weight)

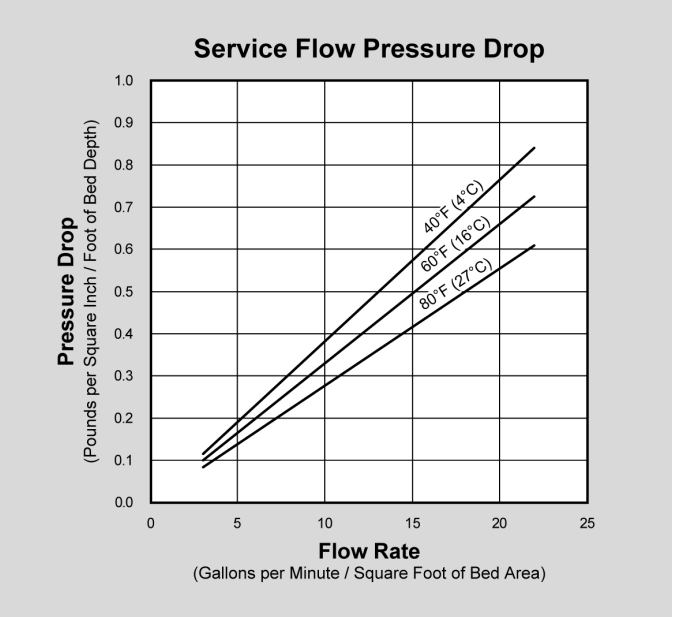
* Media can be steam cleaned.
** 36 inches for optimal filtration.
*** With intermittant peak flow of 20 gpm per sq.ft.

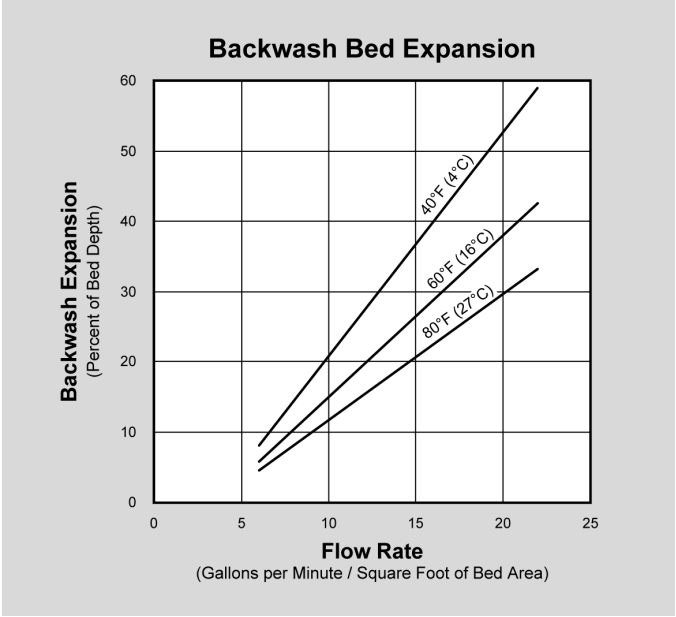
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1478
EFFECTIVE
DECEMBER 2020

FILTER-AG PLUS® FILTRATION MEDIA
PARTICULATE REDUCTION MEDIA





PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH — The graph above shows the expansion characteristics as a function of flow rate at various temperatures.

AIR SCOUR

Air scour is possible and helpful when there is heavy loading in the bed. It has to be done minimally in order to prevent too much bed lift and/or advanced attrition.

An air scour of 1 to 2 cfm/sq.ft. at backwash rates of 15 to 20 gpm/sq.ft. would be sufficient. The pressure required would be static head pressure plus the psi necessary to deliver 1 to 2 cfm/sq.ft. Bed expansion should be observed to ensure that media is not being discharged in the backwash water. A one minute air scour at the beginning of the backwash cycle should be sufficient. Prolonged air scour may cause stratification of the smaller media to the top of the bed which could affect future head loss.

CALIFORNIA PROPOSITION 65 WARNING: This product contains crystalline silica which is known to the State of California to cause cancer and other substances which are known to the State of California to cause cancer, birth defects, and reproductive harm.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1478
EFFECTIVE
DECEMBER 2020

FILTRATION MEDIA

ANTHRACITE

SWT Anthracites (P/N ON10001, P/N ON10015, P/N ON10002) come from a superior vein of coal in the USA and are preferred by filter manufacturers around the world. All sieve sizes are available for multimedia applications as either support layers or prefiltration layers. SWT anthracites meet all engineering specifications and/or can be custom specified. Meets or exceeds all ASI, AWWA, or ASME standards and protocols. Standard packaging is either 2000 lb supersacks or 1 cubic foot bags. The cubic foot bags are banded, skidded, and shrink wrapped for reliable transport.

Low uniformity coefficient anthracite filter media has less oversized and undersized particles resulting in a highly uniformed bed which extends the life and efficiency of a water treatment filter. Lower uniformity coefficients lead to longer filter runs, better effluent quality, less head loss, and reduced backwash rates. This means more saleable water produced at a lower cost of operation.

FEATURES

- Angular design specific for water treatment
- Durable
- Tight screen control for minimum attrition
- All sizes available
- International shipping
- Available in 1 cubic foot bags/palletized or 2,000 lb supersacks

Suggested Operating Conditions

Service Flow Rate	5 gpm per sq.ft. minimum
Bed Depth	24 to 36 inches
(Multibed Filter)	(10 to 18 inches)
Freeboard	50% of bed depth minimum
Backwash Rate @ 60°F	
Anthracite #1	12 to 18 gpm per sq.ft.
Anthracite #1.5	18 to 25 gpm per sq.ft.
Anthracite #2	Use air scour
Backwash Bed Expansion	20 to 40% of bed depth minimum

Typical Mesh Sizes (US Standard Mesh Size)

	Part #:	Size:
Anthracite #1	ON10001	14 x 30 (0.6–0.8 mm)
Anthracite #1.5	ON10015	10 x 20 (0.85–0.95 mm)
Anthracite #2	ON10002	4 x 12 (1.7–4.0 mm)

Non-Standard Mesh Sizes without Uniformity Coefficient:

Anthracite #3	ON10003	5/16" (7.94 mm) x 3/16" (4.76 mm)
Anthracite #4	ON10004	9/16" (14.29 m m) x 5/16" (7.94 mm)
Anthracite #5	ON10005	13/16" (20.64 mm) x 9/16" (14.29 mm)
Anthracite #6	ON10006	1-5/8" (41.28 mm) x 13/16" (20.64 mm)

Properties

Color	Black
Apparent Specific Gravity	1.65 ± 0.05
Hardness	3.0 to 3.8 (Mohs scale)
Attrition Losses	Minimal
Acid Solubility (Per AWWA B100-80)	1% maximum
Caustic Solubility (1% NaOH @ 190°F)	1% maximum
Uniformity Coefficient (only applies to: #1, #1.5, & #2)	1.7 maximum (unless otherwise specified)
Source of Material	Eastern Middle Field Mammoth Vein USA
Net Weight	52 lb per cu.ft.
Packaging	1 cu.ft. bag or 2,000 lb supersack

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

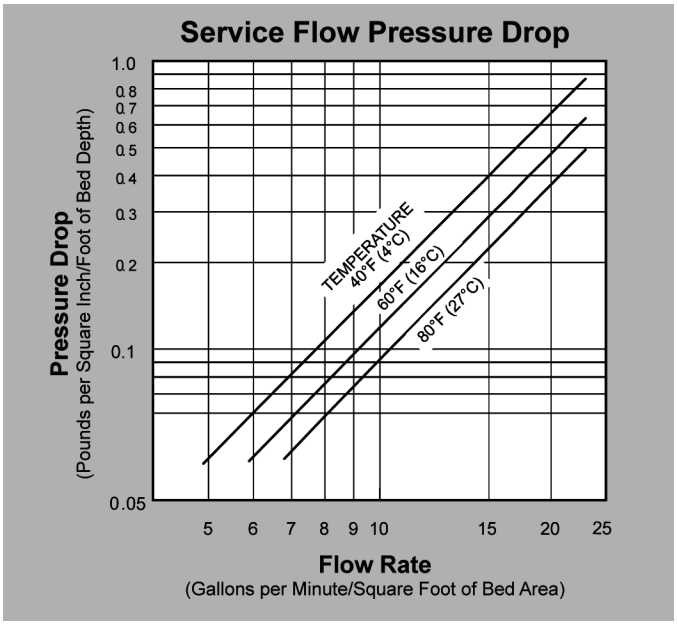
MEMBER Water Quality ASSOCIATION
FORM 1234
EFFECTIVE
DECEMBER 2025

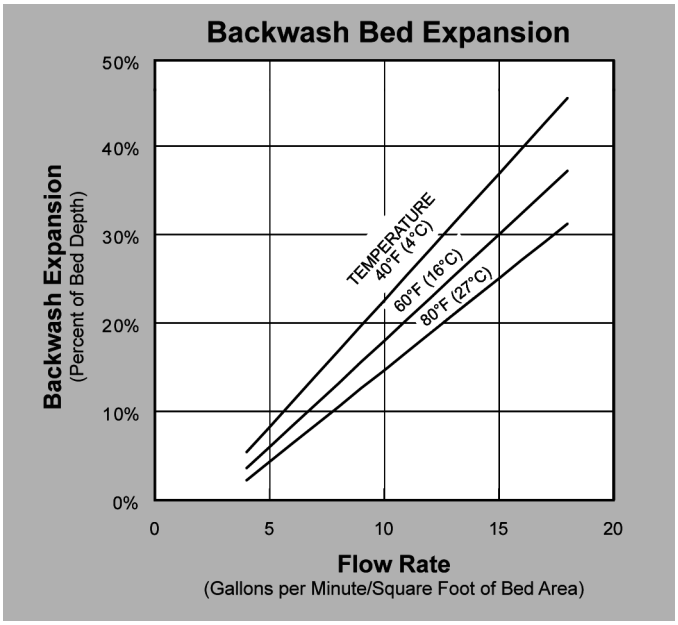
FILTRATION MEDIA

ANTHRACITE

Average Ultimate Analysis
(Moisture & Ash-Free Basis)

Hydrogen	2.1%
Carbon	94.7%
Nitrogen	0.8%
Oxygen	1.6%
Sulfur	0.8%
B.T.U.	14,828





PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH — After each cycle the media bed should be backwashed at a rate that expands the bed 20 to 40 percent.

This information has been gathered from standard materials and/or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

Warning

For safety and handling purposes, we recommend appropriate protective measures when entering a wet vessel containing granular activated carbon, because wet activated carbon depletes oxygen from air and therefore, dangerously low levels of oxygen may be encountered. In such a case, the oxygen level inside the vessel shall be determined before entering and appropriate protective equipment should be worn when entering, or leave the vessel open until the oxygen level in the vessel is normal.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1234
EFFECTIVE
DECEMBER 2025

FILTRATION MEDIA

GARNET

SWT's Garnet is a high-density water filtration media used to remove fine particulate and keeps the silica gravel bed static during rigorous backwash. In a multi-media filter, garnet sand is the finest layer and is located below the filter sand layer. Due to its high specific gravity, the garnet remains in its position in the filter - even after backwashing. Coarse garnet sizes are available for support layers. Meets or exceeds all ASI, AWWA, or ASME standards and protocols. UL Certified to NSF/ANSI Standard 61.

FEATURES

- Chemical and abrasive resistant
- Chemically inert and nonmetallic
- High hardness for minimum attrition
- International shipping
- Packaging in 50 lb. bags or supersacks
- Ideal media for water filtration

Typical Properties

Color	Dark Pink, Red, Purple, Brown
Apparent Specific Gravity	≥ 3.8
Hardness	7.0 - 8.0 (Mohs scale)
Source of Material	USA or India
Acid Solubility	1% maximum
Free Silica Content	0.5% maximum
Net Weight	120 - 151 lbs lb per cu.ft.
Available Sizes	#8 - #80

This information has been gathered from standard materials and/or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1237
EFFECTIVE
FEBRUARY 2025

FILTRATION MEDIA

FILTRATION SAND & GRAVEL

SWT sand and gravel are manufactured with precise effective size ranges and the lowest uniformity coefficients in the industry.

SWT Silica Sand is graded specifically for use in water and waste water filtration processes. Our sand can be used in municipal, industrial, or residential applications. The low acid solubility and high silica content of our filter sand ensures durable and long lasting filter media performance.

SWT Gravel is manufactured to be uniform in size which promotes excellent flow and even distribution in support beds. Our gravel is low in soluble impurities and maintains its quality as a support bed for the filter media.

Meets or exceeds all ASI, AWWA, or ASME standards and protocols. UL Certified to NSF/ANSI Standards 61 & 372.

Filter Sand Properties

Color	Light brown
Form	Sub-angular/sub-round
Bulk Density	~100 lbs. per cubic foot
Hardness	6.0 to 7.0 (Mohs scale)
Effective Size Range	0.2-0.3mm to 2.0-3.0mm
Uniformity Coefficient	1.3 to 1.7 maximum
Acid Solubility	<1.0%
Specific Gravity	>2.6
Silicon Dioxide Content	>85%
Loss on Ignition	<2.0%
Source of Material	USA

Support Gravel Properties

Color	Assorted
Form	Uncrushed, smooth surface
Bulk Density	~100 lbs. per cubic foot
Hardness	7.0 to 8.0 (Mohs scale)
Effective Size Range	1/8" x 1/16" to 2½" x 1½"
Porosity	38% - 45%
Acid Solubility	<1.0%
Specific Gravity	>2.6
Deleterious Material	< 1.0%
Thin, Flat & Elongated	<2.0%
Source of Material	USA

This information has been gathered from standard materials and/or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1238
EFFECTIVE
FEBRUARY 2025

Filtration Media

FILTRATION SAND & GRAVEL

Filter Sand

PRODUCT EFFECTIVE SIZE (mm)		2.00-3.00	1.65-2.00	1.20-1.60	0.80-1.20	0.65-0.75	0.60-0.65	0.45-0.55	0.35-0.45	0.20-0.30
US Mesh	mm	Percent Passing (%)								
4	4.75	99								
5	4.00	89	99							
6	3.35	57	94	99						
7	2.80	27	78	96						
8	2.36	10	57	90						
10	2.00	3	29	73	99					
12	1.70	1	6	50	98	99				
14	1.40		1	15	77	97				
16	1.18			3	51	87	99	99		
18	1.00			1	20	64	88	94		
20	0.850				5	41	65	82	98	
25	0.710				1	11	32	58	84	
30	0.600					3	7	33	59	98
35	0.500					1	2	10	28	93
40	0.425						1	2	8	72
45	0.355							1	2	42
50	0.300									24
60	0.250									10
70	0.212									5
80	0.180									2

Support Gravel

PRODUCT SIZE (INCHES)			2½ x 1½	1½ x 3/4	3/4 x 1/2	5/8 x 3/8	1/2 x 1/4	3/8 x 3/16	1/4 x 1/8	3/16 x 3/32	1/8 x 1/16
US Mesh	inches	mm	Percent Passing (%)								
2½"	2.500	63.00	98								
2.0"	2.000	50.00	35								
1 ½"	1.500	37.50	5	98							
1.0"	1.000	25.00	1	40							
7/8"	0.875	22.40		18							
3/4"	0.750	19.00		4	97						
5/8"	0.625	16.00			48	99					
1/2"	0.500	12.50			3	77	98				
3/8"	0.375	9.50				3	41	98			
1/4"	0.250	6.30				1	4	30	96		
4	0.187	4.75						4	66	98	
5	0.157	4.00							35	84	
6	0.132	3.35							11	45	97
1/8"	0.125	3.18							5	14	94
7	0.111	2.80							1	3	80
8	0.094	2.36								1	60
10	0.079	2.00									30
12	0.066	1.70									6
14	0.056	1.40									1

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1238
EFFECTIVE
FEBRUARY 2025

NEUTRALIZATION MEDIA

NEUTRALIZER PLUS

SWT Neutralizer Plus (P/N PH10001) can correct acidic water conditions and render it less corrosive by neutralizing the free carbon dioxide in water. Neutralizer Plus is used most effectively where pH correction is substantial or high flow conditions are in use, it is a highly reactive magnesium oxide. pH correction and media consumption are affected by a number of water chemical variables. Being soluble to acidity, Neutralizer Plus will slowly dissolve and will need to be replenished periodically. Certified to NSF/ANSI/CAN Standard 60.

FEATURES

- High degree of activity and speed of correction allowing high flow
- High capacity, less chemical usage

On a per weight basis, magnesium oxide can neutralize five times more acidity than can calcium carbonate. This results in greatly reduced chemical usage for the same pH correction. ***Please note; under certain low flow conditions, Neutralizer Plus may overcorrect and create a highly basic (high pH) condition.***

Under certain hardness conditions, pH correction can cause hardness minerals to precipitate out of solution, resulting in cementing or solidification of the Neutralizer Plus mineral bed. Upflow service is generally recommended with hardness exceeding five grains per gallon. (Always use an in-line filter ahead of an upflow system to prevent plugging of the lower distribution screen.)

As Neutralizer Plus's magnesium oxide neutralizes the water, it will increase hardness and a softener may become necessary after the neutralizing filter. Neutralizer Plus can be effectively combined with Neutralizer to combine the high flow neutralization properties of Neutralizer Plus, along with the slower reacting low flow properties of Neutralizer, reducing potentially high basic properties due to overcorrection.

Suggested Operating Conditions

Water pH Range	4.5 - 6.0
Bed Depth	24 to 30 inches
Freeboard	50% of bed depth minimum
Backwash Rate	10 to 12 gpm per sq.ft.
Service Flow Rate	5-6 gpm/sq. ft.
Maximum Usage	100 mg/L

Typical Properties

Color	Brownish White
Bulk Density	75 lbs./ cu. ft.
US Standard Mesh Size	6 x 16
Specific Gravity	3.6 gm/cc
Effective Size	1.4mm
Uniformity Coefficient	1.7
Composition	MgO 97% minimum

Backwash Bed Expansion- Due to Neutralizer Plus' high density and large particle size, a new bed is difficult to expand, but it is still imperative to backwash in order to keep the bed clean. Over time, as the media is consumed, the particle size will decrease and backwash bed expansion will begin to occur.Backwash Bed Expansion- Due to Neutralizer Plus' high density and large particle size, a new bed is difficult to expand, but it is still imperative to backwash in order to keep the bed clean. Over time, as the media is consumed, the particle size will decrease and backwash bed expansion will begin to occur.

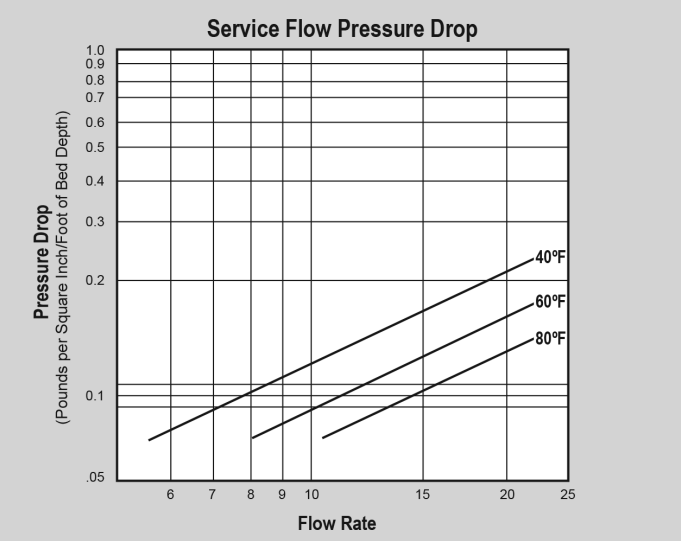
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1471
EFFECTIVE
APRIL 2025

NEUTRALIZATION MEDIA

NEUTRALIZER PLUS



PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

Downflow service is generally satisfactory on waters with a hardness of less than five grains/gallon or where it's combined with Neutralizer at least 50-50. Upflow service is generally recommended with hardness exceeding five grains/gal. to prevent cementing of the Neutralizer Plus bed. Use distributors designed for upflow applications. A gravel support bed is recommended.

This information has been gathered from standard materials and/or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1471
EFFECTIVE
APRIL 2025

NEUTRALIZATION MEDIA

NEUTRALIZER

SWT Neutralizer (P/N PH10003) is a naturally occurring calcium carbonate media. One of the advantages of Neutralizer is its self-limiting property. When properly applied, it corrects pH only enough to reach a non-corrosive equilibrium. It does not overcorrect under normal conditions. Upon contact with Neutralizer, acidic waters slowly dissolve the calcium carbonate to raise the pH which reduces the potential leaching of copper, lead and other metals found in typical plumbing systems. Periodic backwashing will prevent packing, reclassify the bed and maintain high service rates. Depending on pH, water chemistry and service flow, the Neutralizer bed will have to be periodically replenished as the Neutralizer is depleted. Certified to NSF/ANSI/CAN Standard 60.

FEATURES

- Naturally occurring material
- Low uniformity coefficient for maximum contact for controlled pH correction
- Slower reacting for controlled pH correction
- Inexpensive

Suggested Operating Conditions

A gravel support bed is recommended

Water pH Range	5.0 - 7.0
Bed Depth	24 to 30 inches
Freeboard	50% of bed depth minimum
Backwash Rate	8 to 12 gpm per sq.ft.
Service Flow Rate	3-6 gpm/sq. ft.
Maximum Usage	650 mg/L
Backwash Bed Expansion	20 - 40% of bed depth

Typical Properties

Color	Near White
Bulk Density	90 lbs./ cu. ft.
US Standard Mesh Size	16 x 40
Specific Gravity	2.7 gm/cc
Effective Size	0.4mm
Uniformity Coefficient	1.5
Hardness	3.0 (Mohs scale)
Composition	$CaCO_3$, 95% min. $MgCO_3$, 3.0% max.

As the Neutralizer's calcium carbonate neutralizes the water, it will increase hardness and a softener may become necessary after the neutralizing filter. Neutralizer can be effectively combined with Neutralizer Plus to combine the high flow neutralization properties of Neutralizer Plus, along with the slower reacting low flow properties of Neutralizer, increasing the ability to correct low pH.

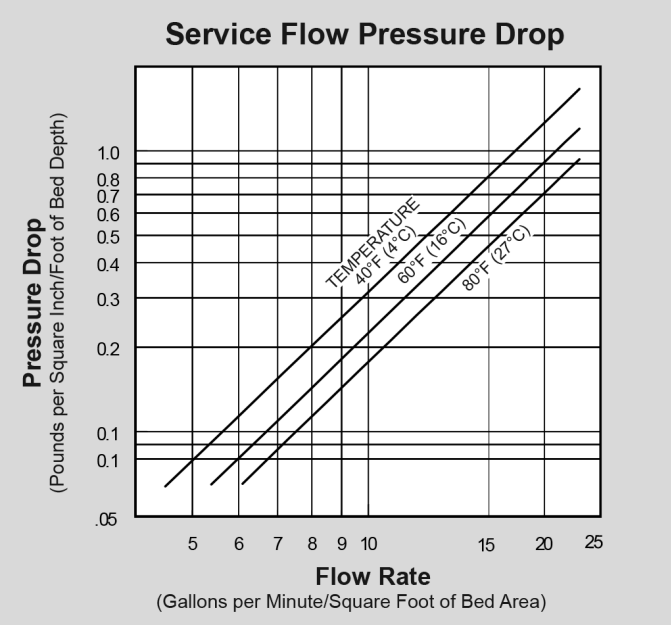
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

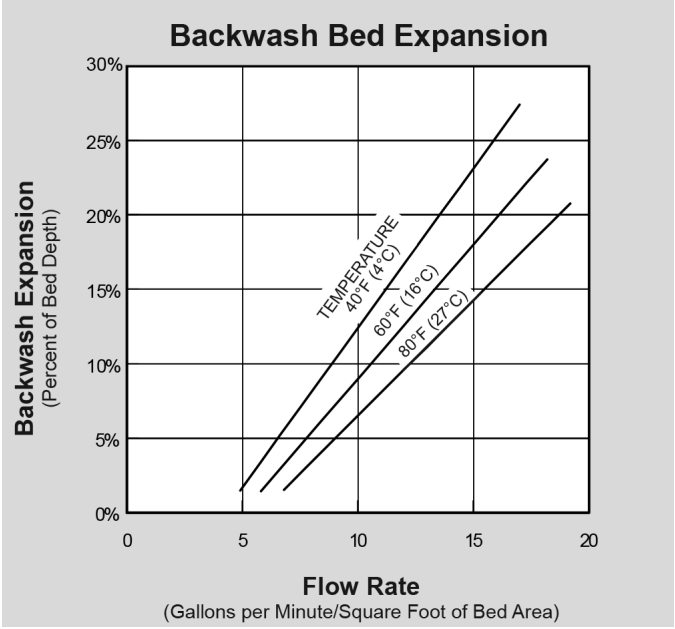
MEMBER Water Quality ASSOCIATION

FORM 1472
EFFECTIVE
APRIL 2025

NEUTRALIZATION MEDIA

NEUTRALIZER





PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH — After each cycle the media bed should be backwashed at a rate that expands the bed 20 to 40 percent.

This information has been gathered from standard materials and/or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER
Water Quality ASSOCIATION

FORM 1472
EFFECTIVE
APRIL 2025

SOFTENING RESIN

PROSOFT™ GOLD

ProSoft Gold — We found a way to save you some money here and still get the job done. A 7% crosslinked softening resin that is for low or non-chlorinated waters. ProSoft Gold is perfect for well water and non-turbulator applications. Excellent exchange capability and every bag is prewashed and rinsed so you don't have to do it in the field.

FEATURES

- Optimized for residential softener applications
- Uniform particle size, low pressure drop
- Superior physical stability
- Low color throw
- Conforms to paragraph 21CFR173.25 of the Food Additives Regulations of the US FDA
- Certified to NSF/ANSI Standard 44/61 *

* NSF/ANSI-61 compliance requires conditioning with a minimum 20 bed volume rinse prior to first use.

Physical Properties

Polymer Structure	Styrene/DVB
Polymer Type	Gel
Functional Group	Sulfonic Acid
Physical Form	Spherical beads
Resin Color	Amber
Ionic Form, as shipped	Sodium
Total Capacity	
Sodium Form	> 1.8 meq/mL
Water Retention	
Sodium Form	40 to 52%
Screen Size Distribution	16 to 50 (US mesh)
Maximum Fines Content	1% (< 50 mesh)
Minimum Sphericity	90%
Uniformity Coefficient	1.6 approx.
Approximate Shipping Weight	
Sodium Form	50 lb/cu.ft.

Part Number

Sodium Form	ER10001

Suggested Operating Conditions

Maximum Temperature	
Sodium Form	250°F (121°C)
Minimum Bed Depth	24 inches
Backwash Expansion	25 to 50%
Maximum Pressure Loss	25 psi
Operating pH Range	0 to 14
Regenerant Concentration	
Salt Cycle	10 to 15% NaCl
Regenerant Level	4 to 15 lb/cu.ft.
Regenerant Flow Rate	0.5 to 1.5 gpm/cu.ft.
Regenerant Contact Time	> 20 minutes
Displacement Flow Rate	Same as dilution water
Displacement Volume	10 to 15 gal/cu.ft
Rinse Flow Rate	Same as service flow
Rinse Volume	35 to 60 gal/cu.ft.
Service Flow Rate	1 to 10 gpm/cu.ft.

CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

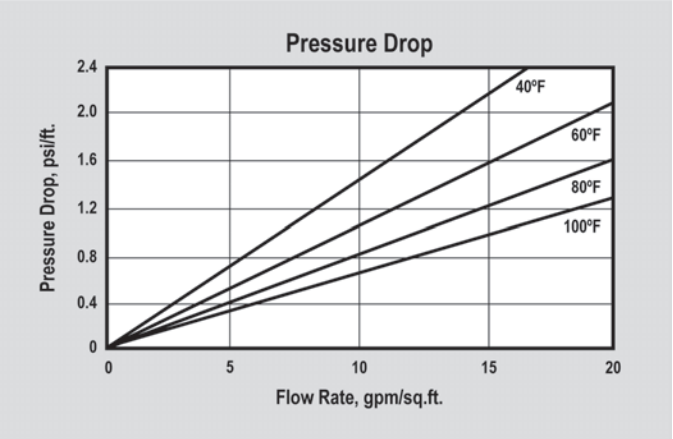
Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

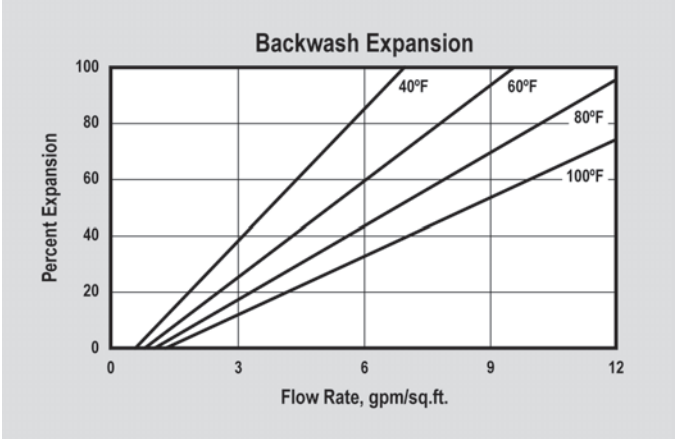
FORM 1132
EFFECTIVE
AUGUST 2021

SOFTENING RESIN

PROSOFT™ GOLD



PRESSURE DROP — *The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.*

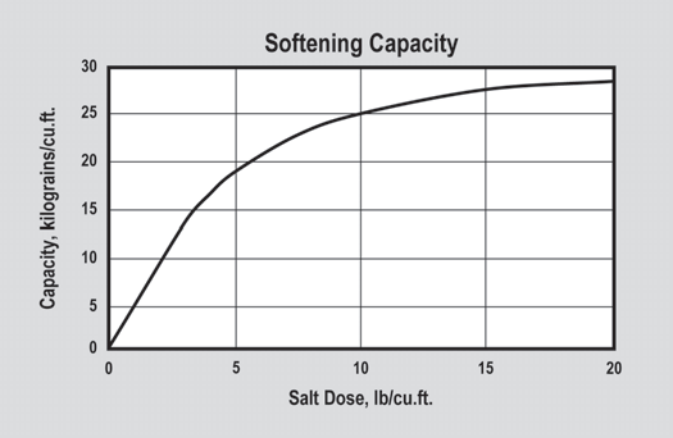


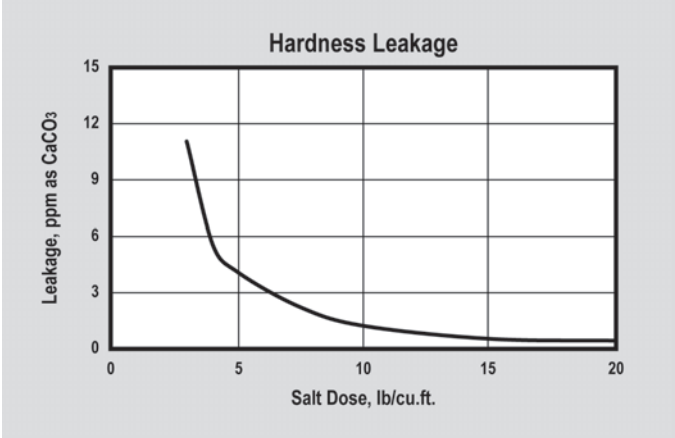
BACKWASH — *The graph above shows the expansion characteristics as a function of flow rate at various temperatures.*

APPLICATIONS

Softening

ProSoft Gold is a standard crosslinked cation resin optimized for residential and commercial applications. This type of resin is easier to regenerate than the higher crosslinked resins. ProSoft Gold has marginal resistance to chlorine and other oxidants and is not ideal for high temperature and other high stress applications.





CAPACITY AND LEAKAGE — *Capacity and leakage data are based on 2:1 Ca:Mg ratio, 500 ppm TDS as $CaCO_3$, 0.2% hardness in the salt, and 10% brine concentration applied co-currently through the resin over 30 minutes. No engineering downgrade has been applied.*

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1132
EFFECTIVE
AUGUST 2021

SOFTENING RESIN

PROSOFT™ PREMIUM

ProSoft Premium is the best value for an all-around, hard working, softening resin. It is primarily used on the types of chlorinated waters associated with municipal water treatment. Its full 8% crosslinking makes ProSoft Premium more resistant to chlorine attack and the vigorous backwashes of commercial applications and turbulators.

FEATURES

- Ideal for industrial softeners and demineralizers
- Uniform particle size, low pressure drop
- Superior physical stability
- Low color throw
- Conforms to paragraph 21CFR173.25 of the Food Additives Regulations of the US FDA
- Certified to NSF/ANSI Standard 61 *

* NSF/ANSI-61 compliance requires conditioning with a minimum 20 bed volume rinse prior to first use.

Physical Properties

Polymer Structure	Styrene/DVB
Polymer Type	Gel
Functional Group	Sulfonic Acid
Physical Form	Spherical beads
Resin Color	Amber
Ionic Form, as shipped	Sodium or Hydrogen
Total Capacity	
Sodium Form	> 2.0 meq/mL
Hydrogen Form	> 1.8 meq/mL
Water Retention	
Sodium Form	42 to 49%
Hydrogen Form	47 to 56%
Swelling, Na to H	5 to 9%
Screen Size Distribution	16 to 50 (US mesh)
Maximum Fines Content	1% (< 50 mesh)
Minimum Sphericity	93%
Uniformity Coefficient	1.6 approx.
Approximate Shipping Weight	
Sodium Form	52 lb/cu.ft.
Hydrogen Form	50 lb/cu.ft.

Part Number

Sodium Form	ER10002
Hydrogen Form	ER10004
ProSoft Premium Black	ER10002-BL-USA

Suggested Operating Conditions

Maximum Temperature	
Sodium Form	280°F (138°C)
Hydrogen Form	265°F (130°C)
Minimum Bed Depth	24 inches
Backwash Expansion	25 to 50%
Maximum Pressure Loss	25 psi
Operating pH Range	0 to 14
Regenerant Concentration	
Salt Cycle	10 to 15% NaCl
Hydrogen Cycle	5 to 10% HCl
Hydrogen Cycle	1 to 8% H_2SO_4
Regenerant Level	4 to 15 lb/cu.ft.
Regenerant Flow Rate	0.5 to 1.5 gpm/cu.ft.
Regenerant Contact Time	> 20 minutes
Displacement Flow Rate	Same as dilution water
Displacement Volume	10 to 15 gal/cu.ft
Rinse Flow Rate	Same as service flow
Rinse Volume	35 to 60 gal/cu.ft.
Service Flow Rate	1 to 10 gpm/cu.ft.

CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

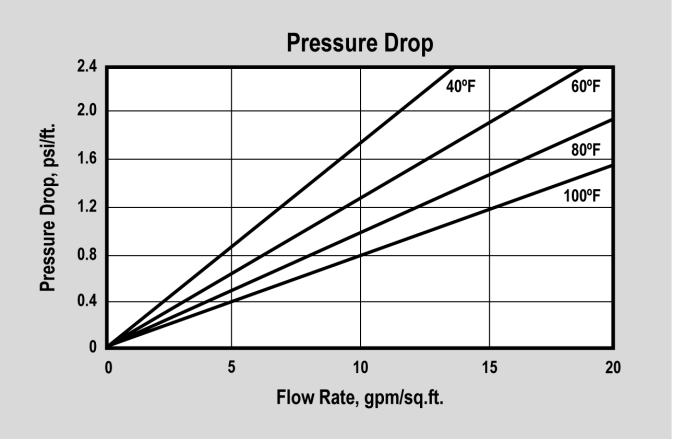
Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

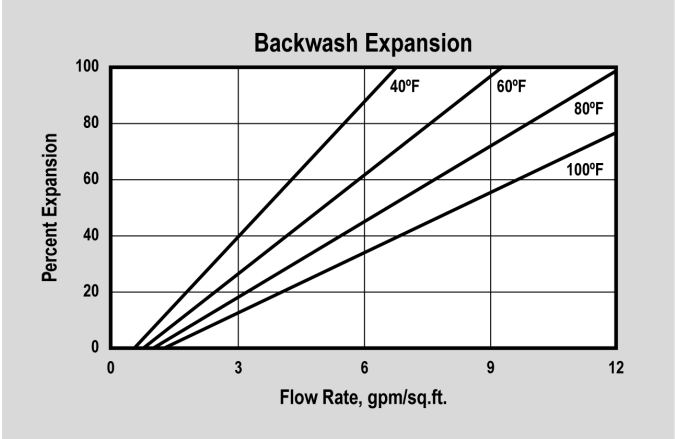
MEMBER Water Quality ASSOCIATION
FORM 1133
EFFECTIVE
SEPTEMBER 2025

SOFTENING RESIN

PROSOFT™ PREMIUM



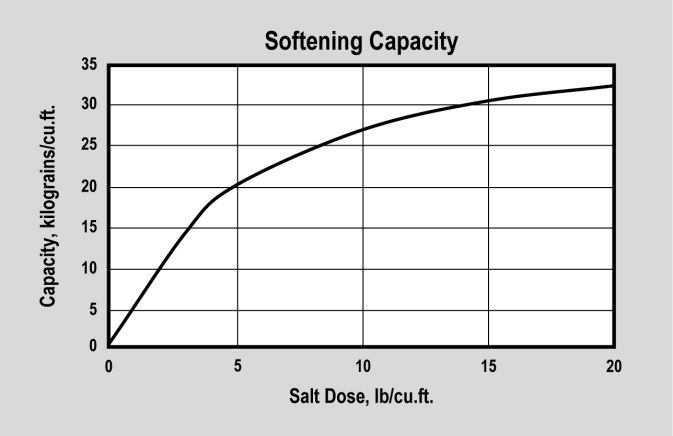
PRESSURE DROP — *The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.*



BACKWASH — *The graph above shows the expansion characteristics as a function of flow rate at various temperatures.*

APPLICATIONS

Softening



SOFTENING CAPACITY — *Capacity is based on 2:1 Ca:Mg ratio, 500 ppm TDS as $CaCO_3$, 0.2% hardness in the salt, and 10% brine concentration applied co-currently through the resin over 30 minutes. No engineering downgrade has been applied.*

Iron Removal

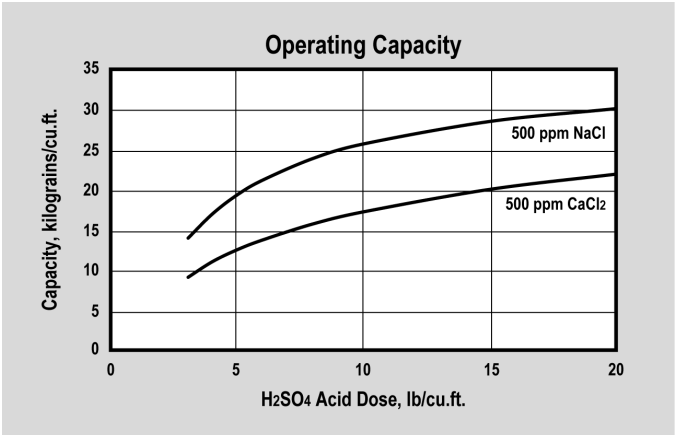
ProSoft Premium has a good capacity for ferrous iron. Iron content in the feedwater should not be more than 1 mg/L Fe per each 17 mg/L of hardness.

Amonia Removal

ProSoft Premium is slightly selective for ammonia compared to sodium, but hardness is much more preferred. Ammonia is not ionized at pH above 9 and is not well removed when the pH is significantly alkaline.

Demineralization

ProSoft Premium (Hydrogen Form) can be used as the cation component in separate bed and mixed bed demineralization applications where a hydrogen form cation resin is coupled with a hydroxide form anion resin. Regeneration is accomplished with stepwise sulfuric acid or with hydrochloric acid applied.



OPERATING CAPACITY — *Capacity is based on 500 ppm of stated salt (as $CaCO_3$) with 0% alkalinity, 36 inch bed depth, flow rate of 2 to 4 gpm per cu.ft., and a minimum of 30 minutes chemical injection time. Sulfuric acid concentration must be stepwise when calcium concentration exceeds 20% of total cations. No engineering downgrade has been applied.*

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association
FORM 1133
EFFECTIVE
SEPTEMBER 2025

SOFTENING RESIN

PROSOFT™ FINE MESH

ProSoft Fine Mesh — We took our premium grade resin and reduced the partical size for faster kinetics and regeneration. ProSoft Fine Mesh is ideally suited for cabinet style softeners and for use with ProSelect™ Tannin-HP for a mixed bed softener/organic removal unit. You won't have any problems here with fines or color throw, because we have already prewashed and rinsed the resin for you.

FEATURES

- Superior kinetics for high efficiency softeners and use in iron-bearing waters and high TDS solutions
- Highly uniform particle size, low color throw
- Superior physical stability provides long life and low pressure drop
- Conforms to paragraph 21CFR173.25 of the Food Additives Regulations of the US FDA
- Certified to NSF/ANSI Standard 61 *

* NSF/ANSI-61 compliance requires conditioning with a minimum 20 bed volume rinse prior to first use.

Physical Properties

Polymer Structure	Styrene/DVB
Polymer Type	Gel
Functional Group	Sulfonic Acid
Physical Form	Spherical beads
Resin Color	Amber
Ionic Form, as shipped	Sodium
Total Capacity	
Sodium Form	> 2.0 meq/ml
Water Retention	
Sodium Form	42 to 49%
Screen Size Distribution	30 to 50 (US mesh)
Maximum Fines Content	30% (< 50 mesh)
Minimum Sphericity	93%
Uniformity Coefficient	1.4 approx.
Approximate Shipping Weight	
Sodium Form	50 lb/cu.ft.

Part Number

Sodium Form	ER10003

Suggested Operating Conditions

Maximum Temperature	
Sodium Form	280°F (138°C)
Minimum Bed Depth	24 inches
Backwash Expansion	25 to 50%
Maximum Pressure Loss	25 psi
Operating pH Range	0 to 14
Regenerant Concentration	
Salt Cycle	10 to 15% NaCl
Regenerant Level	4 to 15 lb/cu.ft.
Regenerant Flow Rate	0.5 to 1.5 gpm/cu.ft.
Regenerant Contact Time	> 20 minutes
Displacement Flow Rate	Same as dilution water
Displacement Volume	10 to 15 gal/cu.ft
Rinse Flow Rate	Same as service flow
Rinse Volume	35 to 60 gal/cu.ft.
Service Flow Rate	1 to 10 gpm/cu.ft.

CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

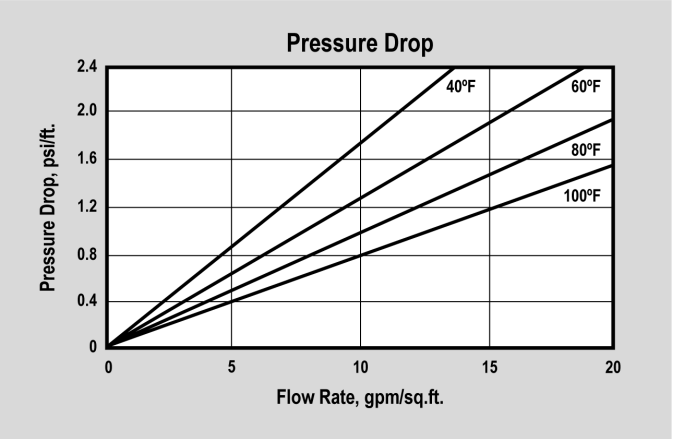
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

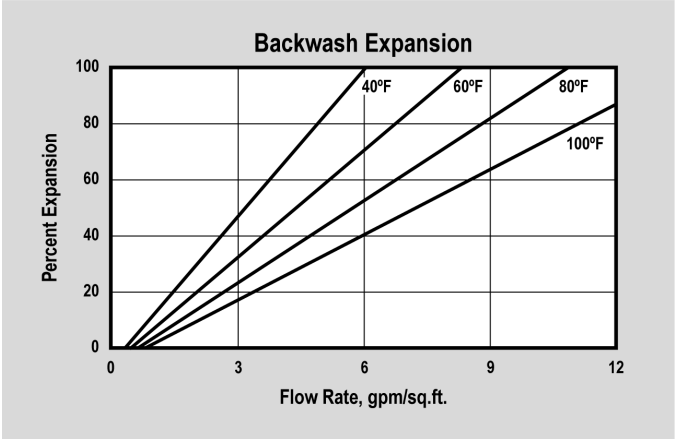
FORM 1134
EFFECTIVE
FEBRUARY 2024

SOFTENING RESIN

PROSOFT™ FINE MESH



PRESSURE DROP — *The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.*

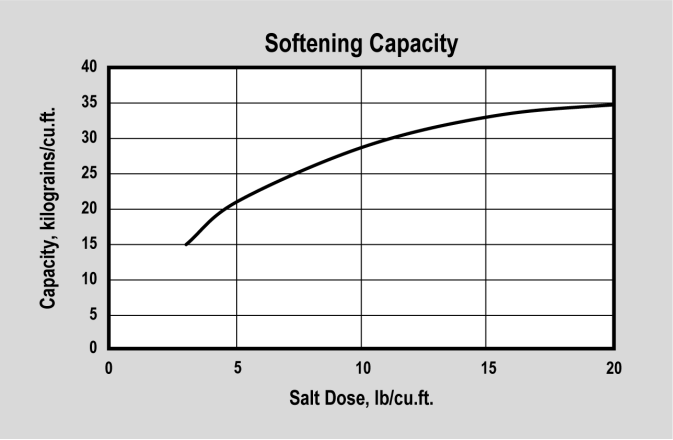


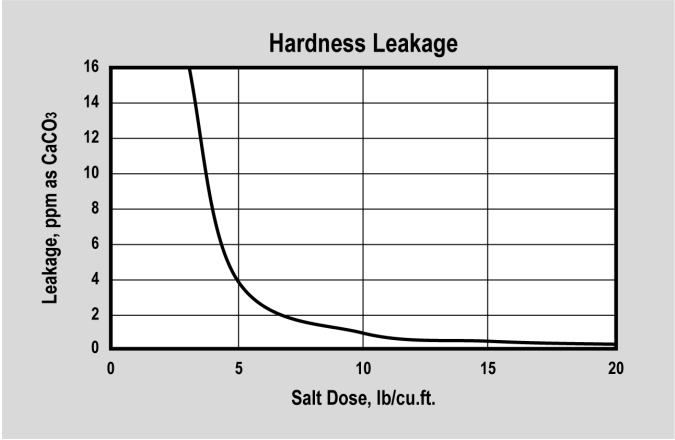
BACKWASH — *The graph above shows the expansion characteristics as a function of flow rate at various temperatures.*

APPLICATIONS

Softening

ProSoft Fine Mesh is an 8% crosslinked cation resin optimized for industrial softening applications. It has higher total capacity than standard crosslinked resins such as ProSoft Gold and has higher operating capacity when relatively large brine doses are used during regeneration. ProSoft Fine Mesh is suitable for hot water applications and for waters that contain modest levels of chlorine.





CAPACITY AND LEAKAGE — *Capacity and leakage data are based on 2:1 Ca:Mg ratio, 500 ppm TDS as $CaCO_3$, 0.2% hardness in the salt, and 10% brine concentration applied co-currently through the resin over 30 minutes. No engineering downgrade has been applied.*

Iron Removal

ProSoft Fine Mesh has good capacity for iron removal. Soluble (ferrous) iron is removed by ion exchange, in much the same way as hardness ions are removed. Particulate (ferric) iron is removed by filtration. As a general rule of thumb, to protect against fouling, the iron content in the feedwater should not be more than 1 mg/L Fe per each 17 mg/L of hardness. This ensures an adequate salt dose and frequent regenerations which help prevent fouling.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1134
EFFECTIVE
FEBRUARY 2024

SOFTENING RESIN

PROSOFT™ HEAVY DUTY

ProSoft Heavy Duty is just that. Manufactured in special runs to provide one of the toughest softening resins around. With a 10% crosslink and 35,000 grain capacity at 15 lb of salt, ProSoft Heavy Duty is pefect for industrial applications involving rigorous backwashing or high chlorine levels.

FEATURES

- 10% divinylbenzene
- Uniform particle size, low pressure drop
- Superior physical stability
- Low color throw
- Conforms to paragraph 21CFR173.25 of the Food Additives Regulations of the US FDA
- Certified to NSF/ANSI Standard 61 *

* NSF/ANSI-61 compliance requires conditioning with a minimum 20 bed volume rinse prior to first use.

Physical Properties

Polymer Structure	Styrene/DVB
Polymer Type	Gel
Functional Group	Sulfonic Acid
Physical Form	Spherical beads
Resin Color	Amber
Ionic Form, as shipped	Sodium or Hydrogen
Total Capacity	
Sodium Form	> 2.2 meq/mL
Hydrogen Form	> 2.0 meq/mL
Water Retention	
Sodium Form	39 to 45%
Hydrogen Form	46 to 52%
Swelling, Na to H	4 to 8%
Screen Size Distribution	16 to 50 (US mesh)
Maximum Fines Content	1% (< 50 mesh)
Minimum Sphericity	93%
Uniformity Coefficient	1.6 approx.
Approximate Shipping Weight	
Sodium Form	54 lb/cu.ft.
Hydrogen Form	52 lb/cu.ft.

Part Number

Sodium Form	ER10006
Hydrogen Form	ER10007

Suggested Operating Conditions

Maximum Temperature	
Sodium Form	280°F (138°C)
Hydrogen Form	265°F (130°C)
Minimum Bed Depth	24 inches
Backwash Expansion	25 to 50%
Maximum Pressure Loss	25 psi
Operating pH Range	0 to 14
Regenerant Concentration	
Salt Cycle	10 to 15% NaCl
Hydrogen Cycle	5 to 10% HCl
Hydrogen Cycle	1 to 8% H_2SO_4
Regenerant Level	4 to 15 lb/cu.ft.
Regenerant Flow Rate	0.5 to 1.5 gpm/cu.ft.
Regenerant Contact Time	> 20 minutes
Displacement Flow Rate	Same as dilution water
Displacement Volume	10 to 15 gal/cu.ft
Rinse Flow Rate	Same as service flow
Rinse Volume	35 to 60 gal/cu.ft.
Service Flow Rate	1 to 10 gpm/cu.ft.

† **CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS**. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

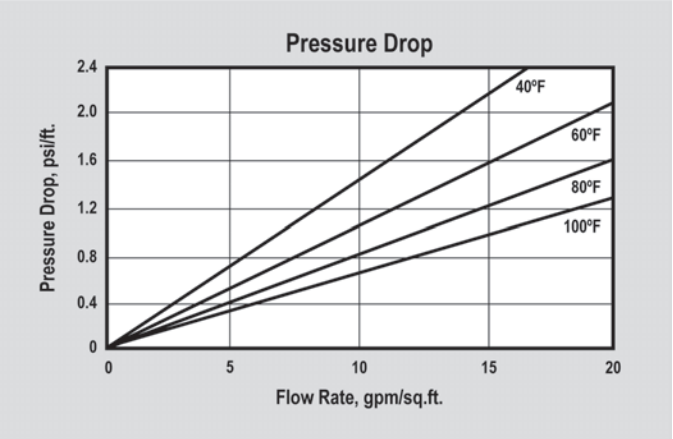
Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

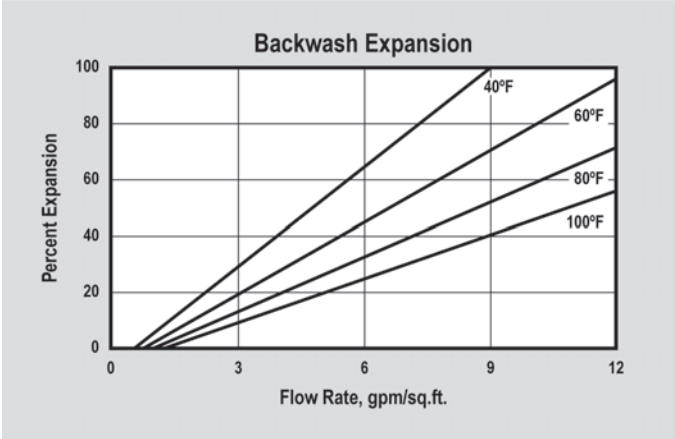
FORM 1135
EFFECTIVE
AUGUST 2021

SOFTENING RESIN

PROSOFT™ HEAVY DUTY



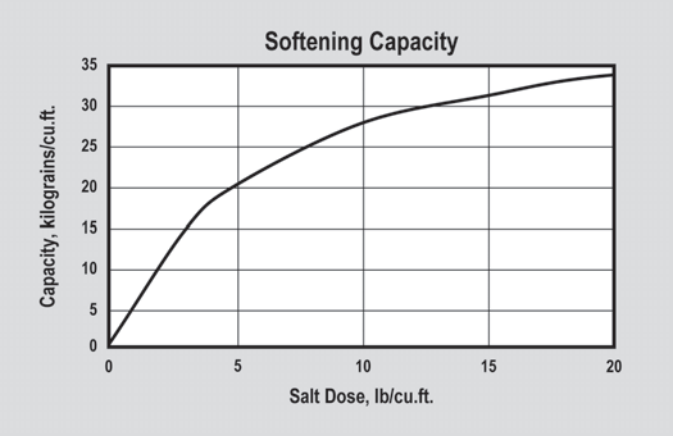
PRESSURE DROP — *The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.*



BACKWASH — *The graph above shows the expansion characteristics as a function of flow rate at various temperatures.*

APPLICATIONS

Softening



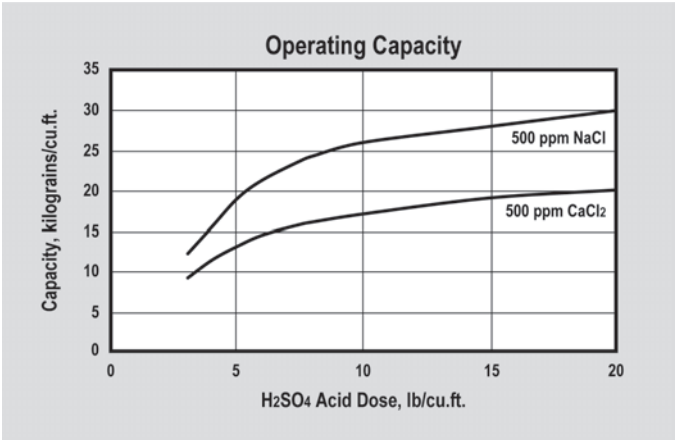
SOFTENING CAPACITY — *Capacity is based on 2:1 Ca:Mg ratio, 500 ppm TDS as $CaCO_3$, 0.2% hardness in the salt, and 10% brine concentration applied co-currently through the resin over 30 minutes. No engineering downgrade has been applied.*

High Temperature Use

ProSoft Heavy Duty is suitable for operation at temperatures as high as 280°F. At temperatures above 212°F, dissolved oxygen in the feedwater is a powerful oxidant and can chemically damage the resin. Oxygen levels in the feed should be reduced to less than 0.05 ppm to ensure a reasonable service life of the resin.

Demineralization

ProSoft Heavy Duty (Hydrogen Form) can be used as the cation component in a variety of demineralization configurations where a hydrogen form cation resin is coupled with a hydroxide form anion resin. The high density of ER10007 provides ideal separation in polishing mixed beds. ProSoft Heavy Duty (Hydrogen Form) has higher total capacity and lower chemical efficiency compared to ProSoft Premium (Hydrogen Form).



OPERATING CAPACITY — *Capacity is based on 500 ppm of stated salt (as $CaCO_3$) with 0% alkalinity, 36 inch bed depth, flow rate of 2 to 4 gpm per cu.ft., and a minimum of 30 minutes chemical injection time. Sulfuric acid concentration must be stepwise when calcium concentration exceeds 20% of total cations. No engineering downgrade has been applied.*

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1135
EFFECTIVE
AUGUST 2021

SOFTENING RESIN

PROSOFT™ HIGH POROSITY

ProSoft High Porosity is the most chemically resistant softening resin we offer. It is manufactured for minimal pressure drops and where high iron content requires constant bed cleaning with solvents. ProSoft High Porosity is also a favorite in chemical processing applications.

FEATURES

- Macroporous structure greatly increases life in applications where resin degradation due to thermal and oxidative effects is anticipated
- Uniform particle size, low pressure drop
- Superior chemical and physical stability
- Conforms to paragraph 21CFR173.25 of the Food Additives Regulations of the US FDA
- Certified to NSF/ANSI Standard 61 *

* NSF/ANSI-61 compliance requires conditioning with a minimum 20 bed volume rinse prior to first use.

Physical Properties

Polymer Structure	Styrene/DVB
Polymer Type	Macroporous
Functional Group	Sulfonic Acid
Physical Form	Spherical beads
Resin Color	Tan
Ionic Form, as shipped	Sodium or Hydrogen
Total Capacity	
Sodium Form	> 1.65 meq/mL
Hydrogen Form	> 1.6 meq/mL
Water Retention	
Sodium Form	45 to 55%
Hydrogen Form	50 to 60%
Swelling, Na to H	3 to 5%
Screen Size Distribution	16 to 50 (US mesh)
Maximum Fines Content	1% (< 50 mesh)
Minimum Sphericity	95%
Uniformity Coefficient	1.6 approx.
Approximate Shipping Weight	
Sodium Form	50 lb/cu.ft.
Hydrogen Form	48 lb/cu.ft.

Part Number

Sodium Form	ER10009
Hydrogen Form	ER10010

Suggested Operating Conditions

Maximum Temperature	
Sodium Form	300°F (149°C)
Hydrogen Form	280°F (138°C)
Minimum Bed Depth	24 inches
Backwash Expansion	25 to 50%
Maximum Pressure Loss	25 psi
Operating pH Range	0 to 14
Regenerant Concentration	
Salt Cycle	10 to 15% NaCl
Hydrogen Cycle	5 to 10% HCl
Hydrogen Cycle	1 to 8% H_2SO_4
Regenerant Level	4 to 15 lb/cu.ft.
Regenerant Flow Rate	0.5 to 1.5 gpm/cu.ft.
Regenerant Contact Time	> 20 minutes
Displacement Flow Rate	Same as dilution water
Displacement Volume	10 to 15 gal/cu.ft
Rinse Flow Rate	Same as service flow
Rinse Volume	35 to 60 gal/cu.ft.
Service Flow Rate	1 to 10 gpm/cu.ft.

† **CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS**. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

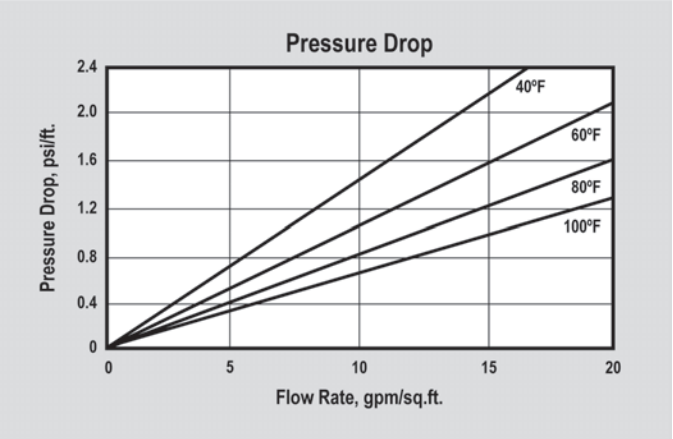
Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

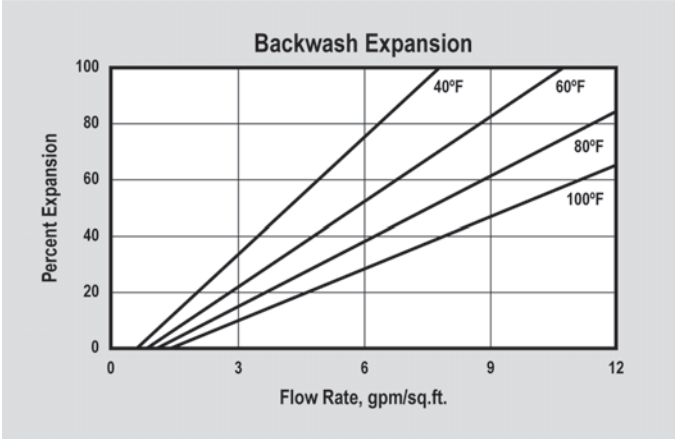
FORM 1136
EFFECTIVE
AUGUST 2021

SOFTENING RESIN

PROSOFT™ HIGH POROSITY



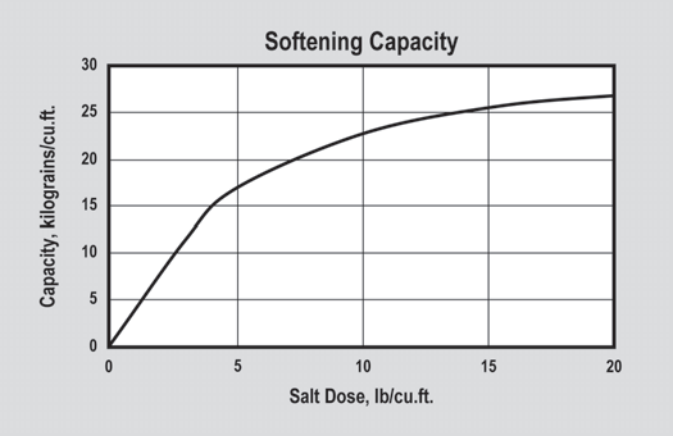
PRESSURE DROP — *The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.*



BACKWASH — *The graph above shows the expansion characteristics as a function of flow rate at various temperatures.*

APPLICATIONS

Softening



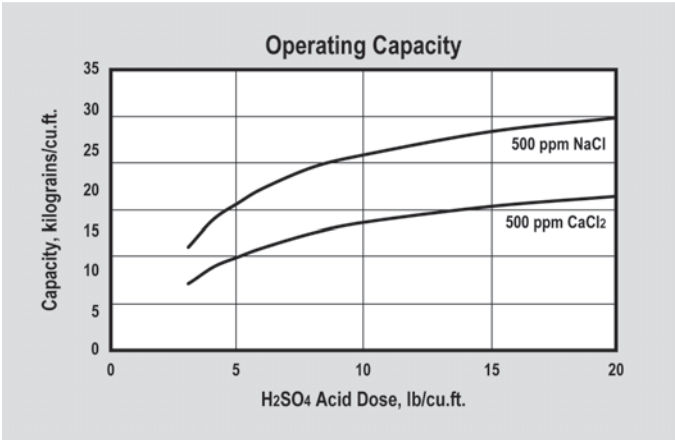
SOFTENING CAPACITY — *Capacity is based on 2:1 Ca:Mg ratio, 500 ppm TDS as $CaCO_3$, 0.2% hardness in the salt, and 10% brine concentration applied co-currently through the resin over 30 minutes. No engineering downgrade has been applied.*

Radwaste

ProSoft High Porosity is ideally suited for radwaste applications. The high crosslinking content gives it improved resistance to chemical damage caused by ionizing radiation. Structural integrity is maintained up to approximately 1 x 10^9 rads exposure.

Demineralization

ProSoft High Porosity (Hydrogen Form) can be used as the cation component in demineralization configurations where a hydrogen form cation resin is coupled with a hydroxide form anion resin. ER10010 is ideal for high flow rate polishers and where high resistance to mechanical, thermal, and oxidative stresses is required.



OPERATING CAPACITY — *Capacity is based on 500 ppm of stated salt (as $CaCO_3$) with 0% alkalinity, 36 inch bed depth, flow rate of 2 to 4 gpm per cu.ft., and a minimum of 30 minutes chemical injection time. Sulfuric acid concentration must be stepwise when calcium concentration exceeds 20% of total cations. No engineering downgrade has been applied.*

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1136
EFFECTIVE
AUGUST 2021

Softening Resin

PROSOFT™ CATION RESIN SELECTION CHART

	Low Iron 0 – 0.1 ppm	Medium Iron 0.1 – 1.0 ppm	High Iron 1.0 – 3.0 ppm	Heavy Iron 3.0 ppm +	Dissolved Iron	Organic Iron
No Chlorine	Gold* P/N: ER10001	Gold* P/N: ER10001	Premium* P/N: ER10002	Premium* P/N: ER10002	Premium P/N: ER10002	2/3 Cu.Ft. Fine Mesh P/N: ER10003 1/3 Cu.Ft. ProSelect™ Tannin-HP P/N: ER20006-HP
Low Chlorine < 0.5 ppm	Gold* P/N: ER10001	Premium* P/N: ER10002	Premium* P/N: ER10002	Heavy Duty* P/N: ER10006	Premium P/N: ER10002	2/3 Cu.Ft. Fine Mesh P/N: ER10003 1/3 Cu.Ft. ProSelect™ Tannin-HP P/N: ER20006-HP
Medium Chlorine 0.6 – 1.5 ppm	Premium* P/N: ER10002	Premium* P/N: ER10002	Heavy Duty P/N: ER10006	Heavy Duty P/N: ER10006	Heavy Duty P/N: ER10006	2/3 Cu.Ft. Fine Mesh P/N: ER10003 1/3 Cu.Ft. ProSelect™ Tannin-HP P/N: ER20006-HP
High Chlorine 1.6 – 3.0 ppm	Heavy Duty P/N: ER10006	Heavy Duty P/N: ER10006	Heavy Duty P/N: ER10006	High Porosity P/N: ER10009	Heavy Duty P/N: ER10006	2/3 Cu.Ft. Heavy Duty P/N: ER10006 1/3 Cu.Ft. ProSelect™ Tannin-HP P/N: ER20006-HP
Heavy Chlorine 3.1 ppm +	High Porosity P/N: ER10009	High Porosity P/N: ER10009	High Porosity P/N: ER10009	High Porosity P/N: ER10009	High Porosity P/N: ER10009	

All units perform well, to a varying degree, with any cation resin. The above table is strictly suggestive for obtaining optimal performance from your unit and extending the life of your resin bed.

When in doubt, ProSoft™ Premium is your best value for an all-around softening resin.

* Cabinet models can or should substitute ProSoft™ Fine Mesh resin for faster kinetics.

This table is based on SWT's conventional wisdom only. Performance can still vary from factors such as high temperatures, oil in the water, silica, or other local water characteristics. Contact your SWT representative for further assistance.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1156
EFFECTIVE
FEBRUARY 2024

SOFTENING RESIN

RESIN CAPACITY COMPARISON CHART

Part Number	Description	Amount of NaCl / Cu.Ft.		Capacity / Cu.Ft. as $CaCO_3$		Hardness Leakage @ 11.7 Grains (200 PPM) as $CaCO_3$		Hardness Leakage @ 23.4 Grains (400 PPM) as $CaCO_3$	
		Pounds (US)	Kilograms (Metric)	Kilograins (US)	Kilograms (Metric)	Grains	PPM	Grains	PPM
ER10001	Prosoft™ Gold (7% Crosslink)	6	2.7	22.6	1.46	0.066	1.12	0.183	3.13
		8	3.6	26.2	1.70	0.043	0.73	0.120	2.05
		10	4.5	28.7	1.86	0.030	0.51	0.083	1.42
		12	5.4	30.5	1.98	0.022	0.37	0.061	1.03
		15	6.8	32.6	2.11	0.014	0.24	0.039	0.66
		20	9.1	35.0	2.27	0.008	0.13	0.021	0.36
ER10002	ProSoft™ Premium (8% Crosslink)	6	2.7	23.8	1.54	0.066	1.12	0.183	3.13
		8	3.6	27.6	1.79	0.043	0.73	0.120	2.05
		10	4.5	30.2	1.96	0.030	0.51	0.083	1.42
		12	5.4	32.2	2.09	0.022	0.37	0.061	1.03
		15	6.8	34.4	2.23	0.014	0.24	0.039	0.66
		20	9.1	36.9	2.39	0.008	0.13	0.021	0.36
ER10003	ProSoft™ Fine Mesh (8% Crosslink)	6	2.7	28.3	1.83	0.066	1.12	0.183	3.13
		8	3.6	31.1	2.02	0.043	0.73	0.120	2.05
		10	4.5	33.4	2.16	0.030	0.51	0.083	1.42
		12	5.4	34.2	2.22	0.022	0.37	0.061	1.03
		15	6.8	34.4	2.23	0.014	0.24	0.039	0.66
		20	9.1	36.9	2.39	0.008	0.13	0.021	0.36
ER10006	ProSoft™ Heavy Duty (10% Crosslink)	6	2.7	26.8	1.74	0.066	1.12	0.183	3.13
		8	3.6	31.1	2.02	0.043	0.73	0.120	2.05
		10	4.5	34.1	2.21	0.030	0.51	0.083	1.42
		12	5.4	36.3	2.35	0.022	0.37	0.061	1.03
		15	6.8	38.8	2.51	0.014	0.24	0.039	0.66
		20	9.1	41.7	2.70	0.008	0.13	0.021	0.36
ER10009	ProSoft™ High Porosity (12%+ Crosslink)	6	2.7	20.7	1.34	0.066	1.12	0.183	3.13
		8	3.6	24.0	1.56	0.043	0.73	0.120	2.05
		10	4.5	26.3	1.70	0.030	0.51	0.083	1.42
		12	5.4	28.1	1.82	0.022	0.37	0.061	1.03
		15	6.8	30.0	1.94	0.014	0.24	0.039	0.66
		20	9.1	32.2	2.09	0.008	0.13	0.021	0.36

Note: Salt and capacity calculations are listed in units of measure needed to program all SWT computer controlled/metered water softeners, for both US and metric modes. Standard resin used in most SWT water softeners is ProSoft™ Premium.

Capacities were calculated based on influent water supply with the following specifications:

- Magnesium: 0 ppm
- Sodium: 100 ppm
- Water Temperature: 60°F (16°C)
- Flow Rate: 2.0 gpm / cu.ft.
- Bed Depth: 36 inches

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1277
EFFECTIVE
FEBRUARY 2013

SPECIALTY RESIN

PROSELECT™ GENERAL PURPOSE ANION

ProSelect General Purpose Anion Resin is designed for multi-bed regenerable systems and dealkalizers. It has the highest alkalinity loading capacity of all anion resin types. But what truly makes this a superior resin is its ability to resist organic fouling from water sources where naturally occuring organics are found (ie. surface water). This special formulation makes ProSelect General Purpose easier to regenerate and a longer lasting resin as well.

FEATURES

- High operating capacity
- Superior physical stability
- Uniform particle size, low pressure drop
- Organic fouling resistance
- Multiple contaminant removal
- Complies with US FDA regulations (paragraph 21 CFR173.25) for potable water applications

Suggested Operating Conditions

Maximum Temperature	
Chloride Form	170°F (77°C)
Minimum Bed Depth	24 inches
Backwash Expansion	25 to 50%
Maximum Pressure Loss	20 psi
Operating pH Range	0 to 14 SU
Regenerant Concentration	
Hydroxide Cycle	2 to 6% NaOH
Salt Cycle	2 to 10% NaCl
Regenerant Level	4 to 10 lb/cu.ft.
Regenerant Flow Rate	0.25 to 1.0 gpm/cu.ft.
Regenerant Contact Time	> 40 minutes
Displacement Flow Rate	Same as dilution flow
Displacement Volume	10 to 15 gal/cu.ft
Rinse Flow Rate	Same as service flow
Rinse Volume	35 to 60 gal/cu.ft.
Service Flow Rate	1 to 10 gpm/cu.ft.

Packaging Options

500 ml samples, 1 cu.ft. bags, 1 cu.ft. boxes, 1 cu.ft. drums, 7 cu.ft. drums, 42 cu.ft. supersacks

Part Number

Chloride Form	ER20004

Physical Properties

Polymer Matrix	Styrenic Gel
Ionic Form	Chloride
Functional Group	Dimethylethanolamine
Physical Form	Spherical beads
Color	White to yellow
Particle Size	16 to 50 US Mesh (297 to 1190 µm)
% < 50 mesh (300 µm)	< 1%
Minimum Sphericity	93%
Uniformity Coefficient	1.6
Reversible Swelling	Cl to OH 12% to 15%
Temperature Limit	170°F (77°C)
Capacity	1.4 meq/ml
Moisture Retention	36 to 45%
Regenerability	Yes
Approx. Shipping Weight	43 to 45 lb/cu.ft. (689 to 721 g/l)

CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

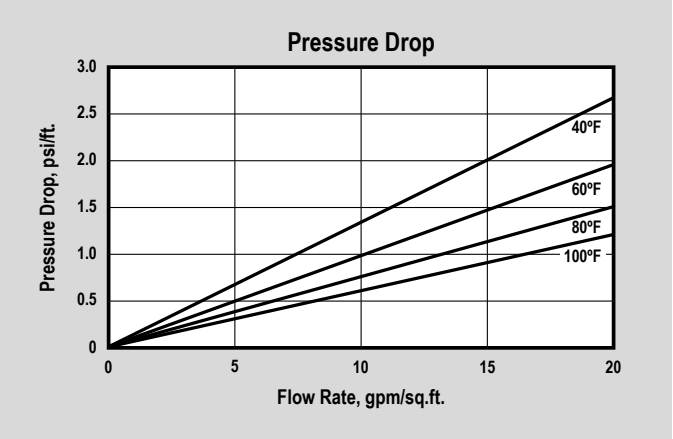
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

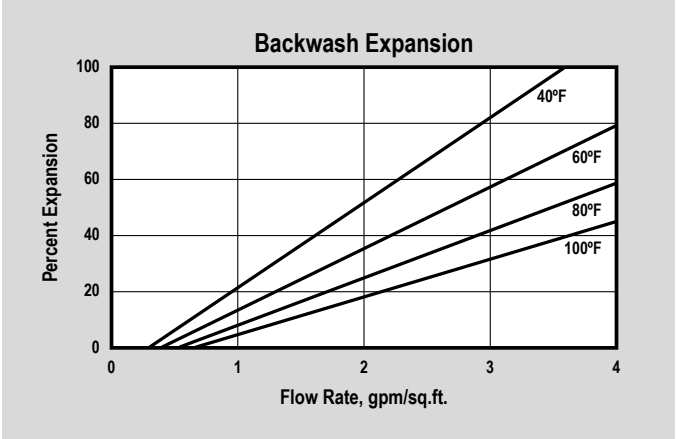
FORM 0073
EFFECTIVE
APRIL 2023

SPECIALTY RESIN

PROSELECT™ GENERAL PURPOSE ANION



PRESSURE DROP — *The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.*



BACKWASH — *The graph above shows the expansion characteristics as a function of flow rate at various temperatures.*

APPLICATIONS

TRACE CONTAMINANT REMOVAL (U, CR, AS, SE, CLO_4)

ProSelect General Purpose has high capacity and can be used to remove a variety of trace contaminants, even when that contaminant is not highly preferred compared to the other bulk ions in the feedwater. Useful capacities are obtained when the feedwater TDS is substantially less than the resin's internal TDS. Uranium, chromate, and perchlorate are particularly well removed. Arsenate and selenate are well removed but can be chromatographically displaced by sulfate and other ions.

NITRATE REMOVAL

ProSelect General Purpose can be used in the chloride cycle to reduce nitrates along with sulfates. Regeneration is accomplished with sodium chloride brine, in a fashion similar to water softeners. Although high operating capacities and high salt efficiency can be obtained, there is also the possibility of nitrate dumping. Use of chloride form anion resin reduces pH during the early portion of the exhaustion cycle. When treating waters with high hardness the brine dilution and displacement waters should be softened and a low hardness salt used to prevent scaling during regeneration.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 0073
EFFECTIVE
APRIL 2023

SPECIALTY RESIN

PROSELECT™ TANNIN HIGH PURITY

ProSelect Tannin High Purity is a chloride form acrylic macroporous strong base anion resin. It has an aliphatic chemical structure and allows organic ions to move in and out of the resin easily. ProSelect Tannin High Purity is intended for use in the chloride form as an organic trap when the highest possible removal of naturally occurring organics is needed.

FEATURES & BENEFITS

- High capacity for organics
- Excellent regeneration efficiency
- Controlled particle size, low pressure drop
- Superior physical stability
- Conforms to paragraph 21CFR173.25 of the Food Additives Regulations of the US FDA
- NSF/ANSI-61 Certified for Material Safety

Physical Properties

Polymer Structure	Acrylic/DVB
Polymer Type	Macroporous
Functional Group	Quaternary Amine (Quaternary Ammonium Compound)
Physical Form	Spherical beads
Resin Color	White to cream
Ionic Form, as shipped	Chloride
Total Capacity	
Chloride Form	> 0.8 meq/ml
Water Retention	
Chloride Form	63 to 72%
Screen Size Distribution	16 to 50 (US mesh)
Maximum Fines Content	1% (< 50 mesh)
Minimum Sphericity	93%
Uniformity Coefficient	1.7 approx.
Approximate Shipping Weight	
Chloride Form	44 lb/cu.ft.

NOTE: Prior to first use for potable water, resin should be backwashed for a minimum of 20 minutes, followed by 10 bed volumes of downflow rinse.

Part Number

Chloride Form	ER20006-HP

Suggested Operating Conditions

Maximum Temperature	
Chloride Form	150°F (66°C)
Minimum Bed Depth	24 inches
Backwash Expansion	25 to 50%
Maximum Pressure Loss	20 psi
Operating pH Range	0 to 14 (< 8.0 pH prevents fishy smell)
Regenerant Concentration	
Salt Cycle	2 to 10% NaCl
Regenerant Level	4 to 10 lb/cu.ft.
Regenerant Flow Rate	0.25 to 1.0 gpm/cu.ft.
Regenerant Contact Time	> 60 minutes
Displacement Flow Rate	Same as dilution water
Displacement Volume	10 to 15 gal/cu.ft
Rinse Flow Rate	Same as service flow
Rinse Volume	35 to 60 gal/cu.ft.
Service Flow Rate	
Average Flow	1 to 4 gpm/cu.ft.
Peak Flow	< 10 gpm/cu.ft.

CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

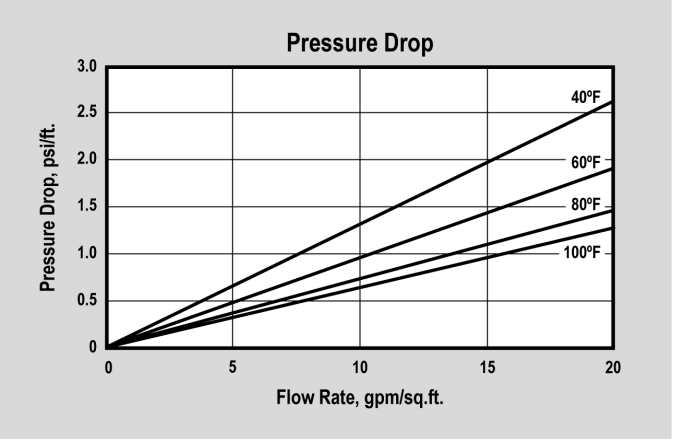
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION

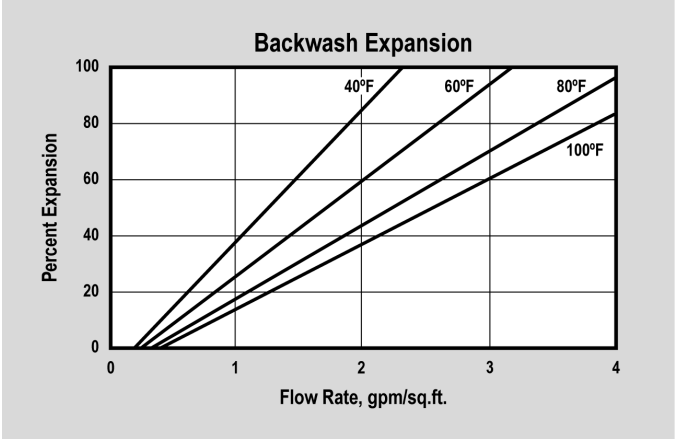
FORM 1386
EFFECTIVE
FEBRUARY 2024

SPECIALTY RESIN

PROSELECT™ TANNIN HIGH PURITY



PRESSURE DROP — *The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.*

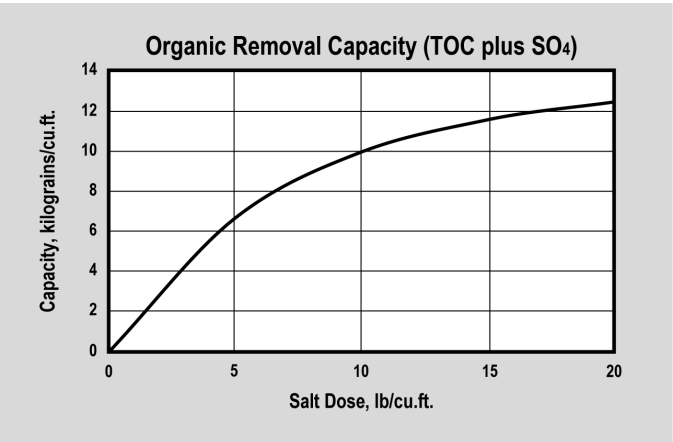


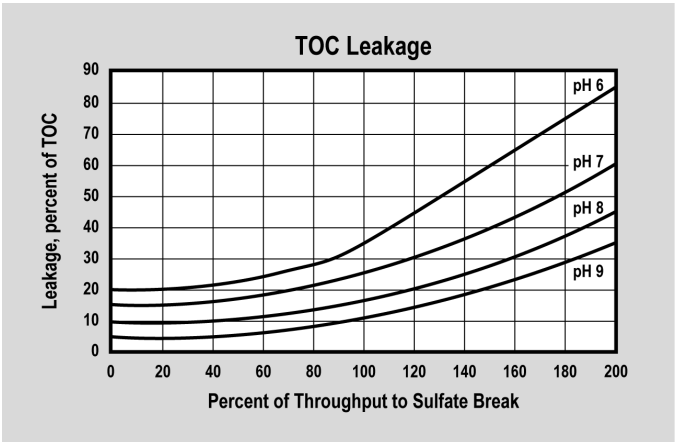
BACKWASH — *The graph above shows the expansion characteristics as a function of flow rate at various temperatures.*

APPLICATIONS

Organic Trap

ProSelect Tannin High Purity has the highest possible capacity for tannins and other naturally occuring organic matter (NOM) due to its acrylic polymer backbone and macroporous physical structure. Tannins and similar naturally occurring organics cause most of the color in potable waters. ProSelect Tannin High Purity removes these substances and is easily regenerated with sodium chloride. Organic trap resins should be regenerated frequently to prevent the NOM from building up inside the resin beads and eventually causing fouling. For industrial applications it is sometimes useful to add a little caustic to the brine in order to increase capacity and reduce leakage. Use of chloride form anion resin reduces the pH of the product water during the early part of the exhaustion cycle.





CAPACITY AND LEAKAGE — *Capacity and leakage data are based on 2 gpm/cu.ft. flow rate, pH near neutral, and 36 inch minimum bed depth. Capacity is for TOC plus sulfate. No engineering downgrade has been applied.*

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1386
EFFECTIVE
FEBRUARY 2024

SPECIALTY RESIN

PROSELECT™ NITRATE

ProSelect Nitrate is a chloride form macroporous nitrate selective strong base anion resin. It has a unique functionality that increases selectivity for nitrate and decreases selectivity for sulfate. This results in higher operating capacity, lower leakage, and freedom from nitrate dumping if operated past sulfate break. It is intended for all nitrate removal applications, and can also be used to remove perchlorate.

FEATURES

- Highest operating capacity of any nitrate selective resin
- Highly uniform particle size
- Low pressure drop, superior kinetics
- Superior physical stability
- Low sulfate selectivity and high operating capacity
- Certified to NSF/ANSI/CAN Standard 61

Suggested Operating Conditions

Maximum Temperature	
Chloride Form	170°F (77°C)
Minimum Bed Depth	24 inches
Backwash Expansion	25 to 50%
Maximum Pressure Loss	20 psi
Operating pH Range	4 to 10 SU
Regenerant Concentration	
Salt Cycle	5 to 10% NaCl
Regenerant Level	>10 lb/cu.ft.
Regenerant Flow Rate	0.25 to 1.0 gpm/cu.ft.
Regenerant Contact Time	> 30 minutes
Displacement Flow Rate	Same as dilution flow
Displacement Volume	10 to 15 gal/cu.ft
Rinse Flow Rate	Same as service flow
Rinse Volume	35 to 60 gal/cu.ft.
Service Flow Rate	
Average Flow	1 to 4 gpm/cu.ft.
Peak Flow	< 10 gpm/cu.ft.

Packaging Options

500 ml samples, 1 cu.ft. bags, 1 cu.ft. boxes, 1 cu.ft. drums, 7 cu.ft. drums, 42 cu.ft. supersacks

Part Number

Chloride Form	ER20002

Physical Properties

Polymer Matrix	Styrenic Macroporous
Ionic Form	Chloride
Functional Group	Triethylamine
Physical Form	Spherical beads
Color	White to tan
Particle Size	16 to 50 US Mesh (297 to 1190 µm)
% < 50 mesh (300 µm)	< 1%
Minimum Sphericity	95%
Uniformity Coefficient	1.6
Reversible Swelling	Cl to No_3 –5% to –10%
Temperature Limit	250°F (121°C)
Capacity	1.0 meq/ml
Moisture Retention	46 to 65%
Regenerability	Yes
Approx. Shipping Weight	40 to 42 lb/cu.ft. (641 to 673 g/L)

CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

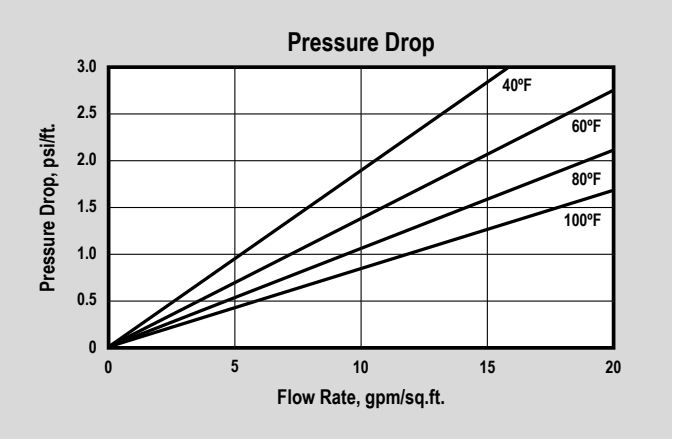
Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • http://www.swtwater.com

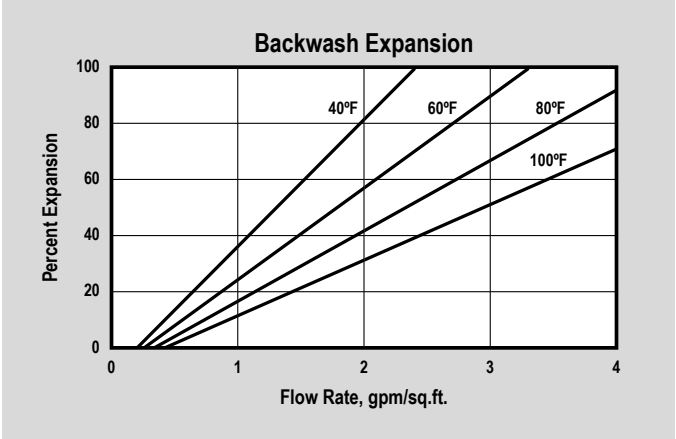
MEMBER Water Quality ASSOCIATION

FORM 1166
EFFECTIVE
APRIL 2023

PROSELECT™ NITRATE



PRESSURE DROP — *The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.*

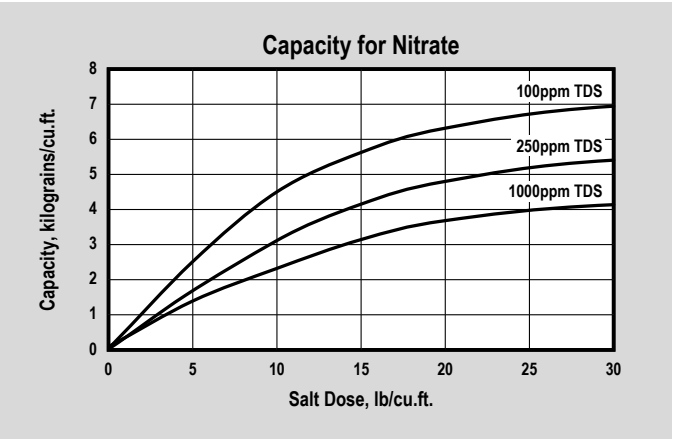


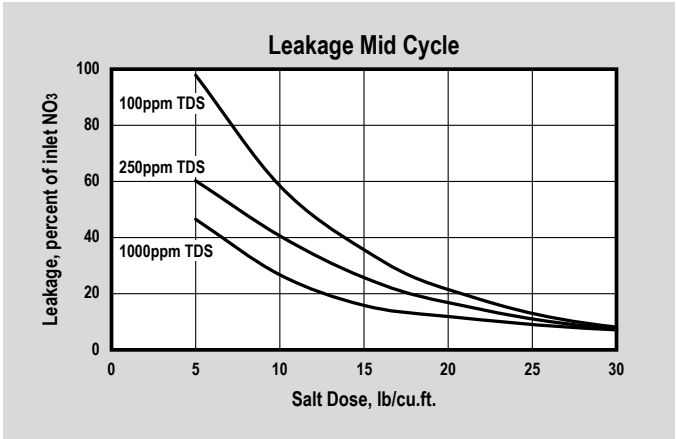
BACKWASH — *The graph above shows the expansion characteristics as a function of flow rate at various temperatures.*

APPLICATIONS

Nitrate Removal

ProSelect Nitrate is used in the chloride form to remove nitrates from potable water. It has a unique amine functional group that eliminates the possibility of nitrate dumping. ER20002 has reduced affinity for sulfate which provides high operating capacity and efficient regeneration. When treating waters with high hardness, the brine dilution and displacement waters should be softened and a low hardness salt used to prevent scaling.





CAPACITY AND LEAKAGE — *Capacity and leakage based on 10% NO_3 and 40% SO_4 in the feed and 35.7 ppm NO_3 endpoint (all as $CaCO_3$). Capacity and leakage are for nitrate alone. TDS is for total anions as $CaCO_3$. No engineering downgrade has been applied.*

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • http://www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1166
EFFECTIVE
APRIL 2023

SPECIALTY RESIN

PROSELECT™ SILICA

ProSelect Silica (P/N ER20003) — If you've run into silica problems in the past, you know how hard it is to take care of them. Now, we've formulated the perfect resin to work hand-in-hand with our ProSoft™ Premium softening resin for the purpose of silica removal. ProSelect Silica is also the perfect choice for mixed-bed demineralizers when 100% ion and organic removal is required. At SWT, we respond to your needs.

FEATURES

- Complies with USDA & FDA regulations (paragraph 21 CFR173.25) for potable water applications *
- Uniform particle size, low pressure drop
- Superior physical stability
- Organic fouling resistance high operating capacity
- Certified to NSF/ANSI Standard 61

* For potable water applications, the resin must be properly pre-treated, usually by multiple exhaustion and regeneration cycles, to insure compliance with extractable levels.

Physical Properties

Polymer Structure	Styrene crosslinked with DVB
Functional Group	R-N-$(CH_3)^3$ $+X^-$
Ionic Form, as shipped	Chloride or Hydroxide
Physical Form	Tough, spherical beads
Screen Size Distribution	16 to 50 nominal
+16 mesh (U.S. Std.)	5% maximum
–50 mesh (U.S. Std.)	1% maximum
pH Range	0 to 14
Sphericity	93% minimum
Uniformity Coefficient	1.6 approximate
Water Retention	
Chloride Form	51 to 60%
Hydroxide Form	65 to 70%
Solubility	Insoluble
Approximate Shipping Weight	
Chloride Form	43 lb/cu.ft.
Hydroxide Form	41 lb/cu.ft.
Swelling Cl– to OH– Form	25 to 30% approximate
Total Capacity	
Chloride Form	1.25 meq/ml min
Hydroxide Form	1.0 meq/ml min

Suggested Operating Conditions

Maximum Temperature	
Chloride Form	170°F (77°C)
Hydroxide Form	140°F (60°C)
Minimum Bed Depth	24 inches
Backwash Rate (see next page)	
50% Bed Expansion @ 60°F	1.7 gpm/sq.ft.
Regenerant Concentration †	2 to 6% NaOH
Regenerant Flow Rate	0.25 to 1.0 gpm/cu.ft.
Regenerant Contact Time	60 minutes minimum
Regenerant Level	4 to 10 lb/cu.ft.
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	10 to 15 gal/cu.ft
Fast Rinse Rate	Same as Service Flow Rate
Fast Rinse Volume	35 to 60 gal/cu.ft.
Service Flow Rate	2 to 4 gpm/cu.ft.
Pressure Drop	See next page

Operating Capacity

The operating capacity of ProSelect Silica for acid removal at various regeneration levels when treating an influent with a concentration of 500 ppm, as $CaCO_3$, is shown in the table below.

Pounds NaOH/cu.ft.	Capacity, Kilograins/cu.ft.				
	HCl	H_2SO_4	H_2SiO_3	H_2CO_3	H_3PO_4
4	11.5	14.0	12.6	18.6	16.1
6	13.5	16.3	14.8	19.8	17.8
8	15.2	18.3	16.7	21.6	19.2
10	16.8	20.0	19.8	22.2	20.5

† **CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS**. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

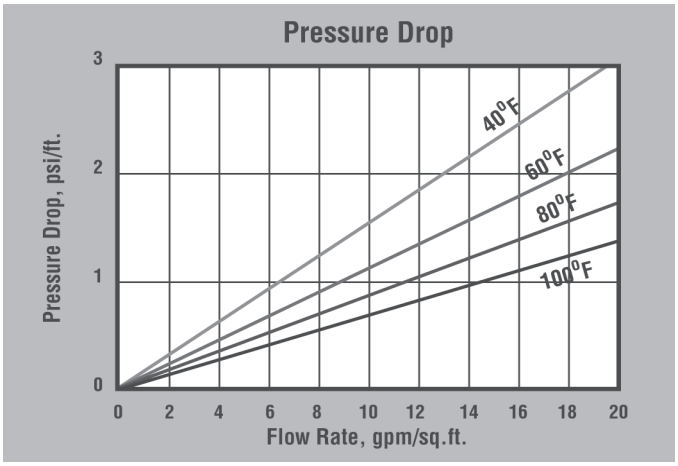
Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

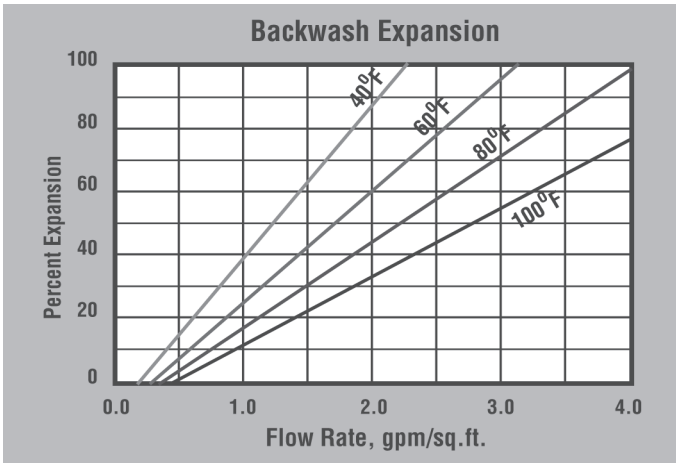
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1167
EFFECTIVE
SEPTEMBER 2006

SPECIALTY RESIN

PROSELECT™ SILICA





PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH — After each cycle the resin bed should be backwashed at a rate that expands the bed 50 to 75 percent. This will remove any foreign matter and reclassify the bed. The graph above shows the expansion characteristics of ProSelect Silica in the chloride form.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1167
EFFECTIVE
SEPTEMBER 2006

SPECIALTY RESIN

PROSELECT™ HEXCHROME

ProSelect HexChrome (P/N ER20011) is a granular gel weak base anion resin with unique epoxy polyamine functionality. It utilizes a secondary mechanism for chromate removal that causes chromium to precipitate inside the resin matrix when the feed pH is slightly acidic. ProSelect HexChrome is intended for all chromate removal applications. It is shipped in the acid chloride form.

FEATURES

- Complies with US FDA regulations (paragraph 21 CFR173.25) for potable water applications *
- High capacity media designed for one-time use
- Large granules provide good physical strength and minimal fines provide low pressure loss
- Removes chromium from water using weak base anion exchange resin at near-neutral pH.
- Certified to NSF/ANSI Standard 61

* For potable water applications, the resin must be properly pre-treated, usually by multiple exhaustion and regeneration cycles, to insure compliance with extractable levels.

Physical Properties

Polymer Structure	Epoxy polyamine
Polymer Type	Gel
Functional Group	Mixed amines
Physical Form	Granules
Ionic Form, as shipped	Acid chloride
Total Capacity	2.1 meq/mL min.
Water Retention	52 to 58%
Approximate Shipping Weight	40 lb/cu.ft.
Screen Size Distribution (U.S. Mesh)	12 to 40
Maximum Fines Content (<50 mesh)	1%
Uniformity Coefficient	2 approximate
Resin Color	Amber to yellow

Suggested Operating Conditions

Maximum Continuous Temperature	100°F (38°C)
Minimum Bed Depth	24 inches
Backwash Expansion (see next page)	25 to 50%
Max. Pressure Loss (see next page)	20 psi
Operating pH Range	4 to 7 SU
Service Flow Rate	1 to 4 gpm/cu.ft.

Note: Physical properties can be certified on a per lot basis, per request.

Chromate Removal

ProSelect HexChrome is a unique weak base anion exchanger with a secondary hybrid capture mechanism for chromate. Under neutral to slightly acidic conditions, chromate is first exchanged into the resin, then reduced to trivalent chrome which covalently bonds to the resin backbone. Throughput capacity is many times greater than that provided by the ion exchange groups alone, allowing very high loading and infrequent change-outs. Because the hexavalent chromate reduction step is both time and pH dependent, it is the rate controlling step. Operation at pH greater than 6 requires low flow rates, rest periods, or periodic soak steps at lower pH to allow the reduction step to catch up. Capacities in excess of 5 lbs of chrome (as Cr) per cubic foot of media are routinely achieved with ProSelect HexChrome when operated at optimum pH and flow conditions. ProSelect HexChrome is not affected by common ions such as nitrate, sulfate, or chloride but can be damaged or fouled by high levels of suspended solids, iron, manganese, chlorine, etc.

Prior to first use for potable water, the resin should be backwashed for a minimum of twenty (20) minutes, followed by ten (10) bed volumes of downflow rinse.

† **CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS**. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

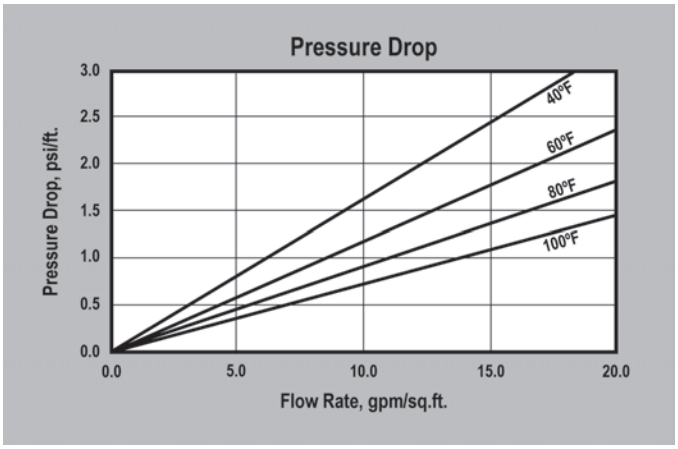
Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

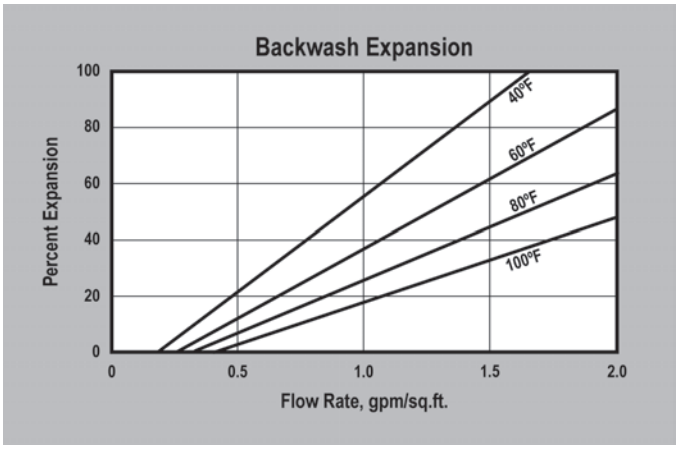
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1384
EFFECTIVE
JULY 2017

SPECIALTY RESIN

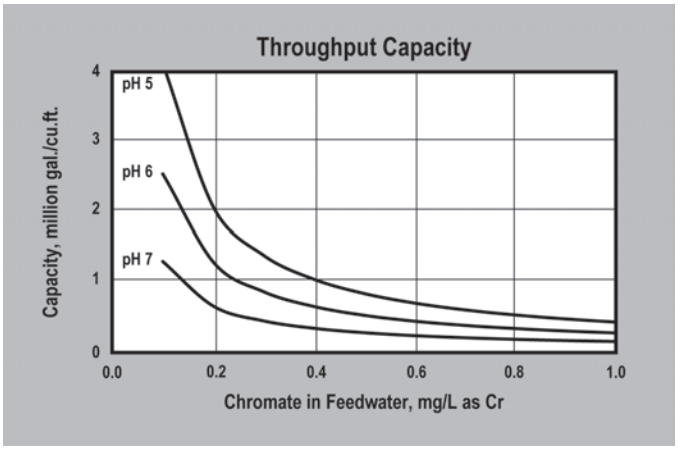
PROSELECT™ HEXCHROME





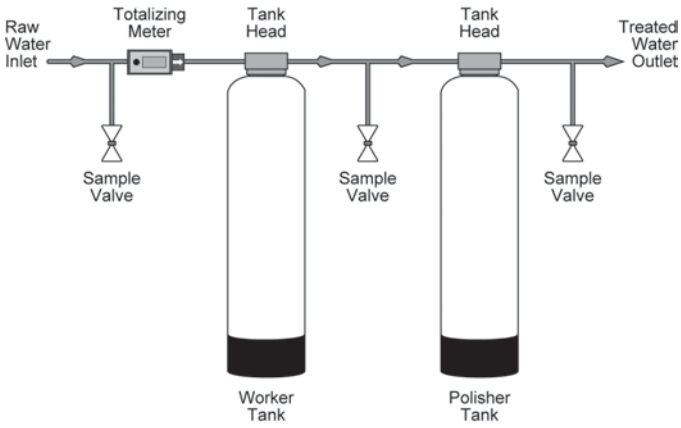
PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH — The graph above shows the expansion characteristics as a function of flow rate at various temperatures.



CAPACITY — The graph above is based on waters with TDS less than 500 ppm and is for chromate alone, exclusive of other anions. Capacity shown is for the working bed in a worker polisher configuration. No engineering downgrade has been applied.

Suggested System Configuration



SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1384
EFFECTIVE
JULY 2017

SPECIALTY RESIN

PROSELECT™ PFAS

ProSelect PFAS is a chloride form perchlorate, nitrate, and PFAS selective gel strong base anion or polystyrenic macroporous resin. It is Gold Seal Certified by the WQA for use in potable water applications. Its unique functionality greatly increases the selectivity for nitrate while greatly decreasing the interference from sulfate ions. ProSelect PFAS is recommended for the removal of perchlorate, nitrate, and most PFAS compounds.

FEATURES & BENEFITS

- Highest operating capacity of any perchlorate selective resin
- Low sulfate selectivity
- Controlled particle size, low pressure drop
- Superior physical stability
- NSF/ANSI-61 Certified for Material Safety

Suggested Operating Conditions

Maximum Temperature	
Chloride Form	170°F (66°C)
Minimum Bed Depth	24 inches
Backwash Expansion	25 to 50%
Maximum Pressure Loss	20 psi
Operating pH Range	4 to 10 SU
Regenerant Concentration	
Salt Cycle	5 to 10% NaCl
Regenerant Level	>10 lb/cu.ft.
Regenerant Flow Rate	0.25 to 1.0 gpm/cu.ft.
Regenerant Contact Time	> 30 minutes
Displacement Flow Rate	Same as dilution water
Displacement Volume	10 to 15 gal/cu.ft
Rinse Flow Rate	Same as service flow
Rinse Volume	35 to 60 gal/cu.ft.
Service Flow Rate	1 to 3 gpm/cu.ft.

Packaging Options

500 ml samples, 1 cu.ft. bags, 1 cu.ft. boxes, 1 cu.ft. drums, 7 cu.ft. drums, 42 cu.ft. supersacks

CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

Part Number

Strong Base Anion	ER20012
Polystyrenic Macroporous	ER20012-MP

Physical Properties

Polymer Matrix	
ER20012	Styrenic Gel
ER20012-MP	Styrenic Macroporous
Ionic Form	Chloride
Functional Group	Tributylamine
Physical Form	Spherical beads
Color	
ER20012	Yellow to orange
ER20012-MP	White to tan
Particle Size	16 to 50 US Mesh (297 to 1190 µm)
Minimum Sphericity	
ER20012	80%
ER20012-MP	95%
Uniformity Coefficient	1.6 approx.
Reversible Swelling	Cl to No_3 –5% to –10%
Temperature Limit	250°F (121°C)
Total Exchange Capacity	
ER20012	0.8 meq/ml
ER20012-MP	0.6 meq/ml *
Moisture Retention	
ER20012	38 to 50%
ER20012-MP	43 to 58%
Regenerability	Yes **
Approx. Shipping Weight	40 to 42 lb/cu.ft. (641 to 673 g/L)

* Despite having a lower capacity than ER20012, ER20012-MP has faster kinetics and can be used at shorter EBCT.

** Exception: currently non-regenerable for PFAS removal applications.

Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

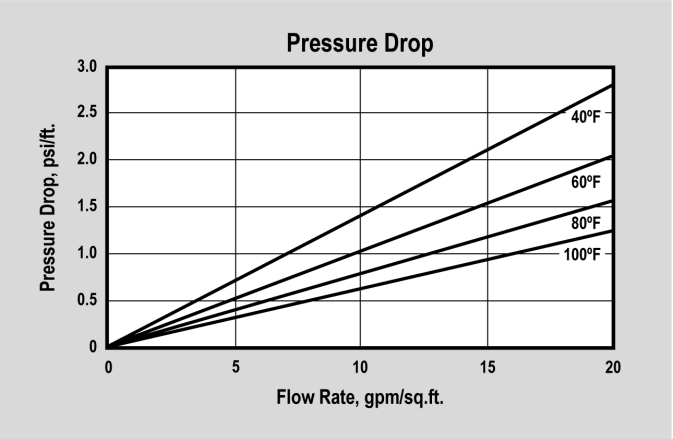
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION

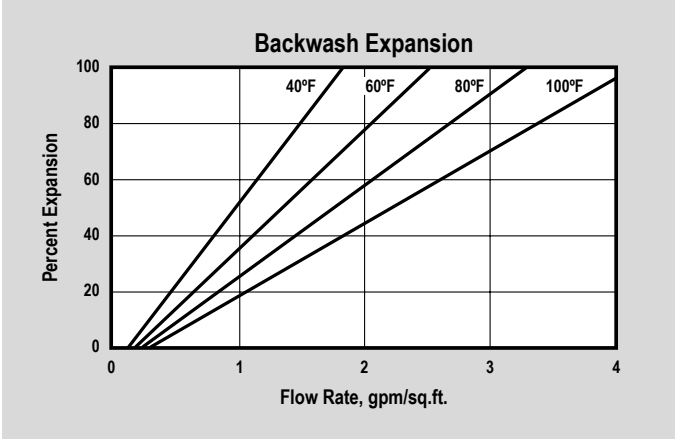
FORM 1520
EFFECTIVE
OCTOBER 2022

SPECIALTY RESIN

PROSELECT™ PFAS



PRESSURE DROP — *The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.*



BACKWASH — *The graph above shows the expansion characteristics as a function of flow rate at various temperatures.*

APPLICATIONS

PFAS Removal

ProSelect PFAS can be used for removal of various PFAS compounds, including PFOA and PFOS, from water. Currently, this is a non-regnerable application. Testing has shown it can remove a wide range of other PFAS species in addition to these compounds. Ion exchange offers the benefit of reduced contact times and longer throughputs vs. conventional activated carbon treatment. An understanding of the influent water chemistry is needed for thorough review. Levels of TOC, VOC, and individual PFAS compounds are needed in addition to the basic background water chemistry (chloride, sulfate, alkalinity, etc.). Any other contaminants that may be present are also needed to determine impact on PFAS removal (uranium, perchlorate, chromate, arsenic, etc.).

Perchlorate Removal

ProSelect PFAS is ideal for single use perchlorate removal applications and is a cost effective method to remove trace levels of perchlorate from water. The perchlorate ion is very strongly attracted to ProSelect PFAS—so much so that regeneration is impractical or impossible. However, in most cases, ER20012-MP loads perchlorate to almost the full capacity of the resin, resulting in very long life and eliminating the need to regenerate and re-use the spent resin.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1520
EFFECTIVE
OCTOBER 2022

SPECIALTY RESIN

PROSELECT™ BORON/BORATE

ProSelect Boron/Borate is a borate selective macroporous chelating weak base anion resin. Its unique functionality provides exceedingly high selectivity for boron in almost any aqueous solution, yet can be regenerated with acid and then neutralized with various alkaline salts prior to use. It is intended for all borate removal applications including potable water, ultrapure water, and boron removal from concentrated brines.

FEATURES

- Highly selective for boron — able to remove boron from almost any liquid solution, provided that the pH is greater than 4
- Superior physical stability — 90% plus sphericity, high crush strengths, and carefully controlled particle distribution provide long life and low pressure drop
- Suitable for regenerable applications — two stage acid/caustic regeneration process restores the capacity for hundreds of operating cycles

Suggested Operating Conditions

Maximum Temperature	
Free Base Form	170°F (77°C)
Minimum Bed Depth	24 inches
Backwash Expansion	25 to 50%
Maximum Pressure Loss	20 psi
Operating pH Range	4 to 10 SU
Regenerant Concentration	
Acid Strip	0.5 to 6% HCl
Caustic Neutralization	1 to 4% NaOH
Regenerant Level	3 to 10 lb/cu.ft.
Regenerant Flow Rate	0.25 to 1.0 gpm/cu.ft.
Regenerant Contact Time	> 30 minutes
Displacement Flow Rate	Same as dilution flow
Displacement Volume	10 to 15 gal/cu.ft
Rinse Flow Rate	Same as service flow
Rinse Volume	35 to 60 gal/cu.ft.
Service Flow Rate	0.5 to 2 gpm/cu.ft.

Packaging Options

500 ml samples, 1 cu.ft. bags, 1 cu.ft. boxes, 1 cu.ft. drums, 7 cu.ft. drums, 42 cu.ft. supersacks

Part Number

Free Base Form	ER20013

Physical Properties

Polymer Matrix	Styrenic Macroporous
Ionic Form	Free Base
Functional Group	Methylglucamine
Physical Form	Spherical beads
Color	White to tan
Particle Size	16 to 50 US Mesh (297 to 1190 µm)
% < 50 mesh (300 µm)	< 1%
Minimum Sphericity	95%
Uniformity Coefficient	1.6
Reversible Swelling	Free Base to Cl 15% to 20%
Temperature Limit	170°F (77°C)
Capacity	0.8 meq/ml
Moisture Retention	46 to 60%
Regenerability	Yes
Approx. Shipping Weight	38 to 40 lb/cu.ft. (609 to 641 g/L)

CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

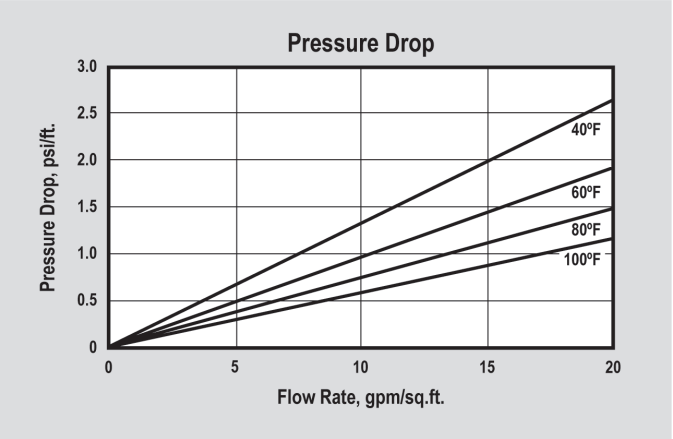
Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • http://www.swtwater.com

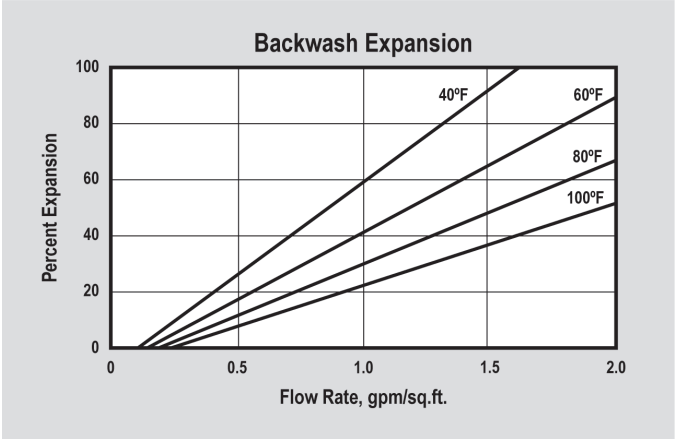
MEMBER Water Quality ASSOCIATION
FORM 1166
EFFECTIVE
SEPTEMBER 2023

SPECIALTY RESIN

PROSELECT™ BORON/BORATE



PRESSURE DROP — *The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.*



BACKWASH — *The graph above shows the expansion characteristics as a function of flow rate at various temperatures.*

APPLICATIONS

Boron Removal From Potable Water

ProSelect Boron/Borate can be used to remove boron from potable waters of any type. Its selectivity for boron is so high that the concentration of common bulk ions—such as chloride, sulfate, and bicarbonate—are unimportant. ProSelect Boron/Borate is kinetically limited and cannot be operated at a high flow rate without experiencing increased leakage and decreased throughput capacity.

Regeneration is accomplished with acid to strip the boron, followed by caustic to remove the acidity. The regenerated resin should be buffered into the potable water range to prevent possible pH excursions when it is first returned to service, and also to prevent possible calcium carbonate scaling.

Boron Removal From Brine

ProSelect Boron/Borate can be used to remove boron from almost any brine stream, even when the brine is fully saturated. The brine pH must not be lower than approximately 4 or the chelating exchange groups will be destabilized and might not work properly. Ion exchange in any concentrated salt solution is kinetically hindered by high TDS, therefore flow rates are necessarily low.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • http://www.swtwater.com

MEMBER Water Quality Association
FORM 1166
EFFECTIVE
SEPTEMBER 2023

SPECIALTY RESIN

PROBLEND™ NUCLEAR GRADE HIGH EFFICIENCY MIXED-BED RESIN

ProBlend NG-HE (P/N ER30001) — We took our ProSoft™ Premium softening resin and our ProSelect™ General Purpose anion exchange resin and mixed them together to make one of the highest capacity bulk demineralizers available. ProBlend Nuclear Grade High Efficiency mixed-bed resin is specially suited for optimum performance and low cost regeneration. It is simply the best value for the dollar.

FEATURES

- Complies with USDA & FDA regulations (paragraph 21 CFR173.25) for potable water applications *
- Designed for Portable Exchange DI (PEDI) use
- Highest operating capacity and low odor
- Superior organic fouling resistance
- Performance tested

* For potable water applications, the resin must be properly pre-treated, usually by multiple exhaustion and regeneration cycles, to insure compliance with extractable levels.

Physical Properties

Functional Structure	
Cation	$RSO_3^-H^+$ (Hydrogen form sulfonated polystyrene copolymer)
Anion	$R_4N^+OH^-$ (Hydroxyl form Type 2 strong base alkyl quarternary ammonium polystyrene copolymer)
Ionic Form, as shipped	H/OH
Physical Form	Spherical beads
Screen Size Distribution	
+16 mesh (U.S. Std.)	5% maximum
−50 mesh (U.S. Std.)	2% maximum
Moisture Content	50% maximum
Volume Ratio (as shipped)	
Cation/Anion	42/58
Total Capacity	
Cation (Na^+ form)	1.95 meq/ml minimum
Anion (Cl^- form)	1.45 meq/ml minimum
Approximate Shipping Weight	44 lb/cu.ft. (720g/l)
Standard Packaging	5 or 7 cu.ft. plastic lined fiber drums

Suggested Operating Conditions

Maximum Temperature	
Non-regenerable *	140°F (60°C)
Regenerable	95°F (35°C)
Operating Flow Rate (Typical)	2 to 10 gpm/cu.ft.
pH Range	0 to 14
Backwash Rate (See next page)	
50% Bed Expansion @ 60°F	3.3 gpm/sq.ft.
Pressure Drop	See next page
Percent Conversions to Ionic Form	
Cation H	99% minimum
Anion OH	90% minimum **
Anion Cl + SO_4	10% maximum
Anion CO_3	** (See note below)

First Cycle Operating Capacity

0.65 meq/mL (14.0 Kgrs/cu.ft.) minimum to electrolyte breakthrough. Regenerable capacity first two months in service is approximately 0.6 meq/mL.

Effluent Quality

Greater than 15 megohm on properly pretreated tap water, free of oxidizing agents and suspended matter.

* 6 month typical resin life at 175°F (80°C).

** Hydroxides and CO_3 levels measured immediately after production and may change during storage and shipment due to adsorption of CO_2 from the atmosphere.

CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

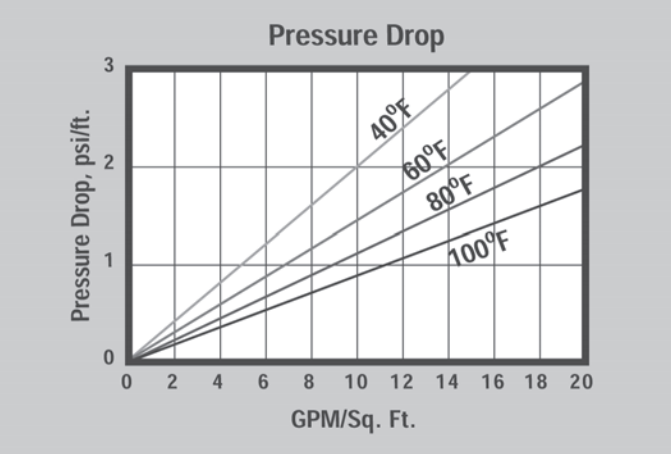
Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

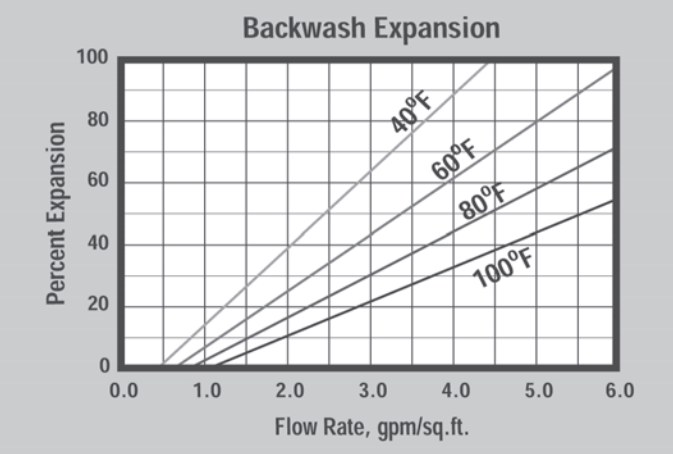
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1352
EFFECTIVE
JANUARY 2013

SPECIALTY RESIN

PROBLEND™ NUCLEAR GRADE
HIGH EFFICIENCY MIXED-BED RESIN





PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH — The backwash step is used to separate the components prior to regeneration and to remove particles. The separation is optimized at a bed expansion of 50 to 75 percent.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1352
EFFECTIVE
JANUARY 2013

SPECIALTY RESIN

PROBLEND™ NUCLEAR GRADE HIGH CAPACITY MIXED-BED RESIN

ProBlend NG-HC (P/N ER30008) is a sturdy, general purpose grade of mixed-bed resin with high capacity and high temperature resistance. The cation component is at least 99% regenerated and the anion component is at least 90% regenerated. The product is fully tested to insure its ability to achieve greater than 15 megohm resistivity effluents under dynamic load.

FEATURES

- Conforms to paragraph 21 CFR173.25 of the Food Additives Regulations of the FDA
- Designed to provide ultra-high purity water
- Highest operating capacity
- Low effluent TOC values
- Superior thermal and physical stability
- Best choice for single use applications, cartridges, and for severe operating conditions

Physical Properties

Functional Structure	
Cation	$RSO_3^-H^+$ (Hydrogen form gelular sulfonated polystyrene copolymer)
Anion	$R_4N^+OH^-$ (Hydroxyl form Type 1 porous gel strong base alkyl quarternary ammonium polystyrene copolymer)
Physical Form	Spherical beads
Screen Size Distribution	
+16 mesh (U.S. Std.)	2% maximum
−45 mesh (U.S. Std.)	2% maximum
Moisture Content (as shipped)	60% maximum
Volume Ratio (as shipped)	
Cation (Na^+ form)	40%
Anion (Cl^- form)	60%
Total Capacity	
Cation (Na^+ form)	1.95 meq/mL minimum
Cation (H^+ form)	1.85 meq/mL minimum
Anion (Cl^- form)	1.40 meq/mL minimum
Anion (OH^- form)	1.12 meq/mL minimum
Approximate Shipping Weight	43 lb/cu.ft. (720g/l)
Standard Packaging	5 or 7 cu.ft. plastic lined fiber drums

Suggested Operating Conditions

Maximum Temperature	
Non-regenerable *	175°F (80°C)
Regenerable	140°F (60°C)
Operating Flow Rate (Typical)	2 to 10 gpm/cu.ft.
pH Range	0 to 14
Backwash Rate (See graph on next page)	
Pressure Drop (See graph on next page)	
Metals Content (Typical ppm dry weight)	
Iron (Fe)	100 ppm maximum
Copper (Cu)	50 ppm maximum
Lead (Pb)	50 ppm maximum
Percent Conversions to Ionic Form	
Cation H	99% minimum
Anion OH	90% minimum **
Anion Cl + SO_4	10% maximum
Anion CO_3	** (See note below)

Column Operating Capacity

0.60 meq/mL (13 Kgrs/cu.ft.) minimum to electrolyte breakthrough during initial cycle.

Limitations

Extended exposure to strong oxidizers, such as chlorine, hydrogen peroxide, and concentrated nitric acid, degrade the structural backbone of the resin and should be avoided.

* 6 month typical resin life at 175°F (80°C).

** Hydroxides and CO_3 levels measured immediately after production and may change during storage and shipment due to adsorption of CO_2 from the atmosphere.

CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

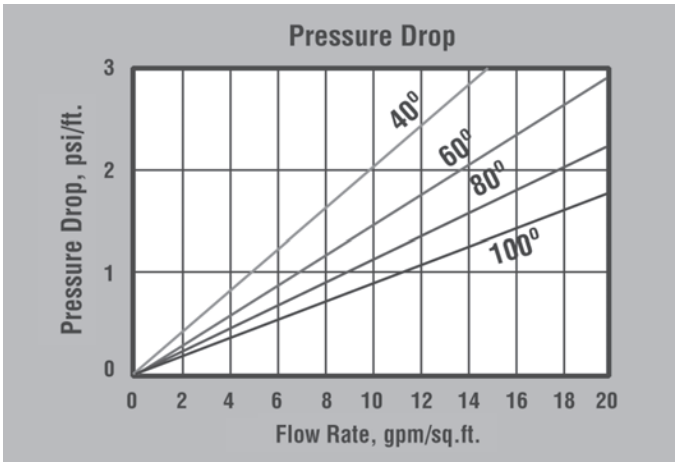
Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

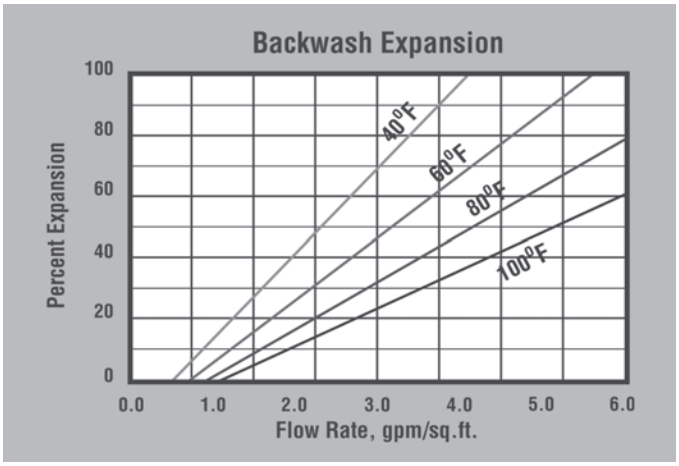
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1325
EFFECTIVE
JANUARY 2013

SPECIALTY RESIN

PROBLEND™ NUCLEAR GRADE HIGH CAPACITY MIXED-BED RESIN





PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH — The backwash step is used to separate the components prior to regeneration and to remove particles. The separation is optimized at a bed expansion of 50 to 75 percent.

ProBlend High Capacity Resins Comparison Table

Specifications	Nuclear Grade (P/N ER30008)	Semi-Conductor (P/N ER30004)	Low TOC Throw (P/N ER30005)	Ultra Low TOC Throw (P/N ER30009)
Resistivity in polishing 18 megohm water @ 60 bed volumes per hour (megohm)	> 15 **	> 18	> 18	> 18
Leachable TOC @ 25 bed volumes from start up (ppb as C) *	No Spec	No Spec	< 25	< 25
Leachable TOC @ 50 bed volumes from start up (ppb as C) *	No Spec	< 50	< 10	< 5
Leachable TOC @ 100 bed volumes from start up (ppb as C) *	No Spec	No Spec	No Spec	< 1

* Leachable TOC measured at 0.5 bed volumes per minute at 175ºF (80ºC).

** Influent greater than 1 megohm.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality Association

FORM 1325
EFFECTIVE
JANUARY 2013

SPECIALTY RESIN

PROBLEND™ SEMICONDUCTOR HIGH CAPACITY MIXED-BED RESIN

ProBlend SC-HC (P/N ER30004) is a premium grade mixed-bed made to reduce leachable TOC levels and ensure its ability to produce 18 megohm resistivity. The product is fully tested to ensure its ability to achieve 18 megohm resistivity. Each batch is tested to ensure it will rinse to below 50 ppb of leachable TOC in less than 50 bed volumes from start of service.

FEATURES

- Conforms to paragraph 21 CFR173.25 of the Food Additives Regulations of the FDA
- Designed to provide ultra-high purity water
- Highest operating capacity
- Low effluent TOC values
- Superior thermal and physical stability
- Best choice for single use applications, cartridges, and for severe operating conditions

Physical Properties

Functional Structure	
Cation	$RSO_3^-H^+$ (Hydrogen form gelular sulfonated polystyrene copolymer)
Anion	$R_4N^+OH^-$ (Hydroxyl form Type 1 porous gel strong base alkyl quarternary ammonium polystyrene copolymer)
Physical Form	Spherical beads
Screen Size Distribution	
+16 mesh (U.S. Std.)	2% maximum
−45 mesh (U.S. Std.)	2% maximum
Moisture Content (as shipped)	60% maximum
Volume Ratio (as shipped)	
Cation (Na^+ form)	40%
Anion (Cl^- form)	60%
Total Capacity	
Cation (Na^+ form)	1.95 meq/mL minimum
Cation (H^+ form)	1.85 meq/mL minimum
Anion (Cl^- form)	1.40 meq/mL minimum
Anion (OH^- form)	1.12 meq/mL minimum
Approximate Shipping Weight	43 lb/cu.ft. (720g/l)
Standard Packaging	5 or 7 cu.ft. plastic lined fiber drums

Suggested Operating Conditions

Maximum Temperature	
Non-regenerable *	175°F (80°C)
Regenerable	140°F (60°C)
Operating Flow Rate (Typical)	2 to 10 gpm/cu.ft.
pH Range	0 to 14
Backwash Rate (See graph on next page)	
Pressure Drop (See graph on next page)	
Metals Content (Typical ppm dry weight)	
Iron (Fe)	100 ppm maximum
Copper (Cu)	50 ppm maximum
Lead (Pb)	50 ppm maximum
Percent Conversions to Ionic Form	
Cation H	99% minimum
Anion OH	95% minimum **
Anion Cl + SO_4	5% maximum
Anion CO_3	** (See note below)

Column Operating Capacity

0.60 meq/mL (13 Kgrs/cu.ft.) minimum to electrolyte breakthrough during initial cycle.

Limitations

Extended exposure to strong oxidizers, such as chlorine, hydrogen peroxide, and concentrated nitric acid, degrade the structural backbone of the resin and should be avoided.

* 6 month typical resin life at 175°F (80°C).

** Hydroxides and CO_3 levels measured immediately after production and may change during storage and shipment due to adsorption of CO_2 from the atmosphere.

CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

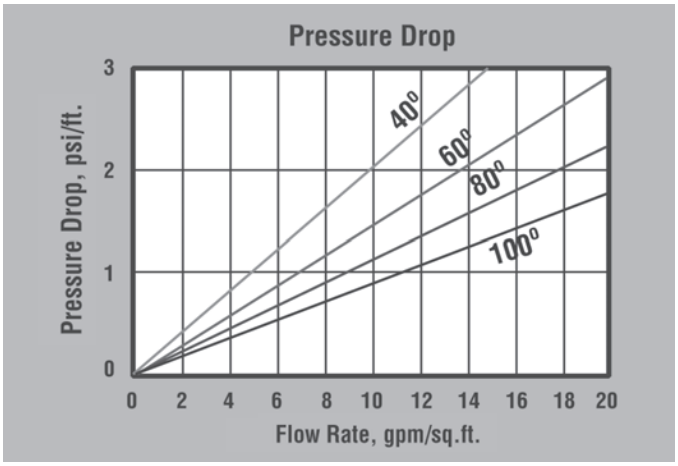
Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

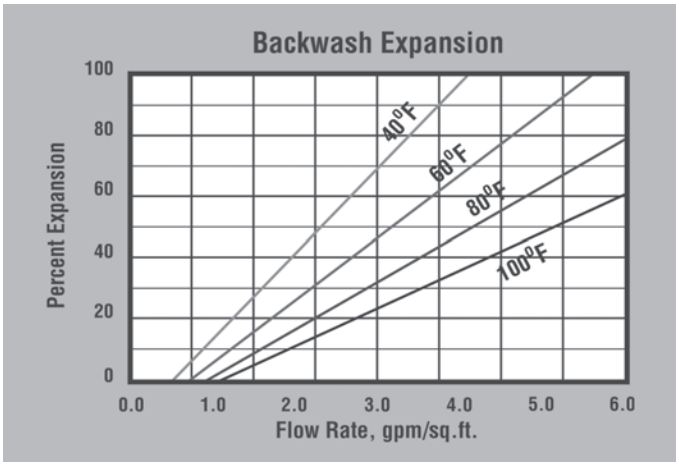
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1326
EFFECTIVE
JANUARY 2013

SPECIALTY RESIN

PROBLEND™ SEMICONDUCTOR HIGH CAPACITY MIXED-BED RESIN





PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH — The backwash step is used to separate the components prior to regeneration and to remove particles. The separation is optimized at a bed expansion of 50 to 75 percent.

ProBlend High Capacity Resins Comparison Table

Specifications	Nuclear Grade (P/N ER30008)	Semi-Conductor (P/N ER30004)	Low TOC Throw (P/N ER30005)	Ultra Low TOC Throw (P/N ER30009)
Resistivity in polishing 18 megohm water @ 60 bed volumes per hour (megohm)	> 15 **	> 18	> 18	> 18
Leachable TOC @ 25 bed volumes from start up (ppb as C) *	No Spec	No Spec	< 25	< 25
Leachable TOC @ 50 bed volumes from start up (ppb as C) *	No Spec	< 50	< 10	< 5
Leachable TOC @ 100 bed volumes from start up (ppb as C) *	No Spec	No Spec	No Spec	< 1

* Leachable TOC measured at 0.5 bed volumes per minute at 175ºF (80ºC).

** Influent greater than 1 megohm.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality Association

FORM 1326
EFFECTIVE
JANUARY 2013

SPECIALTY RESIN

PROBLEND™ LOW TOC THROW HIGH CAPACITY MIXED-BED RESIN

ProBlend LT-HC (P/N ER30005) is a high grade mixed-bed made to attain very low leachable TOC levels. The product is fully tested to ensure its ability to achieve 18 megohm resistivity. Each batch is also tested to ensure its ability to rinse to below 25 ppb of leachable TOC in less than 25 bed volumes from start up and to below 10 ppb in less than 50 bed volumes.

FEATURES

- Conforms to paragraph 21 CFR173.25 of the Food Additives Regulations of the FDA
- Designed to provide ultra-high purity water
- Highest operating capacity
- Low effluent TOC values
- Superior thermal and physical stability
- Best choice for single use applications, cartridges, and for severe operating conditions

Physical Properties

Functional Structure	
Cation	$RSO_3^-H^+$ (Hydrogen form gelular sulfonated polystyrene copolymer)
Anion	$R_4N^+OH^-$ (Hydroxyl form Type 1 porous gel strong base alkyl quarternary ammonium polystyrene copolymer)
Physical Form	Spherical beads
Screen Size Distribution	
+16 mesh (U.S. Std.)	2% maximum
−45 mesh (U.S. Std.)	2% maximum
Moisture Content (as shipped)	60% maximum
Volume Ratio (as shipped)	
Cation (Na^+ form)	40%
Anion (Cl^- form)	60%
Total Capacity	
Cation (Na^+ form)	1.95 meq/mL minimum
Cation (H^+ form)	1.85 meq/mL minimum
Anion (Cl^- form)	1.40 meq/mL minimum
Anion (OH^- form)	1.12 meq/mL minimum
Approximate Shipping Weight	43 lb/cu.ft. (720g/l)
Standard Packaging	5 or 7 cu.ft. plastic lined fiber drums

Suggested Operating Conditions

Maximum Temperature	
Non-regenerable *	175°F (80°C)
Regenerable	140°F (60°C)
Operating Flow Rate (Typical)	2 to 10 gpm/cu.ft.
pH Range	0 to 14
Backwash Rate (See graph on next page)	
Pressure Drop (See graph on next page)	
Metals Content (Typical ppm dry weight)	
Iron (Fe)	100 ppm maximum
Copper (Cu)	50 ppm maximum
Lead (Pb)	50 ppm maximum
Percent Conversions to Ionic Form	
Cation H	99% minimum
Anion OH	95% minimum **
Anion Cl + SO_4	5% maximum
Anion CO_3	** (See note below)

Column Operating Capacity

0.60 meq/mL (13 Kgrs/cu.ft.) minimum to electrolyte breakthrough during initial cycle.

Limitations

Extended exposure to strong oxidizers, such as chlorine, hydrogen peroxide, and concentrated nitric acid, degrade the structural backbone of the resin and should be avoided.

* 6 month typical resin life at 175°F (80°C).

** Hydroxides and CO_3 levels measured immediately after production and may change during storage and shipment due to adsorption of CO_2 from the atmosphere.

CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

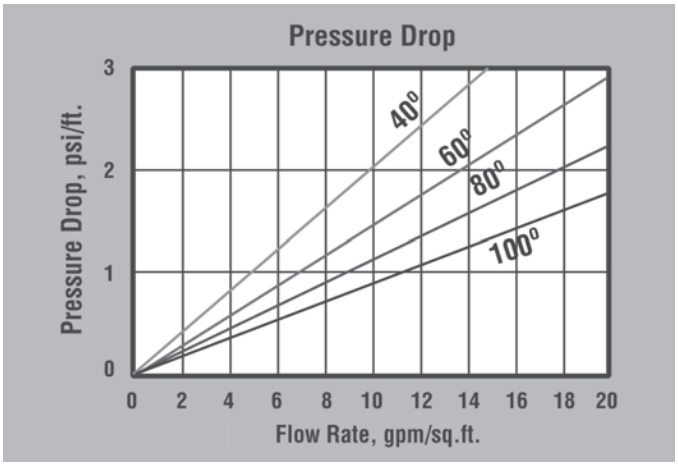
Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

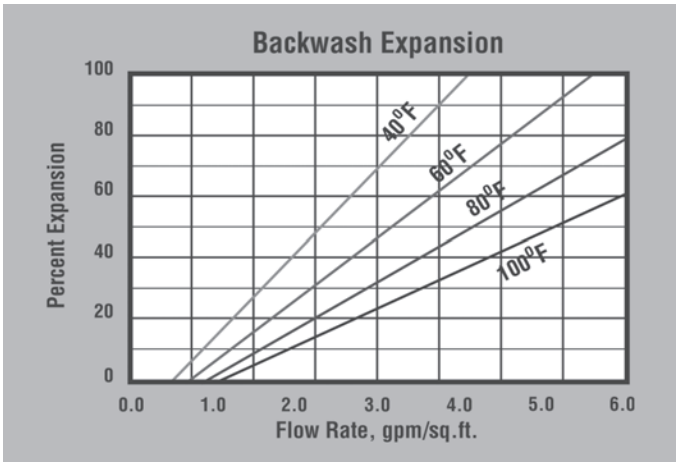
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1327
EFFECTIVE
JANUARY 2013

SPECIALTY RESIN

PROBLEND™ LOW TOC THROW HIGH CAPACITY MIXED-BED RESIN





PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH — The backwash step is used to separate the components prior to regeneration and to remove particles. The separation is optimized at a bed expansion of 50 to 75 percent.

ProBlend High Capacity Resins Comparison Table

Specifications	Nuclear Grade (P/N ER30008)	Semi-Conductor (P/N ER30004)	Low TOC Throw (P/N ER30005)	Ultra Low TOC Throw (P/N ER30009)
Resistivity in polishing 18 megohm water @ 60 bed volumes per hour (megohm)	> 15 **	> 18	> 18	> 18
Leachable TOC @ 25 bed volumes from start up (ppb as C) *	No Spec	No Spec	< 25	< 25
Leachable TOC @ 50 bed volumes from start up (ppb as C) *	No Spec	< 50	< 10	< 5
Leachable TOC @ 100 bed volumes from start up (ppb as C) *	No Spec	No Spec	No Spec	< 1

* Leachable TOC measured at 0.5 bed volumes per minute at 175ºF (80ºC).

** Influent greater than 1 megohm.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

FORM 1327
EFFECTIVE
JANUARY 2013

SPECIALTY RESIN

PROBLEND™ ULTRA LOW TOC THROW HIGH CAPACITY MIXED-BED RESIN

ProBlend UL-HC (P/N ER30009) is the highest quality grade of mixed-bed resin with the lowest possible ionic impurities and TOC leachables. The product is fully tested to ensure its ability to achieve 18 megohm resistivity. Each batch is also tested to ensure its ability to rinse to below 5 ppb of leachable TOC in less than 50 bed volumes from start up and less than 1 ppb after 100 bed volumes.

FEATURES

- Conforms to paragraph 21 CFR173.25 of the Food Additives Regulations of the FDA
- Designed to provide ultra-high purity water
- Highest operating capacity
- Low effluent TOC values
- Superior thermal and physical stability
- Best choice for single use applications, cartridges, and for severe operating conditions

Physical Properties

Functional Structure	
Cation	$RSO_3^-H^+$ (Hydrogen form gelular sulfonated polystyrene copolymer)
Anion	$R_4N^+OH^-$ (Hydroxyl form Type 1 porous gel strong base alkyl quarternary ammonium polystyrene copolymer)
Physical Form	Spherical beads
Screen Size Distribution	
+16 mesh (U.S. Std.)	2% maximum
−45 mesh (U.S. Std.)	2% maximum
Moisture Content (as shipped)	60% maximum
Volume Ratio (as shipped)	
Cation (Na^+ form)	40%
Anion (Cl^- form)	60%
Total Capacity	
Cation (Na^+ form)	1.95 meq/mL minimum
Cation (H^+ form)	1.85 meq/mL minimum
Anion (Cl^- form)	1.40 meq/mL minimum
Anion (OH^- form)	1.12 meq/mL minimum
Approximate Shipping Weight	43 lb/cu.ft. (720g/l)
Standard Packaging	5 or 7 cu.ft. plastic lined fiber drums

Suggested Operating Conditions

Maximum Temperature	
Non-regenerable *	175°F (80°C)
Regenerable	140°F (60°C)
Operating Flow Rate (Typical)	2 to 10 gpm/cu.ft.
pH Range	0 to 14
Backwash Rate (See graph on next page)	
Pressure Drop (See graph on next page)	
Metals Content (Typical ppm dry weight)	
Iron (Fe)	100 ppm maximum
Copper (Cu)	50 ppm maximum
Lead (Pb)	50 ppm maximum
Percent Conversions to Ionic Form	
Cation H	99.9% minimum
Anion OH	98% minimum **
Anion Cl + SO_4	2% maximum
Anion CO_3	** (See note below)

Column Operating Capacity

0.60 meq/mL (13 Kgrs/cu.ft.) minimum to electrolyte breakthrough during initial cycle.

Limitations

Extended exposure to strong oxidizers, such as chlorine, hydrogen peroxide, and concentrated nitric acid, degrade the structural backbone of the resin and should be avoided.

* 6 month typical resin life at 175°F (80°C).

** Hydroxides and CO_3 levels measured immediately after production and may change during storage and shipment due to adsorption of CO_2 from the atmosphere.

CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

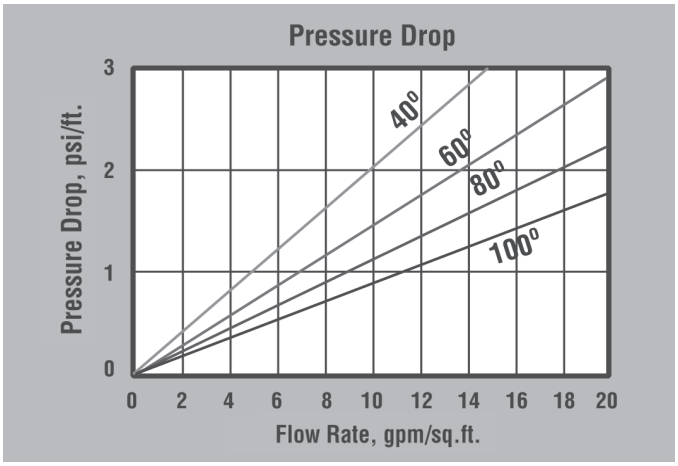
Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

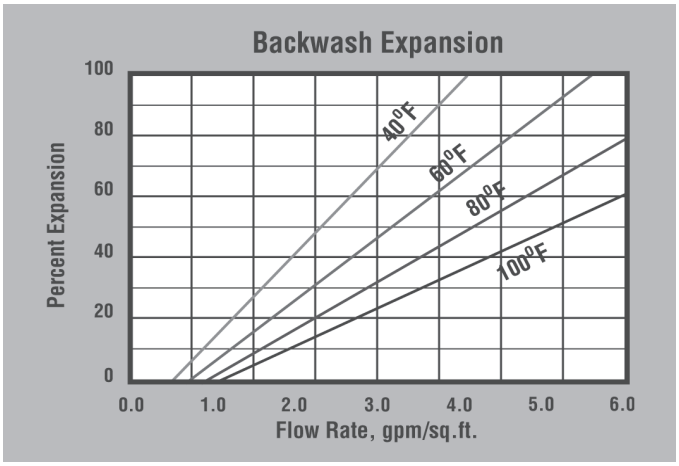
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1328
EFFECTIVE
JANUARY 2013

SPECIALTY RESIN

PROBLEND™ ULTRA LOW TOC THROW HIGH CAPACITY MIXED-BED RESIN





PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH — The backwash step is used to separate the components prior to regeneration and to remove particles. The separation is optimized at a bed expansion of 50 to 75 percent.

ProBlend High Capacity Resins Comparison Table

Specifications	Nuclear Grade (P/N ER30008)	Semi-Conductor (P/N ER30004)	Low TOC Throw (P/N ER30005)	Ultra Low TOC Throw (P/N ER30009)
Resistivity in polishing 18 megohm water @ 60 bed volumes per hour (megohm)	> 15 **	> 18	> 18	> 18
Leachable TOC @ 25 bed volumes from start up (ppb as C) *	No Spec	No Spec	< 25	< 25
Leachable TOC @ 50 bed volumes from start up (ppb as C) *	No Spec	< 50	< 10	< 5
Leachable TOC @ 100 bed volumes from start up (ppb as C) *	No Spec	No Spec	No Spec	< 1

* Leachable TOC measured at 0.5 bed volumes per minute at 175ºF (80ºC).

** Influent greater than 1 megohm.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1328
EFFECTIVE
JANUARY 2013

SPECIALTY RESIN

PROBLEND™ NUCLEAR GRADE HIGH POROSITY MIXED-BED RESIN

ProBlend NG-HP (P/N ER30003) — When it's quantity of TDS removal you're after, there is no better choice. Each lot is tested and certified to reach 15 megohm water when challenged with 10 megohm water. This is the choice for laboratory and cartridge applications. Our Nuclear Grade utilizes a porous anion blended with our ProSoft™ Premium cation to achieve the highest loading rates available in a mixed-bed resin.

FEATURES

- Conforms to paragraph 21 CFR173.25 of the Food Additives Regulations of the FDA
- Designed to provide ultra-high purity water
- High operating capacity
- Low effluent TOC values
- Superior organic fouling resistance
- Excellent regenerable capacities for inorganic and organic irons

Physical Properties

Functional Structure	
Cation	$RSO_3^-H^+$ (Hydrogen form gelular sulfonated polystyrene copolymer)
Anion	$R_4N^+OH^-$ (Hydroxyl form Type 1 porous gel strong base alkyl quarternary ammonium polystyrene copolymer)
Physical Form	Spherical beads
Screen Size Distribution	
+16 mesh (U.S. Std.)	2% maximum
−45 mesh (U.S. Std.)	2% maximum
Moisture Content (as shipped)	65% maximum
Volume Ratio (as shipped)	
Cation (Na^+ form)	36%
Anion (Cl^- form)	64%
Total Capacity	
Cation (Na^+ form)	1.95 meq/mL minimum
Cation (H^+ form)	1.85 meq/mL minimum
Anion (Cl^- form)	1.25 meq/mL minimum
Anion (OH^- form)	1.00 meq/mL minimum
Approximate Shipping Weight	43 lb/cu.ft. (720g/l)
Standard Packaging	5 or 7 cu.ft. plastic lined fiber drums

Suggested Operating Conditions

Maximum Temperature	
Non-regenerable *	175°F (80°C)
Regenerable	140°F (60°C)
Operating Flow Rate (Typical)	2 to 10 gpm/cu.ft.
pH Range	0 to 14
Backwash Rate (See graph on next page)	
Pressure Drop (See graph on next page)	
Metals Content (Typical ppm dry weight)	
Iron (Fe)	100 ppm maximum
Copper (Cu)	50 ppm maximum
Lead (Pb)	50 ppm maximum
Percent Conversions to Ionic Form	
Cation H	99% minimum
Anion OH	90% minimum **
Anion Cl + SO_4	10% maximum
Anion CO_3	** (See note below)

Column Operating Capacity

0.55 meq/mL (12 Kgrs/cu.ft.) minimum to electrolyte breakthrough during initial cycle.

Limitations

Extended exposure to strong oxidizers, such as chlorine, hydrogen peroxide, and concentrated nitric acid, degrade the structural backbone of the resin and should be avoided.

* 6 month typical resin life at 175°F (80°C).

** Hydroxides and CO_3 levels measured immediately after production and may change during storage and shipment due to adsorption of CO_2 from the atmosphere.

CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

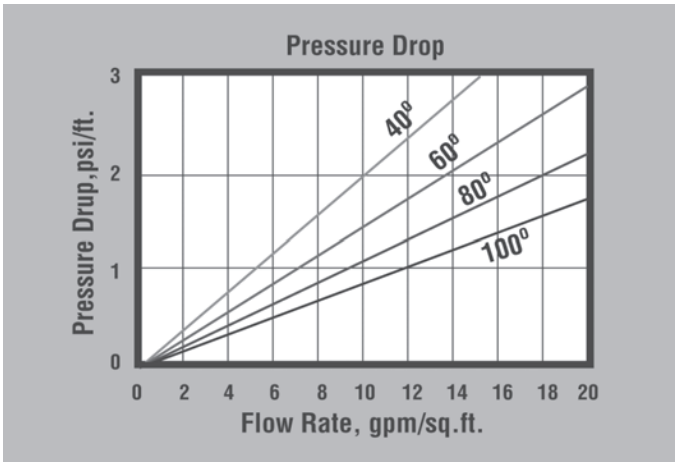
Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

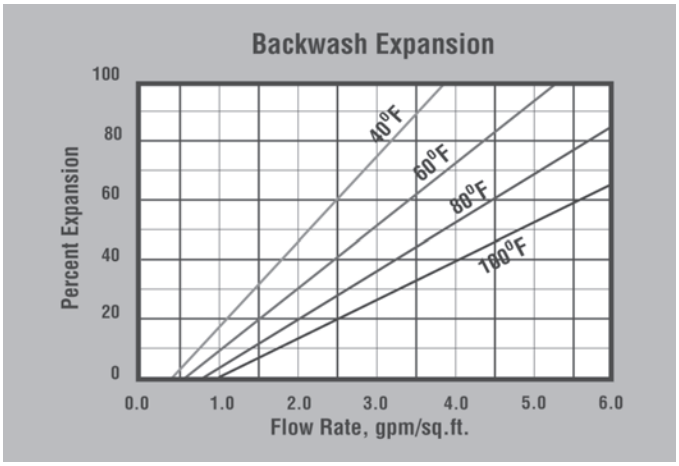
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1348
EFFECTIVE
JANUARY 2013

SPECIALTY RESIN

PROBLEND™ NUCLEAR GRADE HIGH POROSITY MIXED-BED RESIN





PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH — The backwash step is used to separate the components prior to regeneration and to remove particles. The separation is optimized at a bed expansion of 50 to 75 percent.

ProBlend High Porosity Resins Comparison Table

Specifications	Nuclear Grade (P/N ER30003)	Semi-Conductor (P/N ER30002)	Low TOC Throw (P/N ER30011)	Ultra Low TOC Throw (P/N ER30012)
Resistivity in polishing 18 megohm water @ 60 bed volumes per hour (megohm)	> 15 **	> 18	> 18	> 18
Leachable TOC @ 25 bed volumes from start up (ppb as C) *	No Spec	No Spec	< 25	< 25
Leachable TOC @ 50 bed volumes from start up (ppb as C) *	No Spec	< 50	< 10	< 5
Leachable TOC @ 100 bed volumes from start up (ppb as C) *	No Spec	No Spec	No Spec	< 2

* Leachable TOC measured at 0.5 bed volumes per minute at 175ºF (80ºC).

** Influent greater than 1 megohm.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1348
EFFECTIVE
JANUARY 2013

SPECIALTY RESIN

PROBLEND™ SEMICONDUCTOR HIGH POROSITY MIXED-BED RESIN

ProBlend SC-HP (P/N ER30002) — When it's quality not quantity you're after, there is no better choice than ProBlend semiconductor grade, high porosity, mixed-bed resin. This is the perfect polisher, with each lot tested and certified to reach 18 megohm water when challenged with 10 megohm water. This is also the choice for laboratory and cartridge applications.

FEATURES

- Conforms to paragraph 21 CFR173.25 of the Food Additives Regulations of the FDA
- Designed to provide ultra-high purity water
- High operating capacity
- Low effluent TOC values
- Superior organic fouling resistance
- Excellent regenerable capacities for inorganic and organic irons

Physical Properties

Functional Structure	
Cation	$RSO_3^-H^+$ (Hydrogen form gelular sulfonated polystyrene copolymer)
Anion	$R_4N^+OH^-$ (Hydroxyl form Type 1 porous gel strong base alkyl quarternary ammonium polystyrene copolymer)
Physical Form	Spherical beads
Screen Size Distribution	
+16 mesh (U.S. Std.)	2% maximum
–45 mesh (U.S. Std.)	2% maximum
Moisture Content (as shipped)	65% maximum
Volume Ratio (as shipped)	
Cation (Na^+ form)	36%
Anion (Cl^- form)	64%
Total Capacity	
Cation (Na^+ form)	1.95 meq/mL minimum
Cation (H^+ form)	1.85 meq/mL minimum
Anion (Cl^- form)	1.25 meq/mL minimum
Anion (OH^- form)	1.00 meq/mL minimum
Approximate Shipping Weight	43 lb/cu.ft. (720g/l)
Standard Packaging	5 or 7 cu.ft. plastic lined fiber drums

Suggested Operating Conditions

Maximum Temperature	
Non-regenerable *	175°F (80°C)
Regenerable	140°F (60°C)
Operating Flow Rate (Typical)	2 to 10 gpm/cu.ft.
pH Range	0 to 14
Backwash Rate (See graph on next page)	
Pressure Drop (See graph on next page)	
Metals Content (Typical ppm dry weight)	
Iron (Fe)	100 ppm maximum
Copper (Cu)	50 ppm maximum
Lead (Pb)	50 ppm maximum
Percent Conversions to Ionic Form	
Cation H	99% minimum
Anion OH	95% minimum **
Anion Cl + SO_4	5% maximum
Anion CO_3	** (See note below)

Column Operating Capacity

0.55 meq/mL (12 Kgrs/cu.ft.) minimum to electrolyte breakthrough during initial cycle.

Limitations

Extended exposure to strong oxidizers, such as chlorine, hydrogen peroxide, and concentrated nitric acid, degrade the structural backbone of the resin and should be avoided.

* 6 month typical resin life at 175°F (80°C).

** Hydroxides and CO_3 levels measured immediately after production and may change during storage and shipment due to adsorption of CO_2 from the atmosphere.

CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

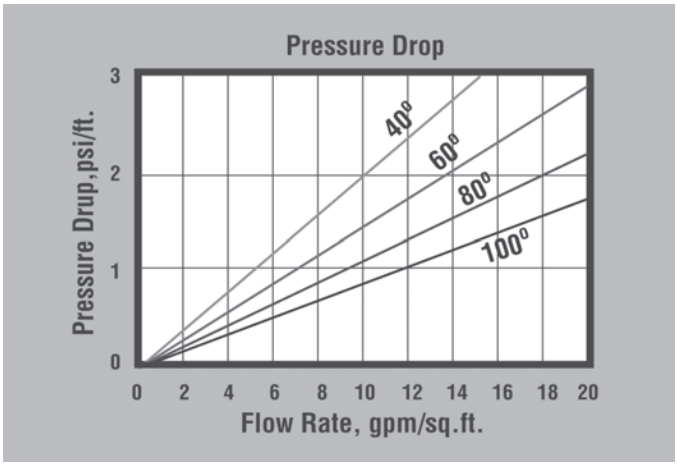
Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

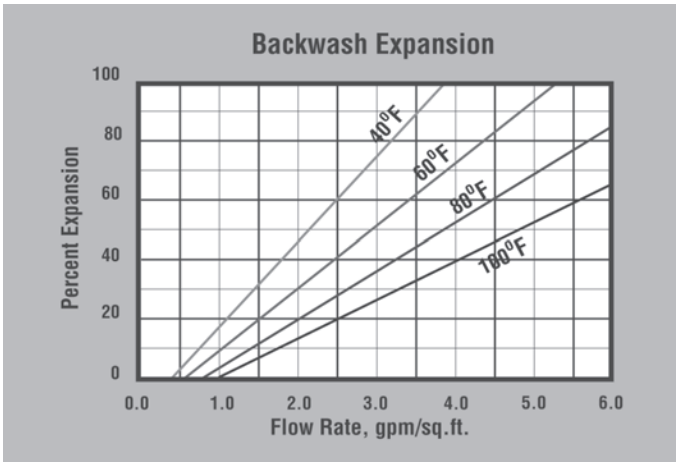
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association
FORM 1349
EFFECTIVE
JANUARY 2013

SPECIALTY RESIN

PROBLEND™ SEMICONDUCTOR HIGH POROSITY MIXED-BED RESIN





PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH — The backwash step is used to separate the components prior to regeneration and to remove particles. The separation is optimized at a bed expansion of 50 to 75 percent.

ProBlend High Porosity Resins Comparison Table

Specifications	Nuclear Grade (P/N ER30003)	Semi-Conductor (P/N ER30002)	Low TOC Throw (P/N ER30011)	Ultra Low TOC Throw (P/N ER30012)
Resistivity in polishing 18 megohm water @ 60 bed volumes per hour (megohm)	> 15 **	> 18	> 18	> 18
Leachable TOC @ 25 bed volumes from start up (ppb as C) *	No Spec	No Spec	< 25	< 25
Leachable TOC @ 50 bed volumes from start up (ppb as C) *	No Spec	< 50	< 10	< 5
Leachable TOC @ 100 bed volumes from start up (ppb as C) *	No Spec	No Spec	No Spec	< 2

* Leachable TOC measured at 0.5 bed volumes per minute at 175ºF (80ºC).

** Influent greater than 1 megohm.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1349
EFFECTIVE
JANUARY 2013

SPECIALTY RESIN

PROBLEND™ LOW TOC THROW HIGH POROSITY MIXED-BED RESIN

ProBlend LT-HP (P/N ER30011) is a high grade mixed-bed made to attain very low leachable TOC levels. The product is fully tested to ensure its ability to achieve 18 megohm resistivity. Each batch is also tested to ensure its ability to rinse to below 25 ppb of leachable TOC in less than 25 bed volumes from start up and to below 10 ppb in less than 50 bed volumes.

FEATURES

- Conforms to paragraph 21 CFR173.25 of the Food Additives Regulations of the FDA
- Designed to provide ultra-high purity water
- High operating capacity
- Low effluent TOC values
- Superior organic fouling resistance
- Excellent regenerable capacities for inorganic and organic irons

Physical Properties

Functional Structure	
Cation	$RSO_3^-H^+$ (Hydrogen form gelular sulfonated polystyrene copolymer)
Anion	$R_4N^+OH^-$ (Hydroxyl form Type 1 porous gel strong base alkyl quarternary ammonium polystyrene copolymer)
Physical Form	Spherical beads
Screen Size Distribution	
+16 mesh (U.S. Std.)	2% maximum
−45 mesh (U.S. Std.)	2% maximum
Moisture Content (as shipped)	65% maximum
Volume Ratio (as shipped)	
Cation (Na^+ form)	36%
Anion (Cl^- form)	64%
Total Capacity	
Cation (Na^+ form)	1.95 meq/mL minimum
Cation (H^+ form)	1.85 meq/mL minimum
Anion (Cl^- form)	1.25 meq/mL minimum
Anion (OH^- form)	1.00 meq/mL minimum
Approximate Shipping Weight	43 lb/cu.ft. (720g/l)
Standard Packaging	5 or 7 cu.ft. plastic lined fiber drums

Suggested Operating Conditions

Maximum Temperature	
Non-regenerable *	175°F (80°C)
Regenerable	140°F (60°C)
Operating Flow Rate (Typical)	2 to 10 gpm/cu.ft.
pH Range	0 to 14
Backwash Rate (See graph on next page)	
Pressure Drop (See graph on next page)	
Metals Content (Typical ppm dry weight)	
Iron (Fe)	100 ppm maximum
Copper (Cu)	50 ppm maximum
Lead (Pb)	50 ppm maximum
Percent Conversions to Ionic Form	
Cation H	99% minimum
Anion OH	95% minimum **
Anion Cl + SO_4	5% maximum
Anion CO_3	** (See note below)

Column Operating Capacity

0.55 meq/mL (12 Kgrs/cu.ft.) minimum to electrolyte breakthrough during initial cycle.

Limitations

Extended exposure to strong oxidizers, such as chlorine, hydrogen peroxide, and concentrated nitric acid, degrade the structural backbone of the resin and should be avoided.

* 6 month typical resin life at 175°F (80°C).

** Hydroxides and CO_3 levels measured immediately after production and may change during storage and shipment due to adsorption of CO_2 from the atmosphere.

CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

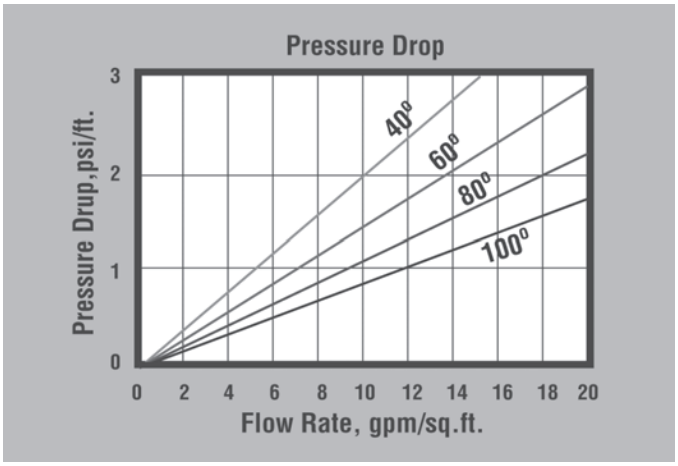
Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

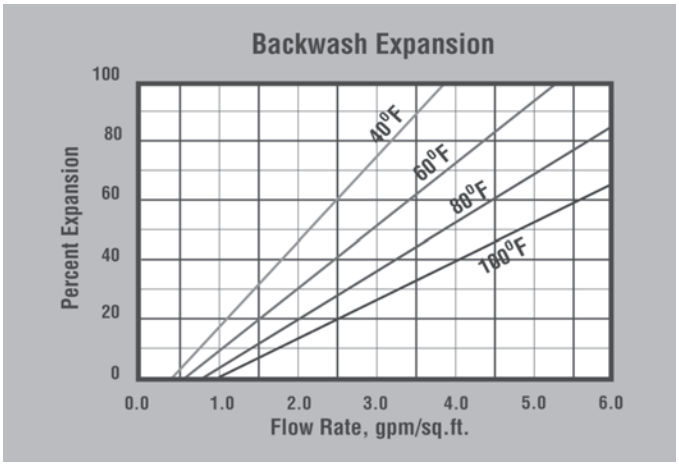
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1350
EFFECTIVE
JANUARY 2013

SPECIALTY RESIN

PROBLEND™ LOW TOC THROW HIGH POROSITY MIXED-BED RESIN





PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH — The backwash step is used to separate the components prior to regeneration and to remove particles. The separation is optimized at a bed expansion of 50 to 75 percent.

ProBlend High Porosity Resins Comparison Table

Specifications	Nuclear Grade (P/N ER30003)	Semi-Conductor (P/N ER30002)	Low TOC Throw (P/N ER30011)	Ultra Low TOC Throw (P/N ER30012)
Resistivity in polishing 18 megohm water @ 60 bed volumes per hour (megohm)	> 15 **	> 18	> 18	> 18
Leachable TOC @ 25 bed volumes from start up (ppb as C) *	No Spec	No Spec	< 25	< 25
Leachable TOC @ 50 bed volumes from start up (ppb as C) *	No Spec	< 50	< 10	< 5
Leachable TOC @ 100 bed volumes from start up (ppb as C) *	No Spec	No Spec	No Spec	< 2

* Leachable TOC measured at 0.5 bed volumes per minute at 175ºF (80ºC).

** Influent greater than 1 megohm.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1350
EFFECTIVE
JANUARY 2013

SPECIALTY RESIN

PROBLEND™ ULTRA LOW TOC THROW HIGH POROSITY MIXED-BED RESIN

ProBlend UL-HP (P/N ER30012) is the highest grade mixed-bed made to attain the lowest leachable TOC levels. The product is fully tested to ensure its ability to achieve 18 megohm resistivity. Each batch is also tested to ensure its ability to rinse to below 5 ppb of leachable TOC in less than 50 bed volumes from start up and to less than 1 ppb after 100 bed volumes.

FEATURES

- Conforms to paragraph 21 CFR173.25 of the Food Additives Regulations of the FDA
- Designed to provide ultra-high purity water
- High operating capacity
- Low effluent TOC values
- Superior organic fouling resistance
- Excellent regenerable capacities for inorganic and organic irons

Physical Properties

Functional Structure	
Cation	$RSO_3^-H^+$ (Hydrogen form gelular sulfonated polystyrene copolymer)
Anion	$R_4N^+OH^-$ (Hydroxyl form Type 1 porous gel strong base alkyl quarternary ammonium polystyrene copolymer)
Physical Form	Spherical beads
Screen Size Distribution	
+16 mesh (U.S. Std.)	2% maximum
−45 mesh (U.S. Std.)	2% maximum
Moisture Content (as shipped)	65% maximum
Volume Ratio (as shipped)	
Cation (Na^+ form)	36%
Anion (Cl^- form)	64%
Total Capacity	
Cation (Na^+ form)	1.95 meq/mL minimum
Cation (H^+ form)	1.85 meq/mL minimum
Anion (Cl^- form)	1.25 meq/mL minimum
Anion (OH^- form)	1.00 meq/mL minimum
Approximate Shipping Weight	43 lb/cu.ft. (720g/l)
Standard Packaging	5 or 7 cu.ft. plastic lined fiber drums

Suggested Operating Conditions

Maximum Temperature	
Non-regenerable *	175°F (80°C)
Regenerable	140°F (60°C)
Operating Flow Rate (Typical)	2 to 10 gpm/cu.ft.
pH Range	0 to 14
Backwash Rate (See graph on next page)	
Pressure Drop (See graph on next page)	
Metals Content (Typical ppm dry weight)	
Iron (Fe)	100 ppm maximum
Copper (Cu)	50 ppm maximum
Lead (Pb)	50 ppm maximum
Percent Conversions to Ionic Form	
Cation H	99.9% minimum
Anion OH	98% minimum **
Anion Cl + SO_4	2% maximum
Anion CO_3	** (See note below)

Column Operating Capacity

0.55 meq/mL (12 Kgrs/cu.ft.) minimum to electrolyte breakthrough during initial cycle.

Limitations

Extended exposure to strong oxidizers, such as chlorine, hydrogen peroxide, and concentrated nitric acid, degrade the structural backbone of the resin and should be avoided.

* 6 month typical resin life at 175°F (80°C).

** Hydroxides and CO_3 levels measured immediately after production and may change during storage and shipment due to adsorption of CO_2 from the atmosphere.

CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

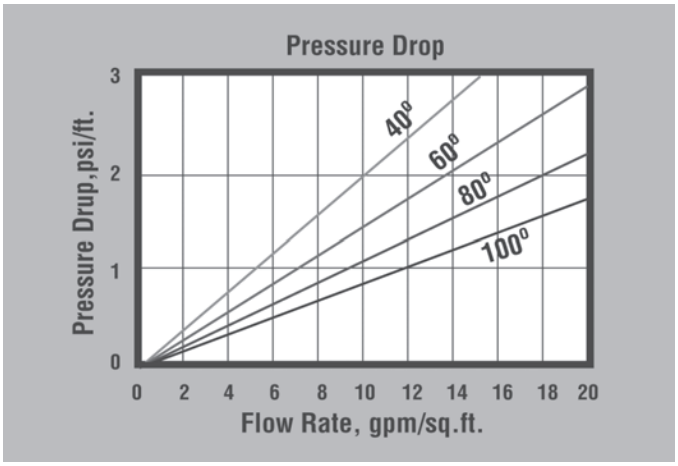
Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

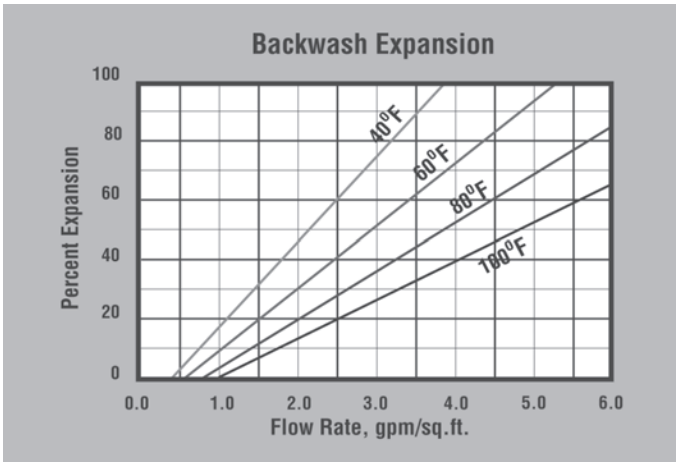
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1351
EFFECTIVE
JANUARY 2013

SPECIALTY RESIN

PROBLEND™ ULTRA LOW TOC THROW HIGH POROSITY MIXED-BED RESIN





PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH — The backwash step is used to separate the components prior to regeneration and to remove particles. The separation is optimized at a bed expansion of 50 to 75 percent.

ProBlend High Porosity Resins Comparison Table

Specifications	Nuclear Grade (P/N ER30003)	Semi-Conductor (P/N ER30002)	Low TOC Throw (P/N ER30011)	Ultra Low TOC Throw (P/N ER30012)
Resistivity in polishing 18 megohm water @ 60 bed volumes per hour (megohm)	> 15 **	> 18	> 18	> 18
Leachable TOC @ 25 bed volumes from start up (ppb as C) *	No Spec	No Spec	< 25	< 25
Leachable TOC @ 50 bed volumes from start up (ppb as C) *	No Spec	< 50	< 10	< 5
Leachable TOC @ 100 bed volumes from start up (ppb as C) *	No Spec	No Spec	No Spec	< 2

* Leachable TOC measured at 0.5 bed volumes per minute at 175ºF (80ºC).

** Influent greater than 1 megohm.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1351
EFFECTIVE
JANUARY 2013

CHELATING RESIN

PROBOND™ CI (CATION IMINODIACETATE)

ProBond CI (Cation Iminodiacetate) (P/N ER10112) is a macroporous weak acid cation exchange resin which has chelating properties for heavy metal ions even against high concentrations of calcium. It is intended for use in polishing heavy metal ions from near neutral industrial wastes and process streams, and recovery of precious metals. It is supplied in the sodium form as moist, tough, uniform spherical beads.

FEATURES

- Able to chelate heavy metals in metal finishing rinses
- Able to chelate heavy metals ions in high calcium concentrations
- Highly uniform particle size giving a low pressure drop while maintaining excellent kinetics
- Superior physical stability

Physical Properties

Polymer Structure	Macroporous Styrene with DVB
Functional Group	R-CH_2-N($COOH)_2$
Ionic Form, as shipped	Sodium
Physical Form	Spherical beads
Screen Size Distribution	16 to 50
+16 mesh (U.S. Std.)	< 5%
–50 mesh (U.S. Std.)	< 1%
pH Range	1.5 to 14
Sphericity	> 95%
Water Retention	
Sodium Form	55 to 60%
Solubility	Insoluble
Approximate Shipping Weight	
Sodium Form	43 lb/cu.ft.
Swelling H^- to Na^- Form	20%
Total Capacity	
Sodium Form	> 1.1 meq/mL

Suggested Operating Conditions

Maximum Temperature	
Sodium Form	170°F (77°C)
Hydrogen Form	140°F (60°C)
Maximum Free Chlorine	None
Minimum Bed Depth	36 inches
Backwash Rate (see next page)	50 to 75% bed expansion
Service Flow Rate	1 to 2 gpm/cu.ft.
Pressure Drop	See next page
Acid Regenerant Concentration	4 to 10%
Regenerant Flow Rate	0.25 to 0.5 gpm/cu.ft.
Regenerant Contact Time	30 minutes minimum
Regenerant Level	
HCl	8.7 lb/cu.ft.
H_2SO_4	12.5 lb/cu.ft.
Displacement Rinse Rate	Same as Regen Flow Rate
Displacement Rinse Volume	10 to 20 gal/cu.ft
Fast Rinse Rate	1 to 2 gpm/cu.ft.
Fast Rinse Volume	Same as Service Flow Rate
Caustic Neutralization Conc.	4 to 10%
Caustic Solution Flow Rate	0.25 to 0.5 gpm/cu.ft.
Caustic Contact Time	30 minutes minimum
Caustic Dose Level	2.5 to 6.0 lb/cu.ft.

CAUTION: DO NOT MIX ION EXCHANGE RESINS WITH STRONG OXIDIZING AGENTS. Nitric acid and other strong oxidizing agents can cause explosive reactions when mixed with organic materials such as ion exchange resins.

Note: These suggestions and data are based on information we believe to be reliable. However, we do not make any guarantee or warranty. We caution against using these products in any unsafe manner or in violation of any patents. Further, we assume no liability for the consequences of any such actions.

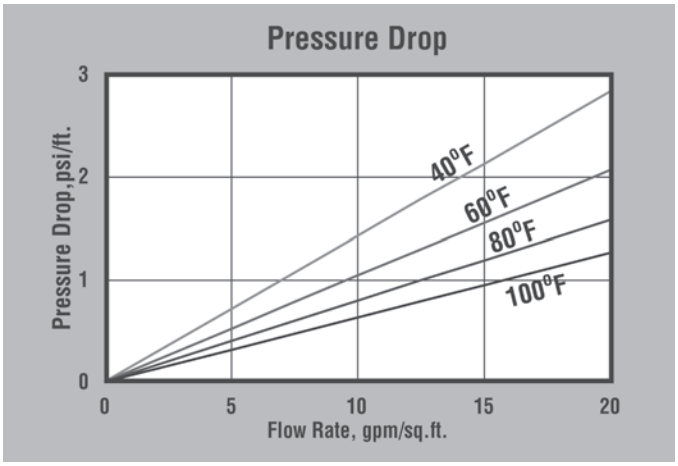
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

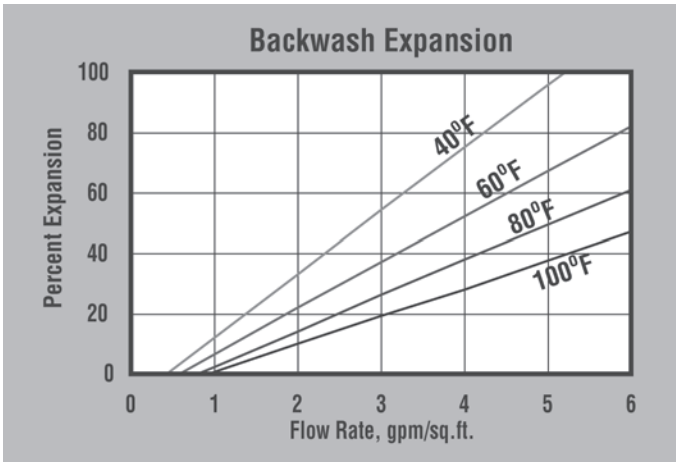
FORM 1369
EFFECTIVE
APRIL 2014

CHELATING RESIN

PROBOND™ CI (CATION IMINODIACETATE)



PRESSURE DROP — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.



BACKWASH — After each cycle the resin bed should be backwashed at a rate that expands the bed 50 to 75 percent. This will remove any foreign matter and reclassify the bed.

OPERATING CAPACITY

The relative affinity of ProBond CI (Cation Iminodiacetate) for heavy metals in near neutral solutions is in accordance with the following sequence.

H^{+1}>>Cu^{+2}>V^{+2}>>$(UO2)^{+2}$>Pb^{+2}>Ni^{+2}>Zn^{+2}>Co^{+2}>
Cd^{+2}>Fe^{+2}>Be^{+2}>Mn^{+2}>Mg^{+2}>Ca^{+2}>Sr^{+2}>Ba^{+2}>>Na^{+1}

High concentrations of chlorides or sulfates, or the presence of chelating or complexing agents can alter this sequence and likewise will affect the operating capacity.

High Chloride Solutions
Cu^{+2}>Ni^{+2}>Co^{+2}>Zn^{+2}>Cd^{+2}>Fe^{+2}

High Sulfate Solutions
Cu^{+2}>Ni^{+2}>Cd^{+2}>Zn^{+2}>Co^{+2}>Fe^{+2}

ProBond CI has similar chelating characteristics to EDTA and NTA. Therefore it is less effective when these agents are present.

For each particular metal cation there is a critical pH at which ProBond CI has optimum selectivity. For most metals this pH is approximately 4.0. As the pH decreases, so does the selectivity. At a pH of approximately 1.5, ProBond CI loses its ability to remove most metals. The minimum pH values for removal of some common metal ions are as follows:

Manganese	4.0
Iron	3.0
Zinc, Cobalt	2.7
Nickel	2.5
Copper	1.5

As the pH increases, selectivity also decreases. At a pH of 9.0 selectivity for most metals is about 10% of the selectivity at optimum pH. Above a pH of 9.0 many metals form anionic complexes and are no longer present in a form that can be removed by ProBond CI.

ProBond CI, like other chelating resins, has very slow kinetics. Optimum capacity is obtained when the service flow rate is limited to 0.5 to 1.0 gpm/cu.ft. Where extremely low leakage of metals is required, two columns of ProBond CI should be operated in series. The primary column can be fully exhausted, allowing the polishing column to protect against leakage. After regeneration, the order of the columns is reversed with the freshly regenerated column used as the polisher.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association
FORM 1369
EFFECTIVE
APRIL 2014

Resin Glossary

Acid
A substance which releases hydrogen ions when dissolved in water. Most acids will dissolve the common metals and will react with a base to form a neutral salt and water.

Acrylic Resin
Resin that is made with an acrylic polymer instead of a styrene polymer. Acrylic resins can be activated with weakly acidic, weakly basic, or strongly basic exchange groups.

Anion Resin
A positively charged resin bead that exchanges negatively charged ions in the water. *(See ProSelect™)*

Bed Expansion
The increase in volume of a bed of ion exchange resin or filter media during upflow operations such as backwashing, due to lifting and separation of bed materials.

Capacity
The amount of an element that resin will pick up before it needs to be regenerated. With softening resin, this usually applies to hardness measured in kilograms per cubic foot of resin. Standard cation resins, once in service, will generally remove 30,000 kilograms of hardness after it is regenerated with salt (sodium chloride). With nitrate removal, resin calculations can be done to estimate the ppm (parts per million) of nitrate removal before the resin bed is exhausted and another regeneration of salt is needed. Capacity is measured in many different ways and other elements can run interference on a resin's capacity.

Cation Resin
A negatively charged resin bead that exchanges positively charged ions in the water. Cation resin is most often used for removing calcium and magnesium (hardness) from water. *(See ProSoft™)*

Contact Time
The time that brine or other regenerant, at the proper strength, is moving through the resin bed.

Crosslink
A chemical bridge that connects the polymer chains of a resin bead; the glue that holds the resin beads together. Generally, the higher the crosslink, the tougher the resin. For cation resins, higher crosslinking also means more resistance to chlorinated water.

Dyed Resin
Resin that is colored with a dye that is pH sensitive and changes color as the pH of the resin changes.

DVB
Abbreviation for "Divinylbenzene." Divinylbenzene is the chemical most commonly used to crosslink polymers that are used to make ion exchange resins.

Effective Size
A measure of the size of particles of an ion exchange resin or filter media, defined as the diameter of a specific particle in a bed, batch, or lot which has 10 percent smaller, and 90 percent larger, particles.

Elution
The stripping of ions from an ion exchange material by other ions, either because of greater affinity or because of much higher concentration.

Fouling
The process in which undesirable foreign matter accumulates in a bed of filter media, ion exchange resin, or membrane process, clogging pores and coating surfaces, thus inhibiting the proper operation of the system. This can be due to the presence of suspended solids, precipitated salts, or biological growth, and can cause a decrease in both the amount of water produced and the quality of water.

Freeboard
The vertical distance between the top of a resin bed or filter media and the overflow or collector for backwash water. This may be expressed either as a linear distance or a percentage of bed depth.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1078
EFFECTIVE
MARCH 1999

Resin Glossary

Gel Resin
Resins that do not have discrete pores and are translucent in appearance. Gel resins generally have higher capacity than macroporous resins.

Ionic Form
Refers to the particular type of ion that is exchanged onto an ion exchange resin. (e.g., The ionic form of ProSelect™ Tannin is Cl (chloride) and the regenerant used is salt (sodium chloride). This means that the chloride side of the salt is the exchanged ion.)

Leakage
The presence of a consistent concentration of ions in the effluent of an ion exchange system, due to incomplete removal of the ions.

Macroporous Resins
Resins that have discrete pores and are opaque in appearance. Macroporous resins are generally stronger than gel resins.

Mixed Bed
The blending of cation and anion resins into a single bed. These resins are mostly used in D.I. or specialty applications. By mixing and matching different resins and ratios, different results can be accomplished.

Operating Capacity
The quantity of ions that can be exchanged by a resin before leakage bleed through of ions occurs. This term also refers to resin in service, rather than resin fresh out of the bag.

ProSelect™
At SWT, we believe it is the best anion resin you can buy.

ProSoft™
At SWT, we believe it is the best cation resin you can buy.

Regeneration
This process includes the backwash, brine, and fresh water rinse steps necessary to prepare a water softener ion exchange bed for service after exhaustion.

Selectivity (Relative Affinity)
A quantitative measure of a resin's preference for various ions at equilibrium between the resin and water. In general, an ion with greater selectivity will be removed preferentially to an ion with lower selectivity (e.g., as in the case of "nitrate selective" resins).

Strong Base
Anion resins that are capable of splitting salts and can therefore operate in an alkaline environment and can remove weakly ionized substances, such as carbon dioxide and silica.

Total Capacity
The maximum quantity of ions that a resin is capable of exchanging.

Total Dissolved Solids
The quantity of all the dissolved minerals in water.

Type 1
Strong base anion resins that are activated with trimethylamine. These resins are relatively more stable and produce higher water quantity, but have lower capacity and give off a "fishy" odor when used in the hydroxide form.

Type 2
Strong base anion resins that are activated with dimethylethanolamine. These resins have a higher capacity and are more easily regenerated, but do not produce as high of a water quality and generally have a shorter life.

Weak Base
Anion resins that can only function under acidic conditions, and can only exchange for strong acids and that can not remove weakly ionized substances.

Zeolite
A class of inorganic ion exchange materials that are based on aluminosilicate chemistry (e.g., clay based compounds). Zeolites have lower capacities than ion exchange resins, but are more selective for certain ions.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1078
EFFECTIVE
MARCH 1999

Section 9

Filter Housings & Cartridges

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

CARTRIDGE TANK SYSTEM

CARTRIDGE TANK™



Say goodbye to small and inefficient housings.
Get rid of expensive stainless steel housings.

The **Cartridge Tank** offers extended life and service, and a more cost effective and efficient filtration solution.

The Cartridge Tank filtration system features an 8 x 40 composite tank with easy-to-access top and bottom openings for use with various filtration connections and solutions. Lightweight and cost effective with multiple configuration options, this is the filtration solution of the future!

Features

- Extended service life, contaminant removal, and dirt holding capacity.
- Lightweight and cost-effective housing with high chemical compatibility.
- 100% non-metallic, NSF 61 and 42 listed device.
- 2.5"–8 NPSM PVC bottom assembly with 1.25 inch socket in/out (1.660") or 4.5" buttress PVC bottom assembly with 2 inch socket in/out (2.375") for multiple pipe requirement connections.
- All glue joints and connections are contained underneath and inside the vessel base for clean connections and visibly attractive systems for homeowners, businesses, and consumers.
- Patented, no tools necessary, snap ring design makes it easy to access the high capacity 6 x 30 cartridge. Full radial seal caps make replacement simple.
- Pressure release top opening with the plumbing connections at the bottom allows access and service to the filter without disrupting plumbing.
- 125 psi @ 100°F maximum operating pressure.

Easy Access


Push red button until pressure is completely released.


Push black cap down.


Remove clip ring by pulling handle inward and upward.


Remove cap.


Replace cartridge.

Applications

- Whole house POE requirements, whether for city or well water applications.
- Extreme loading conditions, RO systems, and any other pretreatment applications where high service flow and low pressure drop requirements are required or desirable.
- For customers that are tired of changing small 2.5 or 4 inch filters on a weekly or monthly basis.
- Replacement solution for expensive stainless steel housings…100% plastic design.
- Ideal for most problem water issues where particulate contaminated water is concerned—with lower shear velocity these filters can load properly with particulates, unlike conventional filtration.

Cartridge Tanks — WITHOUT CARTRIDGE

Part Number	Description	Inlet/Outlet
CTS-125	Cartridge Tank for use with CTS1 cartridges	1.25 inch PVC Socket
CTS-200	Cartridge Tank for use with CTS2 cartridges	2 inch PVC Socket

Top Cap Cover (P/N CTS-COVER) avaialble to prevent water collection in top cap for outdoor installations.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1345
EFFECTIVE
NOVEMBER 2022

CARTRIDGE TANK SYSTEM

CARTRIDGE TANK™

Cartridge Tank Cartridges

Part Number	Usage	Series	Material	Flow Rate GPM		Micron Rating	Design	Type of Filtration
				@ 3 psid	@ 8 psid			
CTS-125 Cartridge Tank Sediment Cartridges								
CTS1-SW-PP-20-5	Sediment	Yellow	Polypropylene	20	36	20/5	String Wound	Depth
CTS1-SW-PP-50-20	Sediment	Yellow	Polypropylene	25	40	50/20	String Wound	Depth
CTS1-DP-PE-10-5	Sediment	Orange	Polyester	50	150	10/5	Double Pleated	Dual Gradient
CTS1-DP-PE-20-10	Sediment	Orange	Polyester	50	150	20/10	Double Pleated	Dual Gradient
CTS1-DP-PE-50-20	Sediment	Orange	Polyester	50	150	50/20	Double Pleated	Dual Gradient
CTS1-DP-A	Sub-micron, Bacteria, Cyst	Green	Micro-Glass Fiber with Cellulose / NanoAl with Biostat [1]	30	60	20/0.2 @ 99.99% Efficiency	Double Pleated Impregnated	Dual Gradient
CTS1-DP-ACB	Sub-micron, Bacteria, Cyst, Chlorine	Green	Micro-Glass Fiber with Cellulose / NanoAl with Biostat [1] / Carbon Block	35	60	20/0.2 @ 99.99% Efficiency	Double Pleated Impregnated & Carbon Block Core [2]	Dual Gradient & Carbon Block
CTS-125 Cartridge Tank Carbon Block Cartridges								
CTS1-CCB-3	Chlorine, Taste, Odor	Blue	Coconut Shell Carbon [3]	20	36	3	Carbon Block	Adsorption
CTS1-CCB-20	Chlorine, Taste, Odor	Blue	Coconut Shell Carbon [4]	25	43	20	Carbon Block	Adsorption
CTS1-ACB-3	Chloramine, Chlorine, Taste, Odor	Blue	Catalytic Coconut Shell Carbon [5]	20	36	3	Chloramine Carbon Block	Adsorption
CTS-125 Cartridge Tank Empty Cartridges								
CTS1-RC-E1	Media Dependent	White	Polypropylene Container	—	—	—	(1) 0.5 cu.ft. Chamber	Downflow
CTS1-RC-E2	Media Dependent	White	Polypropylene Container	—	—	—	(2) 0.25 cu.ft. Chambers	Downflow
CTS-200 Cartridge Tank Sediment Cartridges								
CTS2-SP-PP-1A	Sediment	Red	Polypropylene	20	53	1 Micron Absolute	Pleated	Surface
CTS2-SP-PP-1	Sediment	Red	Polypropylene	29	78	1	Pleated	Surface
CTS2-SP-PP-5	Sediment	Red	Polypropylene	37	100	5	Pleated	Surface
CTS2-SP-PP-20	Sediment	Red	Polypropylene	50	133	20	Pleated	Surface
CTS2-SP-PP-50	Sediment	Red	Polypropylene	62	150	50	Pleated	Surface
CTS2-SP-PP-150	Sediment	Red	Polypropylene Mesh	105	150	150	Pleated	Surface
CTS2-SP-PPC-5	Sediment, Chlorine	Red	Polypropylene / Carbon [6]	15	NA	5	Pleated / Impregnated	Surface
CTS2-MB-PP-5	Sediment	Purple	Polypropylene	62	100	5	Melt Blown	Depth
CTS2-MB-PP-20	Sediment	Purple	Polypropylene	70	112	20	Melt Blown	Depth

NOTES:

1. Green Series cartridges use Agion® antimicrobial technology.
2. > 200,000 gallons treatment capacity tested to NSF 42 standard
3. 250,000 gallons @ 15 gpm with 90% reduction using 2 ppm free chlorine
4. 150,000 gallons @ 7 gpm with 90% reduction using 2 ppm free chlorine
5. 50,000 gallons @ 7 gpm with 85% reduction using 3 ppm chloramine
6. 140,000 gallons @ 15 gpm for 90% chlorine reduction

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1345
EFFECTIVE
NOVEMBER 2022

CARTRIDGE TANK SYSTEM

DOUBLE PLEATED CARTRIDGES

FITS CTS-125 CARTRIDGE TANK™



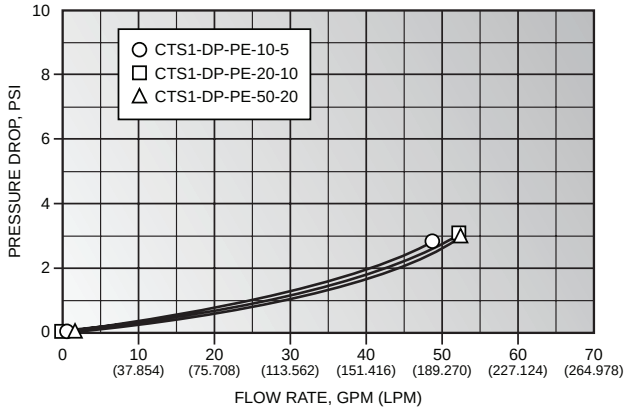
Each cartridge comes with a unique handle designed top cap for lightweight and easy removal, a bag for proper disposal, and a double o-ring bottom connection to fit securely into the CTS-125 Cartridge Tank.

Dual Gradient, Double Pleated, Sediment Filter Cartridges

These cartridges are constructed of dual gradient, double pleated layers for extended life and use while achieving high flow and low pressure drop. They will outperform competitive filtration solutions in all turbidity applications including silt, rust, and other particle filtration. They also provide lower shear water velocity as the raw water passes through the filter, allowing for more contact time and interaction with the extensive surface area of the cartridge (100 sq.ft. approx). These cartridges provide 6.5 times the total surface area of a standard 4.5 x 20 pleated cartridge and nearly 14.5 times that of a standard 2.5 x 20 cartridge. This results in higher water quality and longer life of the filtration system.

Features

- Dual Gradient, Double Pleated Filters
- Double EPDM O-ring Seals
- Filter Belly Bands
- Durable Polyester Filter and Polypropylene Cap Construction



Benefits

- Extended service life, contaminant removal, and dirt holding capacity
- Low pressure drop, high flow rate
- Ensures no bypass of contaminants and high chemical compatibility
- Prevent collapsing of filters under high flow or contaminant load applications
- Bacteria and chemical resistant

Applications

- Ideal for residential, food service, rental fleets, commercial, and industrial applications
- Make-up water, RO prefiltration, cooling towers, chill water loops, metal finishing
- Process water (turbidity, particulate, colloidal suspensions)

Dual Gradient, Double Pleated, Sediment Filter Cartridges — FOR USE WITH CTS-125 CARTRIDGE TANKS

Part Number	Usage	Series	Material	Flow Rate GPM		Micron Rating	Design	Type of Filtration
				@ 3 psid	Max.			
CTS1-DP-PE-10-5	Sediment	Orange	Polyester	50	150	10/5	Double Pleated	Dual Gradient
CTS1-DP-PE-20-10	Sediment	Orange	Polyester	50	150	20/10	Double Pleated	Dual Gradient
CTS1-DP-PE-50-20	Sediment	Orange	Polyester	50	150	50/20	Double Pleated	Dual Gradient

Performance claims are based on independent lab results and manufacturer's internal test data. Actual performance is dependent on influent water quality, flow rate, system design, and application. Results may vary. Micron ratings are based on 85% or greater removal of a given particle size. Flush new cartridges until water runs clear prior to use. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1410
EFFECTIVE
AUGUST 2014

CARTRIDGE TANK SYSTEM

HIGH FLOW, DOUBLE PLEATED, SUBMICRON CARTRIDGES

FITS CTS-125 CARTRIDGE TANK™



Each cartridge comes with a unique handle designed top cap for lightweight and easy removal, a bag for proper disposal, and a double o-ring bottom connection to fit securely into the CTS-125 Cartridge Tank.

Dual Gradient, Double Pleated, Impregnated Filter Cartridges

These cartridges are constructed of electropositively charged, dual gradient, double pleated layers for extended life and use. They feature a thermally bonded blend of micro-glass fibers and cellulose, infused with nanoalumina fibers in a nonwoven matrix that creates an electropositively charged depth filter media. When assembled into a pleated cartridge, it offers a unique combination of efficiency, capacity, flow rate, and low pressure drop that allows this nonwoven media to filter like a NF polymeric membrane, at levels unmatched in today's filtration marketplace. In addition, all filter cartridges feature the use of Agion® antimicrobial technology that provides built-in protection by working 24/7 resisting the growth of microbes.

The filters will outperform competitive filtration solutions in all turbidity applications including insoluble scale, ferric iron, bacterial iron slime, colloidal solids, silt, rust, and other particle filtration, resulting in higher water quality and longer life of the filtration system.

Applications

- Primary filtration in lieu of microporous membranes
- Makeup water (particulate, microbial control)
- Polishing filters (carbon fines, emulsified oil removal)
- RO prefiltration (SDI reduction)
- Process water (turbidity, particulate, colloidal suspensions)
- Waste water (biologicals, proteins, dyes)
- Cooling towers & chill water loops (iron removal)

Features

- Dual Gradient, Double Pleated Filters with Electropositively Charged Nanoalumina Media
- 20 Micron Prefilter Outer Pleated Layer
- 0.2 Microns @ 99.99% Efficiency Inner Pleated Layer
- Carbon Block Core Option
- Double EPDM O-ring Seals
- Filter Belly Bands
- Agion® Antimicrobial Technology

Benefits

- Finer particle retention, higher flow rate & loading capacity, and lower pressure drop than traditional filtration
- Ensures no bypass of contaminants and high chemical compatibility
- Prevents collapsing of filters under high flow or contaminant load applications
- Effective at reducing unwanted bad taste and odor from potable drinking water
- Provides built-in protection by working 24/7 resisting the growth of microbes

Dual Gradient, Double Pleated, Impregnated Filter Cartridges — FOR USE WITH CTS-125 CARTRIDGE TANKS

Part Number	Usage	Series	Material	Flow Rate GPM		Micron Rating	Design	Type of Filtration
				@ 3 psid	@ 8 psid			
CTS1-DP-A	Sub-micron, Bacteria, Cyst	Green	Micro-Glass Fiber with Cellulose / NanoAl with Biostat	30	60	20/0.2 @ 99.99% Efficiency	Double Pleated Impregnated	Dual Gradient
CTS1-DP-ACB *	Sub-micron, Bacteria, Cyst, Chlorine	Green	Micro-Glass Fiber with Cellulose / NanoAl with Biostat / Carbon Block	35	60	20/0.2 @ 99.99% Efficiency	Double Pleated Impregnated & Carbon Block Core	Dual Gradient & Carbon Block

* > 200,000 gallons treatment capacity tested to NSF 42 standards

Agion® is a registered trademark of Sciessent LLC

Performance claims are based on independent lab results and manufacturer's internal test data. Actual performance is dependent on influent water quality, flow rate, system design, and application. Results may vary. Micron ratings are based on 85% or greater removal of a given particle size. Flush new cartridges until water runs clear prior to use. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

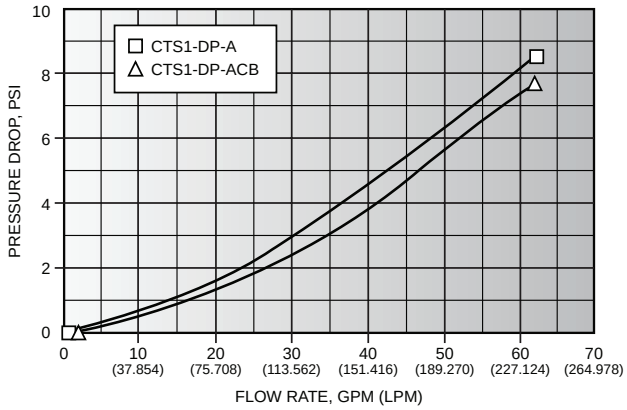
FORM 1411
EFFECTIVE
AUGUST 2014

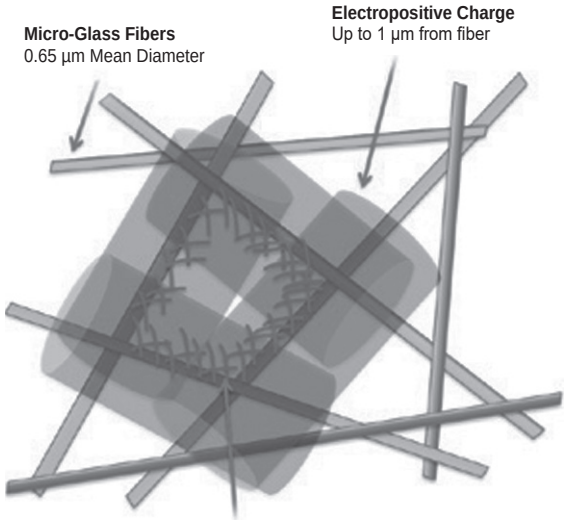
CARTRIDGE TANK SYSTEM

HIGH FLOW, DOUBLE PLEATED, SUBMICRON CARTRIDGES

FITS CTS-125 CARTRIDGE TANK™

Filter Performance



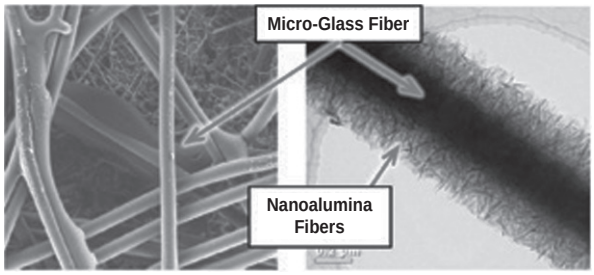


Known foulants for RO membranes that are reduced by this adsorptive technology:

- Virus
- Bacteria
- Colloids (iron, manganese, silica, etc)
- Cellular debris
  - Lipids (hydrophobic and hydrophylic)
  - Phospholipid
  - Proteins
  - Carbohydrates
  - Glucose — mono and polysaccharides (TEP/EPS)

Additional filtration highlights include:

- Removal of humic acid based tannins
- 3-4 log reduction
- Cyst removal
- Endotoxin removal
- Selected heavy metal removal
  - Ferrous iron (Fe2)
  - Ferric iron (Fe3)
  - Tin (Sn)
  - Copper (Cu)
  - Chromium III (Cr3)
  - Aluminum (Al)
- Reduces membrane fouling
- Pre-, post-, and stand-alone filtration solution



SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1411
EFFECTIVE
AUGUST 2014

CARTRIDGE TANK SYSTEM

CARBON BLOCK CARTRIDGES

FITS CTS-125 CARTRIDGE TANK™



Each cartridge comes with a unique handle designed top cap for lightweight and easy removal, a bag for proper disposal, and a double o-ring bottom connection to fit securely into the CTS-125 Cartridge Tank.

Coconut Shell Carbon Block Filter Cartridges

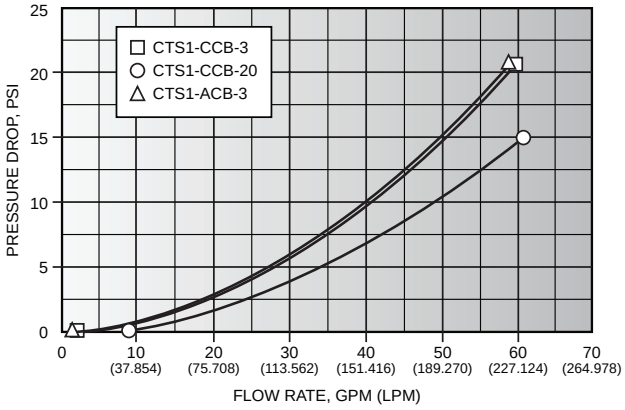
These carbon block filters are made using high performance coconut shell carbon coupled with a unique binder system for superior adsorption capacity and kinetic dynamics. The chloramine block cartridges use a proprietary media with an enormous number of catalytically active nitrogen groups for highly efficient reduction of chloramines. This enhanced catalytic functionality has five times more capacity for chloramines reduction than standard carbon blocks. These carbon block cartridges deliver exceptionally low pressure drop, high dirt holding capacity, and excellent contaminant reductions. All components and materials are made with FDA approved materials, are manufactured from NSF 61 Certified coconut shell carbon, and are California Prop 65 compliant.

Features

- High-Performance Carbon
- Unique Binder System
- Outer Wrap of Polypropylene
- Netting of Polyethylene
- Double EPDM O-ring Seals

Benefits

- Exceptionally low pressure drop
- High dirt holding capacity
- Excellent contaminant reductions



Applications

- Ideal for residential, food service, commercial, and industrial applications
- Effective at reducing unwanted bad taste and odor, along with chlorine and chloramine taste and odor from potable drinking water
- Ideal as polishing or prefilters in applications requiring fine filtration and high capacity

Coconut Shell Carbon Block Filter Cartridges — FOR USE WITH CTS-125 CARTRIDGE TANKS

Part Number	Usage	Series	Material	Flow Rate GPM		Micron Rating	Gallon Capacity	Design	Type of Filtration
				@ 3 psid	@ 8 psid				
CTS1-CCB-3	Chlorine, Taste, Odor	Blue	Coconut Shell Carbon	20	36	3	250,000 [1]	Carbon Block	Adsorption
CTS1-CCB-20	Chlorine, Taste, Odor	Blue	Coconut Shell Carbon	25	43	20	150,000 [2]	Carbon Block	Adsorption
CTS1-ACB-3	Chloramine, Chlorine, Taste, Odor	Blue	Catalytic Coconut Shell Carbon	20	36	3	50,000 [3]	Chloramine Carbon Block	Adsorption

NOTES:

1. 250,000 gallons @ 15 gpm with 90% reduction using 2 ppm free chlorine
2. 150,000 gallons @ 7 gpm with 90% reduction using 2 ppm free chlorine
3. 50,000 gallons @ 7 gpm with 85% reduction using 3 ppm of chloramine

Performance claims are based on independent lab results and manufacturer's internal test data. Actual performance is dependent on influent water quality, flow rate, system design, and application. Results may vary. Micron ratings are based on 85% or greater removal of a given particle size. Flush new cartridges until water runs clear prior to use. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1413
EFFECTIVE
AUGUST 2014

CARTRIDGE TANK SYSTEM

SPECIALTY MEDIA CARTRIDGES

FITS CTS-125 CARTRIDGE TANK™



FOR BEST RESULTS: Use with pre- and postfiltration product solutions, including pleated filters (orange/yellow series) and carbon blocks (blue series).

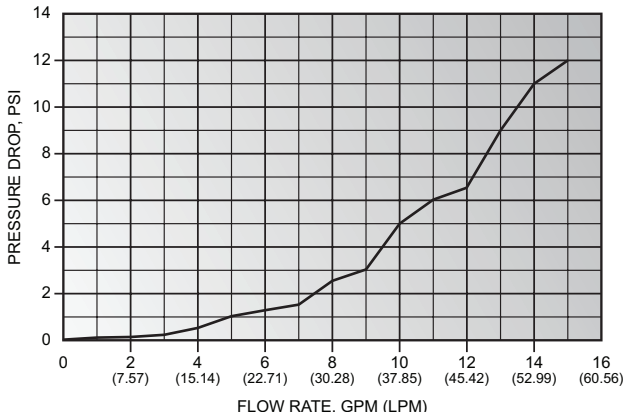
The ATOMUS MD1 media inside this system is Certified by IAPMO R&T to NSF/ANSI 61 for Material Safety and NSF/ANSI 372 for Low Lead Content.

Specialty Filtration Media Filter Cartridges

The CTS1-OX cartridge features ATOMUS® MD1, a proprietary filtration media specifically designed to simultaneously oxidize and adsorb organic and inorganic contaminants along with heavy metals that could be present in water. This unique oxidative media does not add residuals to the water stream or create harmful disinfectant byproducts. Unlike typical oxidation agents (ozone, chlorine, peroxide, etc) ATOMUS MD1 is a "solid state" oxidizing agent. Overall system simplification is paramount in the usage of the CTS-OX cartridge, eliminating an airdraw or standard control valve head, the use of salt, or oxidation agents for regeneration.

Features

- For the reduction of sulfur, iron, manganese, color/tannins/organics and heavy metals from water
- Help to eliminate the orange and brown stains often found in sinks, toilets, tubs and other plumbing fixtures
- Reduces the possibility of damage to pipes and water heaters



Benefits

- Fast kinetics and empty bed contact time (EBCT) from 1 to 5 minutes, depending on the agent that requires oxidation
- Reduction of unwanted bad taste and odor from potable drinking water

Applications

- Residential, food service, rental fleets, commercial, and industrial applications
- Make-up water, RO prefiltration, cooling towers, chill water loops, metal finishing
- Process water (turbidity, particulate, colloidal suspensions)

Water Chemistry and Limitations

Color/Tannin: < 50 color units
Iron, Ferrous: ≤ 3 ppm
H_2S: ≤ 10 ppm
Manganese: ≤ 2 ppm
Alkalinity: < 120 ppm
pH Range: 5.5 to 9.5
Hardness: < 140 ppm (8 gpg)
Temperature: 41 to 140°F (5 to 60°C)
Flow Rates: ≤ 15 gpm (56.8 lpm)

Specialty Media Filter Cartridges — FOR USE WITH CTS-125 CARTRIDGE TANKS

Part Number	Usage	Series	Material	Flow Rate Max.		Design	Type of Filtration
				GPM	LPM		
CTS1-OX	Organics, Inorganics, Heavy Metals	Magenta	Filtration Media	15	56.8	Radial Flow	Oxidation and Adsorption

Performance claims are based on independent lab results and manufacturer's internal test data. Actual performance is dependent on influent water quality, flow rate, system design, and application. Results may vary. Micron ratings are based on 85% or greater removal of a given particle size. Flush new cartridges until water runs clear prior to use. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1416
EFFECTIVE
JUNE 2024

CARTRIDGE TANK SYSTEM

PLEATED CARTRIDGES

FITS CTS-200 CARTRIDGE TANK™



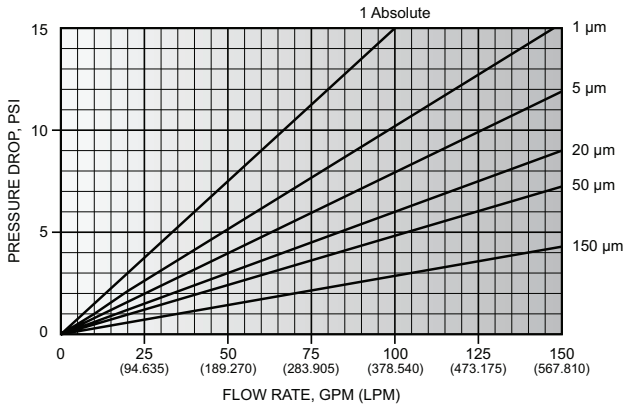
Each cartridge comes with a unique handle designed top cap for lightweight and easy removal, a bag for proper disposal, and a double o-ring bottom connection to fit securely into the CTS-200 Cartridge Tank.

Pleated Sediment Filter Cartridges

These pleated polypropylene or polyethylene cartridges are available with multiple levels of filtration flexibility. The impregnated (PAC) cartridge dramatically improves the quality of water by reducing chlorine, bad tastes, foul odors, and sediment. The cartridges are 100% cellulose free media and cleanable 5 micron and up. They are tough, durable, and designed for a variety of residential and commercial uses. Install filters in parallel to achieve higher flow rates or in a series for step filtration, allowing various micron ratings in each Cartridge Tank for those applications that require versatility.

Features

- Pleated PP or PE Media
- Double EPDM O-ring Seals
- Filter Belly Bands



Benefits

- The PAC cartridge's maximum service flow rate is 15 gpm with a removal capacity of 140,000 gallons, with a 90% chlorine reduction. This dramatically improves the quality of water by reducing chlorine, bad tastes, foul odors, and sediment.
- The pleated cartridges, 5 micron and up, are for service flow rates up to 150 gpm, with low pressure drop of less than 15 psid, are 100% cellulose free media and cleanable.

Applications

Whole house filtration; Commercial filtration; Industrial filtration; Prefiltration for reverse osmosis equipment; Community water systems; Sea water applications due to their non-corrosive construction; Replacement for bag filters with more filter area; A convenient alternative to multiple cartridge filters; Water for livestock and poultry

Pleated Sediment Filter Cartridges — FOR USE WITH CTS-200 CARTRIDGE TANKS

Part Number	Usage	Series	Material	Flow Rate GPM			Micron Rating	Design	Type of Filtration
				@ 3 psid	@ 8 psid	Max.			
CTS2-SP-PP-1A	Sediment	Red	Polypropylene	20	53	50	1 Micron Absolute	Pleated	Surface
CTS2-SP-PP-1	Sediment	Red	Polypropylene	29	78	150	1	Pleated	Surface
CTS2-SP-PP-5	Sediment	Red	Polypropylene	37	100	150	5	Pleated	Surface
CTS2-SP-PP-20	Sediment	Red	Polypropylene	50	133	150	20	Pleated	Surface
CTS2-SP-PP-50	Sediment	Red	Polypropylene	62	150	150	50	Pleated	Surface
CTS2-SP-PP-150	Sediment	Red	Polypropylene Mesh	105	150	150	150	Pleated	Surface
CTS2-SP-PPC-5	Sediment, Chlorine	Red	Polypropylene / Carbon [1]	15	NA	15	5	Pleated / Impregnated	Surface

1. 140,000 gallons @ 15 gpm with 90% chlorine reduction.

NOTE: Maximum allowed pressure drop is 30 psid for all cartridges.

Performance claims are based on independent lab results and manufacturer's internal test data. Actual performance is dependent on influent water quality, flow rate, system design, and application. Results may vary. Micron ratings are based on 85% or greater removal of a given particle size. Flush new cartridges until water runs clear prior to use. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

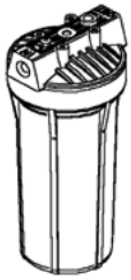
FORM 1414
EFFECTIVE
NOVEMBER 2022

Filter Housings

FILTER HOUSINGS OVERVIEW

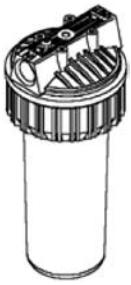
SWT's *economical filter cartridge housings* *are designed for use in a broad range of residential, commercial, and industrial applications. All housings accept standard-length cartridges.*

- *Rugged, corrosion-resistant materials used to provide long trouble-free life*
- *Sumps available in white and clear*
- *Food grade materials*
- *Uses nominal length cartridges: 5, 10, 20 inch*
- *Available port sizes of 1/4 inch, 3/8 inch, 1/2 inch, 3/4 inch, 1 inch, 1-1/2 inch NPT*
- *Maximum Pressure: 100 psi (6.9 bar)*
- *Maximum Temperature: 115°F (46°C)*
- *Mounting brackets and wrenches available*



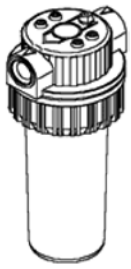
Standard Style Housings

- Basic two-piece design for best economy
- Push-button pressure relief is standard (available without)
- Port sizes: 1/4 inch, 3/8 inch, 1/2 inch, 3/4 inch



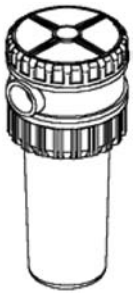
Standard Style Housings with Lock Ring

- Most economical three-piece style includes lock ring
- Push-button pressure relief is standard (also available without pressure relief)
- Port sizes: 1/4 inch, 3/8 inch, 1/2 inch, 3/4 inch



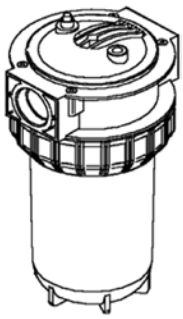
Easy Service Housings

- Three-piece design includes lock ring for quick and easy assembly
- Push-button pressure relief is standard
- Brass threaded inserts available
- Port sizes: 3/4 inch, 1 inch

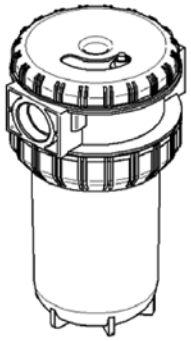


Bypass Housings

- Bypass design offers shutoff and bypass modes
- Lock ring allows for quick and easy assembly
- Automatic pressure relief
- Brass threaded inserts available
- Port sizes: 3/4 inch, 1 inch



Jumbo Easy Service Housing



Jumbo Bypass Housing

Jumbo Housings

- Ideal for high-flow and/or high-capacity applications
- Lock ring closure design allows for quick and easy assembly
- Vent provides pressure relief and air bleeding
- Brass threaded ports available for Jumbo Easy Service Housings
- Port sizes: 1 inch, 1-1/2 inch

Jumbo Housings Options:

Premium All-Metal Drain, 1/4 inch NPT Drain Adapter

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1144
EFFECTIVE
JULY 2011

FILTER HOUSINGS

FILTER HOUSING ACCESSORIES


YH40010


YH40020


YH40030


YH40055


YH40100


YH40110


YH40120

Part Number	Description	Color	Housing Style
Housing Brackets			
FH-BRKT-MC1	L-Shaped Bracket for One Housing	Silver	Streamline & US Filter
YH40010	L-Shaped Bracket for One Housing	White	Standard & Easy Service
YH40011	L-Shaped Bracket for One Housing, Plastic	White	Standard & Easy Service
YH40012	L-Shaped Bracket for One Housing, Plastic	White	Standard
YH40013	L-Shaped Bracket for One Housing, Plastic	White	Easy Service
YH40030	L-Shaped Backet for One Housing	White	Jumbo
YH40040	L-Shaped Backet for One Housing	Silver	Stainless Steel
FH-BRKT-DBL	L-Shaped Bracket for Two Housings	White	Streamline & US Filter
YH40021	L-Shaped Bracket for Two Housings, Plastic	White	Standard & Easy Service
YH40020	L-Shaped Bracket for Two Housings	White	Standard
YH40025	L-Shaped Bracket for Two Housings	White	Easy Service
FH-BRKT-TRP	L-Shaped Bracket for Three Housings	White	Streamline & US Filter
YH40060	U-Shaped Bracket for One Housing with 1/4 or 3/8 inch Ports	Silver	Standard
YH40065	U-Shaped Bracket for One Housing with 1/2 or 3/4 inch Ports	Silver	Standard
FH-BRKT-VIH	U-Shaped Bracket for One Housing with 3/4 inch Ports	Silver	Streamline
YH40050	U-Shaped Bracket for One Housing with 3/4 inch Ports	Silver	Easy Service & Bypass
YH40055	U-Shaped Bracket for One Housing with 1 inch Ports	Silver	Easy Service & Bypass
Housing Wrenches			
YH40100	Standard Housing Wrench, Fits SWT RO Systems and Undersink Units		Standard & Streamline
YH40110	Easy Service and Bypass Housing Wrench		Easy Service & Bypass
YH40115	Standard with Lock Ring Housing Wrench		Standard with Lock Ring
YH40120	Jumbo Housing Wrench		Jumbo
O-Rings			
YH-G10101	Buna-N O-Ring for Standard Housing		Standard
YH-G10105	Buna-N O-Ring for Easy Service or Bypass Housing		Easy Service & Bypass
YH-G10106	Buna-N O-Ring for Stainless Steel Housing		Stainless Steel
YH-G10106-V	Viton O-Ring for Stainless Steel Housing		Stainless Steel
YH-G10122	Buna-N O-Ring for Jumbo Housing		Jumbo

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1144
EFFECTIVE
JULY 2011

Filter Housings



STANDARD STYLE



STANDARD STYLE WITH LOCK RING



EASY SERVICE

Part Number	Description	Port Size	Dimensions Inches	Pressure Drop	Case Qty.
Standard Style Housings with Push-Button Pressure Relief (1)					
YH11111	5 inch, White Sump/Blue Cap	1/4" FPT	7 x 4.9	1 psid @ 4 gpm	12
YH11191	5 inch, Clear Sump/Blue Cap	1/4" FPT	7 x 4.9	1 psid @ 4 gpm	12
YH11211	5 inch, White Sump/Blue Cap	3/8" FPT	7 x 4.9	1 psid @ 4 gpm	12
YH11291	5 inch, Clear Sump/Blue Cap	3/8" FPT	7 x 4.9	1 psid @ 4 gpm	12
YH11311	5 inch, White Sump/Blue Cap	1/2" FPT	7 x 4.9	1 psid @ 4 gpm	12
YH11391	5 inch, Clear Sump/Blue Cap	1/2" FPT	7 x 4.9	1 psid @ 4 gpm	12
YH11411	5 inch, White Sump/Blue Cap	3/4" FPT	7 x 4.9	1 psid @ 4 gpm	12
YH11491	5 inch, Clear Sump/Blue Cap	3/4" FPT	7 x 4.9	1 psid @ 4 gpm	12
YH12111	10 inch, White Sump/Blue Cap NSF*	1/4" FPT	12.4 x 4.9	2 psid @ 8 gpm	12
YH12191	10 inch, Clear Sump/Blue Cap	1/4" FPT	12.4 x 4.9	2 psid @ 8 gpm	12
YH12211	10 inch, White Sump/Blue Cap, NSF*	3/8" FPT	12.4 x 4.9	2 psid @ 8 gpm	12
YH12291	10 inch, Clear Sump/Blue Cap	3/8" FPT	12.4 x 4.9	2 psid @ 8 gpm	12
YH12311	10 inch, White Sump/Blue Cap, NSF*	1/2" FPT	12.4 x 4.9	2 psid @ 8 gpm	12
YH12391	10 inch, Clear Sump/Blue Cap	1/2" FPT	12.4 x 4.9	2 psid @ 8 gpm	12
YH12411	10 inch, White Sump/Blue Cap, NSF*	3/4" FPT	12.4 x 4.9	2 psid @ 8 gpm	12
YH12491	10 inch, Clear Sump/Blue Cap	3/4" FPT	12.4 x 4.9	2 psid @ 8 gpm	12
YH15111	20 inch, White Sump/Blue Cap, NSF*	1/4" FPT	22.5 x 4.9	3 psid @ 12 gpm	1 or 4
YH15211	20 inch, White Sump/Blue Cap, NSF*	3/8" FPT	22.5 x 4.9	3 psid @ 12 gpm	1 or 4
YH15311	20 inch, White Sump/Blue Cap, NSF*	1/2" FPT	22.5 x 4.9	3 psid @ 12 gpm	1 or 4
YH15411	20 inch, White Sump/Blue Cap, NSF*	3/4" FPT	22.5 x 4.9	3 psid @ 12 gpm	1 or 4
Standard Style Housings with Lock Ring & Push-Button Pressure Relief (1)					
YH19111	10 inch, White Sump/Blue Cap, NSF*	1/4" FPT	11.7 x 4.9	2 psid @ 8 gpm	12
YH19191	10 inch, Clear Sump/Blue Cap, NSF*	1/4" FPT	11.7 x 4.9	2 psid @ 8 gpm	12
YH19211	10 inch, White Sump/Blue Cap, NSF*	3/8" FPT	11.7 x 4.9	2 psid @ 8 gpm	12
YH19291	10 inch, Clear Sump/Blue Cap, NSF*	3/8" FPT	11.7 x 4.9	2 psid @ 8 gpm	12
YH19311	10 inch, White Sump/Blue Cap, NSF*	1/2" FPT	11.7 x 4.9	2 psid @ 8 gpm	12
YH19391	10 inch, Clear Sump/Blue Cap, NSF*	1/2" FPT	11.7 x 4.9	2 psid @ 8 gpm	12
YH19411	10 inch, White Sump/Blue Cap, NSF*	3/4" FPT	11.7 x 4.9	2 psid @ 8 gpm	12
YH19491	10 inch, Clear Sump/Blue Cap, NSF*	3/4" FPT	11.7 x 4.9	2 psid @ 8 gpm	12
Easy Service Housings with Lock Ring & Push-Button Pressure Relief (2)					
YH13411	10 inch, White Sump/Blue Cap	3/4" FPT	12.5 x 5.3	2 psid @ 8 gpm	12
YH13491	10 inch, Clear Sump/Blue Cap	3/4" FPT	12.5 x 5.3	2 psid @ 8 gpm	12
YH13511	10 inch, White Sump/Blue Cap	1" FPT	12.5 x 5.3	2 psid @ 8 gpm	12
YH13591	10 inch, Clear Sump/Blue Cap	1" FPT	12.5 x 5.3	2 psid @ 8 gpm	12
YH16411	20 inch, White Sump/Blue Cap	3/4" FPT	22.6 x 5.3	3 psid @ 12 gpm	1 or 4
YH16491	20 inch, Clear Sump/Blue Cap	3/4" FPT	22.6 x 5.3	3 psid @ 12 gpm	1 or 4
YH16511	20 inch, White Sump/Blue Cap	1" FPT	22.6 x 5.3	3 psid @ 12 gpm	1 or 4
YH16591	20 inch, Clear Sump/Blue Cap	1" FPT	22.6 x 5.3	3 psid @ 12 gpm	1 or 4

* NSF/ANSI Standard 42 (1) Available without pressure relief. (2) Brass threaded port inserts standard.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1143
EFFECTIVE
DECEMBER 2024

Filter Housings

FILTER HOUSINGS



BYPASS



JUMBO
EASY SERVICE



JUMBO BYPASS



COUNTERTOP STYLE

Part Number	Description	Port Size	Dimensions Inches	Pressure Drop	Case Qty.
Bypass Housings with Built-in Bypass/Shutoff Valve, Lock Ring & Auto Pressure Relief (2)					
YH14411	10 inch, White Sump/Blue Cap	3/4" FPT	13.3 x 5.5	4 psid @ 8 gpm	12
YH14491	10 inch, Clear Sump/Blue Cap	3/4" FPT	13.3 x 5.5	4 psid @ 8 gpm	12
YH14511	10 inch, White Sump/Blue Cap	1" FPT	13.3 x 5.5	4 psid @ 8 gpm	12
YH14591	10 inch, Clear Sump/Blue Cap	1" FPT	13.3 x 5.5	4 psid @ 8 gpm	12
YH17411	20 inch, White Sump/Blue Cap	3/4" FPT	23.4 x 5.5	6 psid @ 12 gpm	1 or 4
YH17491	20 inch, Clear Sump/Blue Cap	3/4" FPT	23.4 x 5.5	6 psid @ 12 gpm	1 or 4
YH17511	20 inch, White Sump/Blue Cap	1" FPT	23.4 x 5.5	6 psid @ 12 gpm	1 or 4
YH17591	20 inch, Clear Sump/Blue Cap	1" FPT	23.4 x 5.5	6 psid @ 12 gpm	1 or 4
Jumbo Easy Service Housings with Lock Ring & Push-Button Pressure Relief (2)					
YH13512	10 inch, White Sump/Blue Cap	1" FPT	15.4 x 8	1 psid @ 10 gpm	6
YH13592	10 inch, Clear Sump/Blue Cap	1" FPT	15.4 x 8	1 psid @ 10 gpm	6
YH13612	10 inch, White Sump/Blue Cap	1-1/2" FPT	15.4 x 8	1 psid @ 10 gpm	6
YH13692	10 inch, Clear Sump/Blue Cap	1-1/2" FPT	15.4 x 8	1 psid @ 10 gpm	6
YH16512	20 inch, White Sump/Blue Cap	1" FPT	25.4 x 8	1 psid @ 10 gpm	4
YH16612	20 inch, White Sump/Blue Cap	1-1/2" FPT	25.4 x 8	1 psid @ 10 gpm	4
Jumbo Bypass Housings with Built-in Bypass/Shutoff Valve, Lock Ring & Auto Pressure Relief					
YH14512	10 inch, White Sump/Blue Cap	1" FPT	16 x 8	2 psid @ 10 gpm	6
YH14592	10 inch, Clear Sump/Blue Cap	1" FPT	16 x 8	2 psid @ 10 gpm	6
YH14612	10 inch, White Sump/Blue Cap	1-1/2" FPT	16 x 8	2 psid @ 10 gpm	6
YH14692	10 inch, Clear Sump/Blue Cap	1-1/2" FPT	16 x 8	2 psid @ 10 gpm	6
YH17512	20 inch, White Sump/Blue Cap	1" FPT	26 x 8	2 psid @ 10 gpm	4
YH17612	20 inch, White Sump/Blue Cap	1-1/2" FPT	26 x 8	2 psid @ 10 gpm	4
Countertop Style Housing with Mounting Bosses					
YH12112	10 inch, White Sump/White Cap	1/4" FPT	11.5 x 4.8	2 psid @ 8 gpm	12
Streamline™ Countertop Style Housing with Non-skid Base					
FH-10S-CB	10 inch, White Sump/White Cap	1/4" FPT	11.8 x 4.4	2 psid @ 5 gpm	12
Streamline™ Housing with Built-in Bypass/Shutoff Valve & Pressure Relief					
FH-10V-CM-PR	10 inch, White Sump/White Cap, NSF*	3/4" FPT	12.5 x 5.1	4 psid @ 8 gpm	12

* NSF/ANSI Standard 42 (2) Brass threaded port inserts standard.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1143
EFFECTIVE
DECEMBER 2024

Filter Housings

STAINLESS STEEL FILTER HOUSINGS



Stainless Steel Filter Housing for High Temperatures

Part Number *	Number of 10 inch Cartridges	Standard Connect Size	Drain Size	Flow Rate ** GPM (LPM)	Housing Dimensions Inches	Shipping Weight Lb
YH22401	1	3/4" FNPT	1/4" FNP	7 (26.5)	3.5 x 13.5	6
YH22501	1	1" FNPT	1/4" FNP	7 (26.5)	3.5 x 13.5	6
YH22402	2	3/4" FNPT	1/4" FNP	14 (53)	3.5 x 23.5	8
YH22502	2	1" FNPT	1/4" FNP	14 (53)	3.5 x 23.5	8
YH22403	3	3/4" FNPT	1/4" FNP	21 (79.5)	3.5 x 33.5	11
YH22503	3	1" FNPT	1/4" FNP	21 (79.5)	3.5 x 33.5	11

* Stainless steel sump and brass head is standard. Add "-S" after part number for stainless steel sump and head.
** Based upon 7 gpm per 10 inch cartridge length with a 25 micron wound cartridge at 2 psid and a viscosity of 1 cps.
All models include mounting bracket, screws, and pin wrench (P/N YH40230).
1/2, 3/4, and 1 inch connections available for all models.



Stainless Steel Filter Housing for High Flow Rate and High Temperatures

Part Number *	Number of 10 inch Cartridges	Standard Connect Size	Drain Size	Flow Rate ** GPM (LPM)	Housing Dimensions Inches	Shipping Weight Lb
YH22704	4	2" MPT	1/2" NPT	32 (121)	10.5 x 20	25
YH22708	8	2" MPT	1/2" NPT	64 (242)	10.5 x 30	31
YH22712	12	2" MPT	1/2" NPT	96 (363)	10.5 x 40	38
YH22716	16	2" MPT	1/2" NPT	128 (485)	10.5 x 50	45
YH22720	20	2" MPT	1/2" NPT	160 (606)	10.5 x 50	45
YH22724	24	3" Flange	1/2" NPT	192 (727)	16.5 x 40	56
YH22728	28	2" MPT	3/4" NPT	224 (848)	12.5 x 50	66
YH22736	36	3" Flange	3/4" NPT	288 (1,090)	16.5 x 50	92
YH22748	48	4" Flange	3/4" NPT	384 (1,454)	16.5 x 60	100
YH22766	66	4" Flange	3/4" NPT	528 (1,999)	20.5 x 39	140

* 304L stainless steel housing is standard. Add "-S" after part number for 316L stainless steel housing.
** Based upon 7 gpm per 10 inch cartridge length with a 25 micron wound cartridge at 2 psid and a viscosity of 1 cps.
222/fin and 226/fin cartridge connections are available.

High Flow Housing Options

Part Number *	Description
YH-LEGS-2IN	Standard Support Legs — raise housing 2.5 inches, welded-on at factory, includes 9/16 inch bolt holes for floor mounting, qty 3 ea.
YH-LEGS-6IN-HD	Heavy Duty Support Legs — raise housing 6 inches, welded-on at factory, includes 9/16 inch bolt holes for floor mounting, qty 3 ea.
YH-LEGS-MNT	Mounting Tabs — raise housing 1.125 inches, bolted-on by user, includes 7/16 inch bolt holes for floor mounting, qty 3 ea.

* 304L stainless steel is standard. Add "-S" after part number for 316L stainless steel.

Operating Temperature Range: 40 to 300°F (4 to 149°C)
Maximum Operating Pressure: 300 psi (20.7 bar) at 200°F (93°C) for 1- thru 3-cartridge models
150 psi (10 bar) at 300°F (149°C)for 4- or more cartridge models

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1278
EFFECTIVE
NOVEMBER 2022

FILTER HOUSINGS

JUMBO STAINLESS STEEL FILTER HOUSINGS

SWT's Jumbo Stainless Steel Filter Housings *are designed for food industry and high temperature applications with flow rates up to 30 gpm. Available for 10 or 20 inch Big Blue® filter cartridges, these high flow housings feature 304 stainless steel construction with food grade EPDM seals, 1 inch FNPT connections, and 1/4 inch NPT drain port.*



FEATURES

- Eliminates risk of leaks and failures associated with plastic filter housings
- Solid metal construction in premium grade AISI 304 stainless steel
- Food-grade EPDM seals are standard (Viton seals are optional)
- Suitable for use with potable water and food products
- Accepts standard cartridges: 4-1/2 inch OD x 10 or 20 inch nominal length
- Spring-loaded seal plate in sump assures sealing with variable-length cartridges
- Installation kit includes mounting bracket and ring nut disassembly tool
- Sump features a 1/4 inch NPT drain plug

ADDITIONAL INFORMATION

Pressure: 150 psi (1.03 MPa) maximum

Temperature: 210°F (99°C) maximum

Cartridge Type: Double open ended style

Extras: Viton seals

Part Number	Cartridges		Flow Rate**		Connection Size		Dimensions	
	Length Inches*	Diameter Inches	GPM	LPM	Pipe NPT Inches	Drain NPT Inches	Height Inches	OD Inches
YH22501BB-S	10	4-1/2	12	45	1	1/4	15	5
YH22502BB-S	20	4-1/2	12	45	1	1/4	25	5
YH25501BB-S-1.5	10	4-1/2	28	106	1.5	1/4	15	5
YH25501BB-S-2.0	10	4-1/2	48	181	2.0	1/4	15	5
YH25502BB-S-1.5	20	4-1/2	28	106	1.5	1/4	25	5
YH25502BB-S-2.0	20	4-1/2	48	181	2.0	1/4	25	5

* Equivalent lengths accepted: 10 inch = (9.75 to 10 inch); 20 inch = (19.5 to 20 inch)

** Flow rates are for guidelines only. Actual flow rates are based on fluid, viscocity, cartridge type, micron ratings, and other factors.

Big Blue® is a registered trademark of Pentair Residential Filtration, LLC.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1428
EFFECTIVE
JUNE 2025

MULTI-CARTRIDGE HOUSINGS

4 & 5 ROUND CARTRIDGE HOUSINGS

SWT offers a complete line of four and five round multi-cartridge housing models to accommodate a wide range of flow rates. Available in 1, 2, 3, or 4-high stack configurations, the standard models all feature stainless steel construction with poly-coat finish, easy access covers for quick change-outs, and FDA grade Buna-N gaskets. A variety of pipe connection styles and sizes are available to match your application.



FEATURES

- Designed for industrial and commercial filtration needs
- Design pressure: 150 psig (10.3 bar) @ 300ºF (149ºC)
- Heavy duty stainless steel construction for durability
- Band clamp or swing bolt closures for quick cartridge change-outs
- Pipe fittings readily accessible for easy installation
- Knife edge seals eliminate bypass on DOE cartridges
- Adjustable top plate accepts variable length cartridges
- Wide range of options to meet specific filtration and installation requirements

OPTIONS & ADD-ONS

Closure Style: V-Band Clamp or Swing Bolt

Material: 304L Stainless Steel or 316L Stainless Steel

Cartridge Type: Double Open Ended Style (Standard), 222 Style (with Adapter), or 226 Style (with Adapter)

Connections: 2" MNPT (Standard), 1.5" MNPT, 2" or 1.5" FNPT, 2" or 1.5" BSPT, 2" or 1.5" BSPP, 2" or 1.5" Flange, 2" or 1.5" Ferrules, 2" or 1.5" Grooved Fittings

Finish: Poly Coat on Exterior Surfaces (Standard), Electro-Polished, Glass Bead, or Passivate

Extras: Tabs, Legs, Heavy Duty Legs, Gauge Ports, Gauge Ports with Pressure Gauges, Universal Parts

Gasket: Buna N (Standard), EPR, Silicone, Viton, or Teflon Encapsulated Silicone



Adjustable top plate accepts variable length cartridges

Part Number	Cartridges			Flow Rate GPM **	Connection Size			Shipping Weight Lb.	
	Number Per Unit	Length Inches *	Maximum Diameter		Pipe MNPT	Drain FNPT	Vent FNPT	Clamp Style	Swing Bolt Style
YH22704	4	10	2.75	28	2	0.5	0.25	25	62
YH22708	4	20	2.75	56	2	0.5	0.25	31	68
YH22712	4	30	2.75	84	2	0.5	0.25	38	74
YH22716	4	40	2.75	112	2	0.5	0.25	45	80
YH22705	5	10	2.75	35	2	0.5	0.25	26	64
YH22710	5	20	2.75	70	2	0.5	0.25	32	70
YH22715	5	30	2.75	105	2	0.5	0.25	39	76
YH22720	5	40	2.75	140	2	0.5	0.25	46	82

* Equivalent lengths accepted: 10 inch = (9.75 or 10 inch); 20 inch = (19.5 or 20 inch); 30 inch = (29.25 or 30 inch); 40 inch = (39 or 40 inch)

** Based on 7 gpm per 10 inch length with a 25 micron wound cartridge at 2 psid clean and a viscocity of 1 cps. Flow rates are for guidelines only. Actual flow rates are based on fluid, viscocity, cartridge type, micron ratings, and other factors.

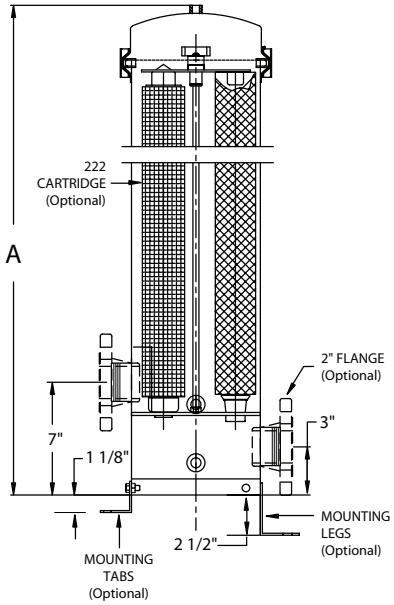
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

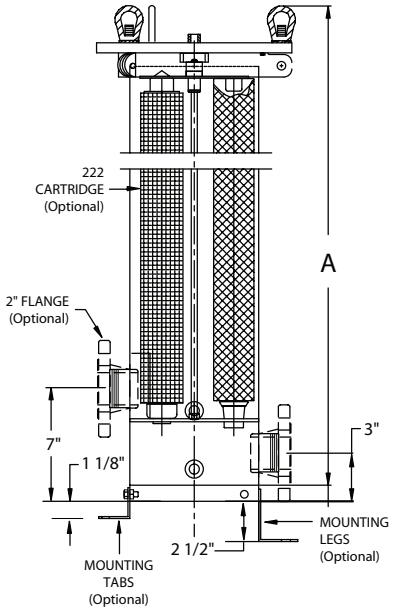
FORM 1329
EFFECTIVE
MARCH 2014

MULTI-CARTRIDGE HOUSINGS

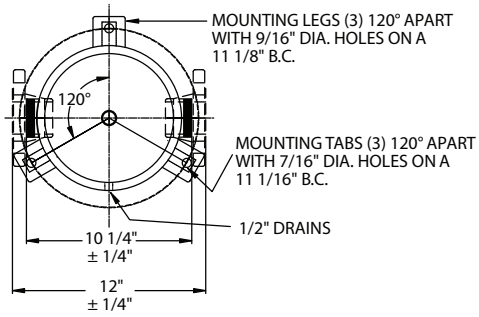
4 & 5 ROUND CARTRIDGE HOUSINGS



CLAMP STYLE



SWING BOLT STYLE



PART NUMBER	CLAMP STYLE	SWING BOLT STYLE
	DIM. A	DIM. A
YH22704	20 7/8″	22 1/4″
YH22708	30 7/8″	32 1/4″
YH22712	40 7/8″	42 1/4″
YH22716	50 7/8″	52 1/4″
YH22705	20 7/8″	22 1/4″
YH22710	30 7/8″	32 1/4″
YH22715	40 7/8″	42 1/4″
YH22720	50 7/8″	52 1/4″



Mounting tabs (may be installed at site)



Sanitary fittings



Gauge port assembly with mounting legs



Electro-polish

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1329
EFFECTIVE
MARCH 2014

MULTI-CARTRIDGE HOUSINGS

7 ROUND CARTRIDGE HOUSINGS

SWT's Seven Round Multi-Cartridge Housing *models are designed for flow rates up to 200 gpm. Available in a variety of stack configurations, the standard models all feature stainless steel construction with poly-coat finish, easy access covers for quick change-outs, and FDA grade Buna-N gaskets. A variety of pipe connection styles and sizes are available to match your application.*



FEATURES

- Designed for industrial and commercial filtration needs
- Design pressure: 150 psi (10.3 bar) @ 300°F (149°C)
- Heavy duty stainless steel construction for durability
- Band clamp or swing bolt closures for quick cartridge change-outs
- Pipe fittings readily accessible for easy installation
- Stainless steel mounting legs standard
- Knife edge seals eliminate bypass on DOE cartridges
- Wide range of options to meet specific application requirements

OPTIONS & ADD-ONS

Closure Style: V-Band Clamp or Swing Bolt

Material: 304L Stainless Steel or 316L Stainless Steel

Cartridge Type: Double Open Ended Style or 222 Style (Standard), or 226 Style (with Adapter)

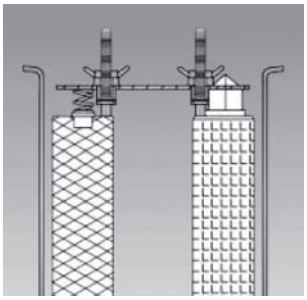
Connection Size: 1.5", 2" (Standard), or 3"

Connection Type: MNPT (Standard), FNPT, BSPT (2" male), BSPP (2" male), Flange, Ferrules, Grooved Fittings

Finish: Poly Coat on Exterior Surfaces (Standard), Electro-Polished, Glass Bead, or Passivate

Extras: Heavy Duty Legs, Gauge Ports, Gauge Ports with Gauges

Gasket: Buna N (Standard), EPR, Silicone, Viton, or Teflon Encapsulated Silicone



Adjustable top plate accepts DOE or 222 fin or flat cartridges

Part Number	Cartridges			Flow Rate GPM **	Connection Size			Shipping Weight Lb.	
	Number Per Unit	Length Inches *	Maximum Diameter		Pipe MNPT	Drain FNPT	Vent FNPT	Clamp Style	Swing Bolt Style
YH22707	7	10	2.75	49	2	0.5	0.25	40	71
YH22714	7	20	2.75	98	2	0.5	0.25	51	82
YH22721	7	30	2.75	157	2	0.5	0.25	60	91
YH22728	7	40	2.75	196	2	0.5	0.25	70	101

* Equivalent lengths accepted: 10 inch = (9.75 or 10 inch); 20 inch = (19.5 or 20 inch); 30 inch = (29.25 or 30 inch); 40 inch = (39 or 40 inch)

** Based on 7 gpm per 10 inch length with a 25 micron wound cartridge at 2 psid clean and a viscocity of 1 cps. Flow rates are for guidelines only. Actual flow rates are based on fluid, viscocity, cartridge type, micron ratings, and other factors.

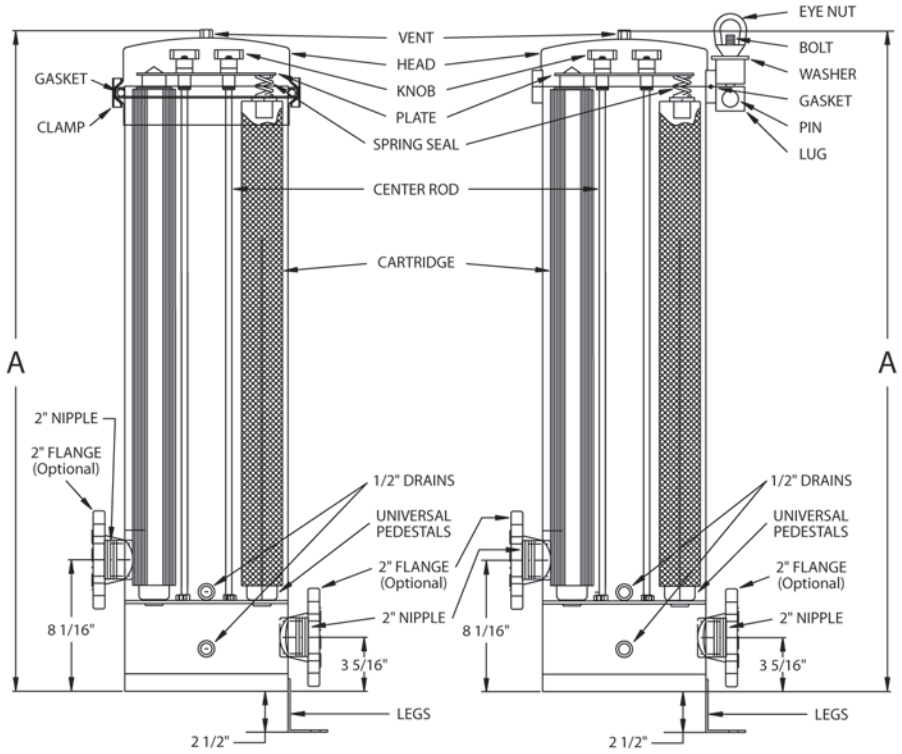
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

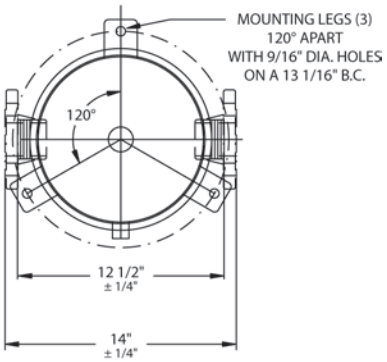
FORM 1429
EFFECTIVE
MAY 2017

MULTI-CARTRIDGE HOUSINGS

7 ROUND CARTRIDGE HOUSINGS



CLAMP STYLE **SWING BOLT STYLE**



PART NUMBER	CLAMP STYLE	SWING BOLT STYLE
	DIM. A	DIM. A
YH22707	20 1/2″	21″
YH22714	30 1/2″	40 1/2″
YH22721	49 1/2″	50 1/2″
YH22728	59 1/2″	60 1/2″



Flanged fittings



Sanitary fittings



Gauge port assembly



Electro-polish

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1429
EFFECTIVE
MAY 2017

MULTI-CARTRIDGE HOUSINGS

12 & 22 ROUND CARTRIDGE HOUSINGS

SWT's twelve and twenty-two round multi-cartridge housing models are designed for flow rates up to 600 gpm. Available in a variety of stack configurations, the standard models all feature stainless steel construction with poly-coat finish, easy access covers for quick change-outs, heavy duty mounting legs, and FDA grade Buna-N gaskets. A variety of pipe connection styles and sizes are available to match your application.



FEATURES

- Designed for industrial and commercial filtration needs
- Design pressure: 150 psig (10.3 bar) @ 300ºF (149ºC)
- Heavy duty stainless steel construction for durability
- Band clamp or swing bolt closures for quick cartridge change-outs
- Heavy duty mounting legs standard
- Flange inlet and outlet connections allow for easy piping
- Knife edge seals eliminate bypass on DOE cartridges
- Top spring seals allow for cartridge length variations
- Accepts DOE cartridges (222 and 226 style adapters are optional)

OPTIONS & ADD-ONS

Closure Style: V-Band Clamp or Swing Bolt
Material: 304L Stainless Steel or 316L Stainless Steel
Cartridge Type: Double Open Ended (Standard), 222 Style (Fin or Flat), or 226 Style (Fin or Flat)
Connections: 2" Flange, 3" Flange (Standard for 12 Round Models), 4" Flange (Standard for 22 Round Models), 2" Ferrules, 3" Ferrules, 4" Ferrules, 2" Grooved Fittings, 3" Grooved Fittings, or 4" Grooved Fittings
Finish: Standard Poly Coat (Standard), Electro-Polished, Glass Bead, or Passivate
Extras: Gauge Ports, Gauge Ports with Gauges
Gasket: Buna N (Standard), EPR, Silicone, Viton, or Teflon Encapsulated Silicone



Adjustable top plate accepts variable length cartridges

Part Number	Cartridges			Flow Rate GPM **	Connection Size			Shipping Weight Lb.	
	Number Per Unit	Length Inches *	Maximum Diameter †		Flange Inches	Drain FNPT	Vent FNPT	Clamp Style	Swing Bolt Style
YH22724	12	20	2.75	168	3	0.5	0.25	86	131
YH22736	12	30	2.75	252	3	0.5	0.25	92	142
YH22748	12	40	2.75	336	3	0.5	0.25	100	150
YH22766	22	30	2.625	462	4	0.5	0.5	140	205
YH22788	22	40	2.625	616	4	0.5	0.5	165	225

* Equivalent lengths accepted: 10 inch = (9.75 or 10 inch); 20 inch = (19.5 or 20 inch); 30 inch = (29.25 or 30 inch); 40 inch = (39 or 40 inch)

** Based on 7 gpm per 10 inch length with a 25 micron wound cartridge at 2 psid clean and a viscocity of 1 cps. Flow rates are for guidelines only. Actual flow rates are based on fluid, viscocity, cartridge type, micron ratings, and other factors.

† When using 222 or 226 adapters with the 22 Round models you must change it to a 21 Round for 2.75 inch O.D. cartridges.

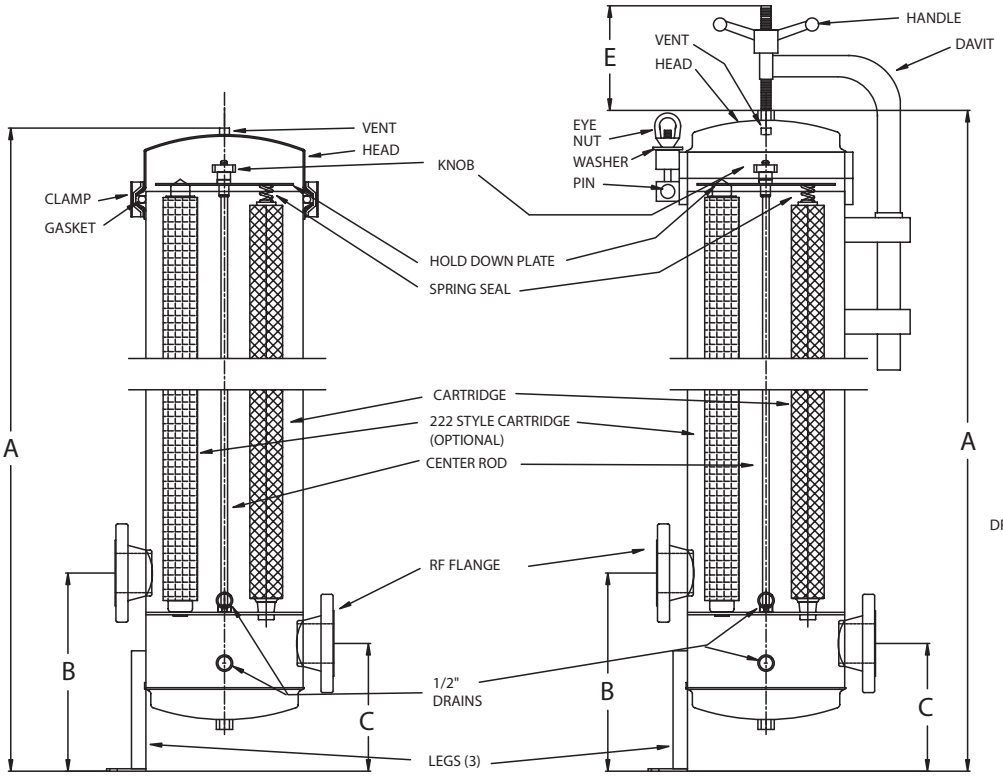
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1330
EFFECTIVE
MARCH 2014

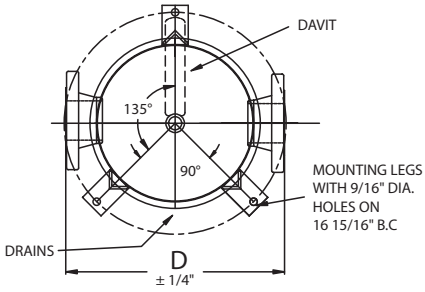
MULTI-CARTRIDGE HOUSINGS

12 & 22 ROUND CARTRIDGE HOUSINGS



CLAMP STYLE

SWING BOLT STYLE



PART NUMBER	CLAMP STYLE	SWING BOLT STYLE				
	DIM. A	DIM. A	B	C	D	E
YH22724	39 1/2″	40 1/2″	15 3/8″	10″	16 11/16″	8″
YH22736	49 1/2″	50 1/2″	15 3/8″	10″	16 11/16″	8″
YH22748	59 1/2″	60 1/2″	15 3/8″	10″	16 11/16″	8″
YH22766	50 3/16″	50 3/16″	15 1/4″	9 1/2‟	21″	12″
YH22788	60 3/16″	50 3/16″	15 1/4″	9 1/2‟	21″	12″



Gauge port assembly with mounting legs



Electro-polish

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1330
EFFECTIVE
MARCH 2014

SEDIMENT CARTRIDGES

SPUN POLYPROPYLENE SEDIMENT CARTRIDGES



These 100% polypropylene cartridges are SWT's lowest priced sediment cartridges. They are free of antistatic agents and binders eliminating the need for pre-rinsing. They are thermally-bonded to keep particles trapped in the filter, even under pressure, for consistent quality over its entire lifetime.

Max. Operating Temperature (water): 160ºF (71ºC) @ 15 psid (1.03 bar)

Max. Operating Differential Pressure (water): 35 psid (2.41 bar) @ 100ºF (38ºC)

Part Number	Description	Micron (Nominal)	Case Qty	Weight Lbs.	Cubic Feet
Spun Sediment Cartridges, 2.5 x 9.875 inch, to fit most standard 10 inch housings					
SO60001	Spun Polypropylene Sediment Cartridge	1	40	21	1.7
SO60003	Spun Polypropylene Sediment Cartridge	3	40	20	1.7
SO60005	Spun Polypropylene Sediment Cartridge	5	40	19	1.7
SO60010	Spun Polypropylene Sediment Cartridge	10	40	18	1.7
SO60020	Spun Polypropylene Sediment Cartridge	20	40	17	1.7
SO60030	Spun Polypropylene Sediment Cartridge	30	40	16	1.7
SO60050	Spun Polypropylene Sediment Cartridge	50	40	15	1.7
SO60075	Spun Polypropylene Sediment Cartridge	75	40	14	1.7
Spun Sediment Cartridges, 2.5 x 20 inch, to fit most standard 20 inch housings					
SO70001	Spun Polypropylene Sediment Cartridge	1	20	21	1.7
SO70003	Spun Polypropylene Sediment Cartridge	3	20	20	1.7
SO70005	Spun Polypropylene Sediment Cartridge	5	20	19	1.7
SO70010	Spun Polypropylene Sediment Cartridge	10	20	18	1.7
SO70020	Spun Polypropylene Sediment Cartridge	20	20	17	1.7
SO70030	Spun Polypropylene Sediment Cartridge	30	20	16	1.7
SO70050	Spun Polypropylene Sediment Cartridge	50	20	15	1.7
SO70075	Spun Polypropylene Sediment Cartridge	75	20	14	1.7

Above cartridges are also available in other materials with a variety of core materials. Contact your SWT representative for details.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1146
EFFECTIVE
APRIL 2015

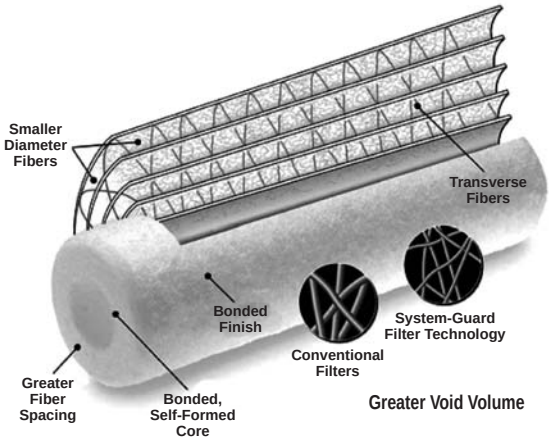
SEDIMENT CARTRIDGES

SYSTEM-GUARD™ DEPTH FILTER CARTRIDGES

SWT's System-Guard™ Filter Cartridges have 65% more dirt-holding capacity than standard spun polypropylene cartridges. New microfiber technology provides a tightly controlled graduated microporous structure for greater filtration efficiency[1] with less pressure drop[2] than any other spun polypropylene cartridge.

This is the best performing sediment depth cartridge SWT has ever offered and is FDA compliant. It is specifically designed as a reverse osmosis prefilter, but can be used in all water treatment applications.

1. 90% @ cartridge's micron rating.
2. 5 micron Cartridges: Less than 0.6 psid @ 5 gpm per 10 inch length in clear water
   1 micron Cartridges: Less than 0.9 psid @ 5 gpm per 10 inch length in clear water

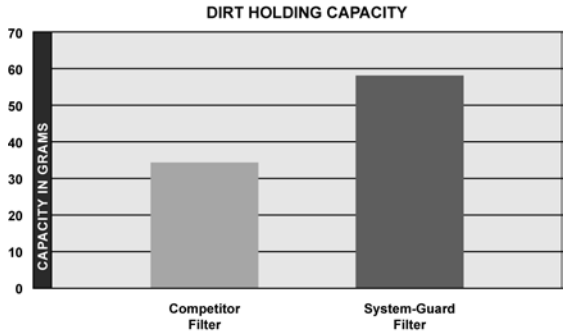


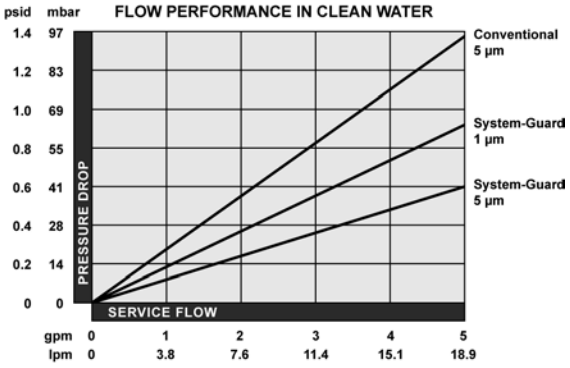
Part Number	Description	Micron (Nominal)	Case Qty	Weight Lbs.
System-Guard Sediment Cartridges, 2.5 x 9.875 inch, to fit most standard 10 inch housings				
SO62001	Thermally-Welded Blown Polypropylene Microfibers	1	40	10
SO62005	Thermally-Welded Blown Polypropylene Microfibers	5	40	10
System-Guard Sediment Cartridges, 2.5 x 20 inch, to fit most standard 20 inch housings				
SO72001	Thermally-Welded Blown Polypropylene Microfibers	1	20	19
SO72005	Thermally-Welded Blown Polypropylene Microfibers	5	20	19
System-Guard Sediment Cartridges, 2.5 x 30 inch, to fit most standard 30 inch housings				
SO82001	Thermally-Welded Blown Polypropylene Microfibers	1	20	28
SO82005	Thermally-Welded Blown Polypropylene Microfibers	5	20	28
System-Guard Sediment Cartridges, 2.5 x 40 inch, to fit most standard 40 inch housings				
SO92001	Thermally-Welded Blown Polypropylene Microfibers	1	20	37
SO92005	Thermally-Welded Blown Polypropylene Microfibers	5	20	37

Cartridge lengths of 9.75, 10, 19.5, and 29.25 inch are also available. Contact SWT for details.

Max. Operating Temperature (water): 160ºF (71ºC) @ 15 psid (1.03 bar)

Max. Operating Differential Pressure (water): 35 psid (2.41 bar) @ 100ºF (38ºC)





SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1146
EFFECTIVE
APRIL 2015

SEDIMENT CARTRIDGES

STRING WOUND SEDIMENT CARTRIDGES

These string wound cartridges are available in a variety of materials and sizes. They are designed to meet the competitive market requirements for an economy weight and diameter wound filtration element. They will satisfy desires for longer life and improve the cost of filtration. They are ideal for sediment reduction — including sand, silt, scale, and rust particles.



Part Number	Description	Micron (Nominal)	Case Qty	Weight Lb	Cubic Feet
String Wound Sediment Cartridges, 2.5 x 4.875 inch, to fit most standard 5 inch housings					
NU51100	Polypropylene* with Polypropylene Core	0.5	30	7	0.9
NU51101	Polypropylene* with Polypropylene Core	1	30	7	0.9
NU51105	Polypropylene* with Polypropylene Core	5	30	7	0.9
NU51110	Polypropylene* with Polypropylene Core	10	30	7	0.9
NU51125	Polypropylene* with Polypropylene Core	25	30	7	0.9
NU51150	Polypropylene* with Polypropylene Core	50	30	7	0.9
NU51200	Bleached Cotton with Polypropylene Core	0.5	30	7	0.9
NU51201	Bleached Cotton with Polypropylene Core	1	30	7	0.9
NU51205	Bleached Cotton with Polypropylene Core	5	30	7	0.9
NU51210	Bleached Cotton with Polypropylene Core	10	30	7	0.9
NU51225	Bleached Cotton with Polypropylene Core	25	30	7	0.9
NU51250	Bleached Cotton with Polypropylene Core	50	30	7	0.9
NU51300	Polyester with Polypropylene Core	0.5	30	7	0.9
NU51301	Polyester with Polypropylene Core	1	30	7	0.9
NU51305	Polyester with Polypropylene Core	5	30	7	0.9
NU51310	Polyester with Polypropylene Core	10	30	7	0.9
NU51325	Polyester with Polypropylene Core	25	30	7	0.9
NU51350	Polyester with Polypropylene Core	50	30	7	0.9
String Wound Sediment Cartridges, 2.5 x 9.875 inch, to fit most standard 10 inch housings *(Continued on next page)*					
NU61100	Polypropylene* with Polypropylene Core	0.5	30	15	1.3
NU61101	Polypropylene* with Polypropylene Core	1	30	15	1.3
NU61105	Polypropylene* with Polypropylene Core	5	30	15	1.3
NU61110	Polypropylene* with Polypropylene Core	10	30	15	1.3
NU61125	Polypropylene* with Polypropylene Core	25	30	15	1.3
NU61150	Polypropylene* with Polypropylene Core	50	30	15	1.3

* These cartridges are manufactured with an industrial grade of polypropylene. For an FDA grade of polypropylene, please contact your SWT representative for a quotation.

Above cartridges are also available in other materials with a variety of core materials. Please contact your SWT representative for details and pricing.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1147
EFFECTIVE
FEBRUARY 2003

SEDIMENT CARTRIDGES

STRING WOUND SEDIMENT CARTRIDGES

Part Number	Description	Micron (Nominal)	Case Qty	Weight Lb	Cubic Feet
String Wound Sediment Cartridges, 2.5 x 9.875 inch, to fit most standard 10 inch housings *(Continued from last page)*					
NU61200	Bleached Cotton with Polypropylene Core	0.5	30	15	1.3
NU61201	Bleached Cotton with Polypropylene Core	1	30	15	1.3
NU61205	Bleached Cotton with Polypropylene Core	5	30	15	1.3
NU61210	Bleached Cotton with Polypropylene Core	10	30	15	1.3
NU61225	Bleached Cotton with Polypropylene Core	25	30	15	1.3
NU61250	Bleached Cotton with Polypropylene Core	50	30	15	1.3
NU61300	Polyester with Polypropylene Core	0.5	30	15	1.3
NU61301	Polyester with Polypropylene Core	1	30	15	1.3
NU61305	Polyester with Polypropylene Core	5	30	15	1.3
NU61310	Polyester with Polypropylene Core	10	30	15	1.3
NU61325	Polyester with Polypropylene Core	25	30	15	1.3
NU61350	Polyester with Polypropylene Core	50	30	15	1.3
String Wound Sediment Cartridges, 2.5 x 19.75 inch, to fit most standard 20 inch housings					
NU71100	Polypropylene* with Polypropylene Core	0.5	15	15	1.3
NU71101	Polypropylene* with Polypropylene Core	1	15	15	1.3
NU71105	Polypropylene* with Polypropylene Core	5	15	15	1.3
NU71110	Polypropylene* with Polypropylene Core	10	15	15	1.3
NU71125	Polypropylene* with Polypropylene Core	25	15	15	1.3
NU71150	Polypropylene* with Polypropylene Core	50	15	15	1.3
NU71200	Bleached Cotton with Polypropylene Core	0.5	15	15	1.3
NU71201	Bleached Cotton with Polypropylene Core	1	15	15	1.3
NU71205	Bleached Cotton with Polypropylene Core	5	15	15	1.3
NU71210	Bleached Cotton with Polypropylene Core	10	15	15	1.3
NU71225	Bleached Cotton with Polypropylene Core	25	15	15	1.3
NU71250	Bleached Cotton with Polypropylene Core	50	15	15	1.3
NU71300	Polyester with Polypropylene Core	0.5	15	15	1.3
NU71301	Polyester with Polypropylene Core	1	15	15	1.3
NU71305	Polyester with Polypropylene Core	5	15	15	1.3
NU71310	Polyester with Polypropylene Core	10	15	15	1.3
NU71325	Polyester with Polypropylene Core	25	15	15	1.3
NU71350	Polyester with Polypropylene Core	50	15	15	1.3

* These cartridges are manufactured with an industrial grade of polypropylene. For an FDA grade of polypropylene, please contact your SWT representative for a quotation.

Above cartridges are also available in other materials with a variety of core materials. Please contact your SWT representative for details and pricing.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1147
EFFECTIVE
FEBRUARY 2003

SEDIMENT CARTRIDGES

PART NUMBER MATRIX FOR ORDERING CUSTOM STRING WOUND SEDIMENT CARTRIDGES

If you cannot find what you are looking for in our standard product line, SWT can provide custom manufactured string wound cartridges. To avoid confusion and speed up the quote process, please use this matrix when requesting custom designs.

NU	—	C	20	R	10	S	–	–	–

PRODUCT LINE
NU = SWT String Wound

MEDIA (SEE NEXT PAGE)
U = Natural Cotton
CCU = White Cotton
C = FDA Bleached Cotton
P = Polypropylene
PD = FDA Polypropylene
F = Fibrillated Polypropylene
R = Rayon (Viscose)
K = Polyester
N = Nylon
O = Acrylic
G = Fiberglass
GH = Baked Fiberglass

MICRON RATING
0.5
1
3
5
10
15
20
25
30
40
50
75
100
125
150
200

DIAMETER
B = 1.375″
T = 2″
E = 2.25″
F = 2.375″
R = 2.5″
H = 2.625″
S = 2.75″
L = 2.875″
P = 3″
BB = 4″
J = 4.5″
K = 4.625″
X = As Specified

LENGTHS
3.75″, 4″, 5″, 6″, 7″, 8″, 9″, 9.75″, 10″, 12″, 12.5″, 18″, 19.5″, 20″, 27″, 29.5″, 30″, 36″, 39″, 40″, 50″, 60″, 70″

CORE MATERIAL
T = Tin Plated Steel
P = Polypropylene
PG = Fiberglass Filled Polypropylene
PH = Heavy Wall Polypropylene
A = 316 Stainless Steel
S = 304 Stainless Steel
X = As Specified

CORE COVER
No Symbol = None
V = Specified Core Cover

END TREATMENT & END CAP ACCESSORIES
S = Metal Cap 2″ Spring
SA = Metal Cap 2.5″ Spring
W = Wild Cat Metal Spring Assembly
PM = Plastic Cap Metal Spring
O = 222 End Cap
PS = Plastic Spring
F = Fin Cap
C = Solid Plastic Cap
CB = Plastic Cap Buna Gasket
B = Buna Basket
N = Plastisol End Cap
NG = Plastisol End Gasket
06 = 226 End Cap

CORE EXTENSION
E = Poly Core Insert
E = Stainless Steel Insert
EC = Tin or SS Crimped Core

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1233
EFFECTIVE
JANUARY 1999

SEDIMENT CARTRIDGES

MEDIA SELECTION GUIDE FOR CUSTOM STRING WOUND SEDIMENT CARTRIDGES

Natural Cotton (U)
For oils, water, paints, organic solvents, alcohols, petroleum. For use to 300°F.

FDA Bleached Cotton (C)
Bleached to meet FDA standards for distilled water, beverages, vegetable oils, petroleum, fatty acid, and alcohols. For use to 300°F. Poor microorganism resistance.

Polypropylene (P) — "Standard Polypropylene"
Recommended for concentrated acids and alkalies, strong oxidizing agents, corrosive fluids and gases. FDA and non-FDA available — consult factory. Easily incinerated to trace of ash. Excellent microorganism resistance. For use to 200°F.

FDA Polypropylene (PD) — "Utility Grade Polypropylene"
Same applications as standard polypropylene but less consistency in appearance due to discoloration, nicknamed "rainbow." For use to 200°F. Primarily used in waste water treatment, and non-critical, high volume applications.

MEDIA

U	=	Natural Cotton
CCU	=	White Cotton
C	=	FDA Bleached Cotton
P	=	Polypropylene
PD	=	FDA Polypropylene
F	=	Fibrillated Polypropylene
R	=	Rayon (Viscose)
K	=	Polyester
N	=	Nylon
O	=	Acrylic
G	=	Fiberglass
GH	=	Baked Fiberglass

Fibrillated Polypropylene (F) — "Electronic Grade"
Non-migrated slit film polypropylene recommended for use in ultra-pure liquids, electronics, and plating where non-leaching is critical. No extractables or sizing agents present. Chemical resistance equal to standard polypropylene. Low moisture absorption and outstanding abrasion resistance. Lowest static propensity of any man-made fiber. High dry or wet strength.

Rayon (R) — "Viscose Rayon"
Fluid compatibility simular to bleached cotton, but has no more coarse fiber and is less absorbent than cotton. Swells in aqueous solutions. For use to 300°F.

Polyester (K)
Chemical resistance similar to polypropylene, with high temperature resistance. For use to 350°F.

Nylon (N)
For special process applications, concentrated alkalies, and hydrocarbons. Excellent microorganism resistance. For use to 300°F.

Acrylic (O) — "Modacrylic"
For strong acids, concentrated alkalies, oxidizing agents. For use to 200°F. Not recommended for organic solvents.

Baked Fiberglass (GH) — "Heat Cleaned Glass Fiber"
Trace oil removed by heat cleaning to yield virgin glass fiber. Recommended for high corrosion applications. For use to 750°F during manufacturing process.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1233
EFFECTIVE
JANUARY 1999

SEDIMENT CARTRIDGES

PLEATED SEDIMENT CARTRIDGES

These cartridges are constructed of a durable, non-woven, reusable fabric which allows for several uses. The standard 9.75 inch length has more than four square feet of fabric media, while the 4.5 inch diameter version has more than sixteen square feet. The media has been pleated to maximize its dirt holding capacity and extend the period of time between changes. The media's chemical and bacterial resistance makes these cartridges suitable for most light industrial and well water applications.



Part Number	Description	Micron (Nominal)	Case Qty	Weight Lb	Cubic Feet
Pleated Sediment Cartridges, 2.75 x 9.75 inch, to fit most standard 10 inch housings					
CF63201	Pleated Polyester Sediment Cartridge	1	25	8	1.1
CF63205	Pleated Polyester Sediment Cartridge	5	24	8	1.1
CF63210	Pleated Polyester Sediment Cartridge	10	25	8	1.1
CF63220	Pleated Polyester Sediment Cartridge	20	25	8	1.1
CF63250	Pleated Polyester Sediment Cartridge	50	24	8	1.1
Pleated Sediment Cartridges, 2.75 x 20 inch, to fit most standard 20 inch housings					
CF73201	Pleated Polyester Sediment Cartridge	1	20	12	1.7
CF73205	Pleated Polyester Sediment Cartridge	5	20	12	1.7
CF73210	Pleated Polyester Sediment Cartridge	10	20	12	1.7
CF73220	Pleated Polyester Sediment Cartridge	20	20	12	1.7
CF73250	Pleated Polyester Sediment Cartridge	50	20	12	1.7
Pleated Sediment Cartridges, 4.5 x 9.75 inch, to fit most jumbo 10 inch housings					
CF83201	Pleated Polyester Sediment Cartridge	1	8	8	1.1
CF83205	Pleated Polyester Sediment Cartridge	5	8	8	1.1
CF83210	Pleated Polyester Sediment Cartridge	10	8	8	1.1
CF83220	Pleated Polyester Sediment Cartridge	20	8	8	1.1
CF83250	Pleated Polyester Sediment Cartridge	50	8	8	1.1
Pleated Sediment Cartridges, 4.5 x 20 inch, to fit most jumbo 20 inch housings					
CF84201	Pleated Polyester Sediment Cartridge	1	6	10	1.7
CF84205	Pleated Polyester Sediment Cartridge	5	6	10	1.7
CF84210	Pleated Polyester Sediment Cartridge	10	6	10	1.7
CF84220	Pleated Polyester Sediment Cartridge	20	6	10	1.7
CF84250	Pleated Polyester Sediment Cartridge	50	6	10	1.7

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1152
EFFECTIVE
JUNE 2004

CARBON CARTRIDGES

CARBON BLOCK CARTRIDGES



SWT's carbon block cartridges are rugged, and extra absorbent. All cartridges feature 95 to 99.99% efficiency at their given micron rating. They all have a 20 micron polypropylene outer wrap with a polypropylene netting for pre-filtration. They also have almost no carbon fines, and up to five times the capacity of standard GAC cartridges. These are quickly becoming the preferred choice in carbon filtration.

Part Number	Description	Size (OD x L) Inches	Micron (Nominal)	Chlorine Reduction @ Flow Rate GPM *	Reduces Cyst	Reduces Lead	Case Qty	Weight Lb
CB57000	Coal Based	2.5 x 5	0.5	3,000 @ 1.0 GPM	X		24	13
CB90005	Coal Based	2.5 x 5	1	2,500 @ 0.5 GPM	X	X	40	28
CB57001	Coal Based	2.5 x 5	1	5,000 @ 1.25 GPM		X	40	28
CB57002	Coal Based	2.5 x 5	2	10,000 @ 0.5 GPM	X		40	23
CB57005	Coconut Shell	2.5 x 5	5	3,000 @ 0.5 GPM			40	21
CB57010	Coal Based	2.5 x 5	2	1,800 @ 0.5 GPM			40	22
CB67000	Coal Based	2.5 x 9.75	0.5	20,000 @ 1.0 GPM	X		12	14
CB90010	Coal Based	2.5 x 9.75	1	6,000 @ 0.5 GPM	X	X	12	20
CB67001	Coal Based	2.5 x 9.75	1	10,000 @ 2.5 GPM	X		20	22
CB67002	Coal Based	2.5 x 9.75	2	20,000 @ 1.0 GPM	X		20	22
CB67005	Coal Based	2.5 x 9.75	5	6,000 @ 1.0 GPM			12	14
CB67010	Coal Based	2.5 x 9.75	10	3,750 @ 1.0 GPM			20	21
CB77000	Coal Based	2.5 x 20	0.5	45,000 @ 2.3 GPM	X		6	15
CB90020	Coal Based	2.5 x 20	1	12,000 @ 1.5 GPM	X	X	20	46
CB77001	Coal Based	2.5 x 20	1	20,000 @ 5.0 GPM	X		20	44
CB77002	Coal Based	2.5 x 20	2	45,000 @ 2.3 GPM	X		20	44
CB77005	Coal Based	2.5 x 20	5	12,000 @ 2.0 GPM			6	17
CB77010	Coal Based	2.5 x 20	10	9,000 @ 2.0 GPM			20	43
CB87000	Coal Based	4.6 x 9.75	0.5	50,000 @ 2.0 GPM	X		4	13
CB90410	Coal Based	4.25 x 9.75	1	20,000 @ 2.5 GPM	X	X	9	32
CB87002	Coal Based	4.25 x 9.75	2	70,000 @ 3.0 GPM	X		9	31
CB87005	Coal Based	4.6 x 9.75	5	12,000 @ 3.0 GPM			4	13
CB87010	Coal Based	4.25 x 9.75	10	12,000 @ 3.0 GPM			9	30
CB97000	Coal Based	4.6 x 20	0.5	150,000 @ 7.0 GPM	X		6	42
CB90420	Coal Based	4.25 x 20	1	42,000 @ 5.0 GPM	X	X	9	55
CB97002	Coal Based	4.25 x 20	2	150,000 @ 7.0 GPM	X		9	60
CB97005	Coal Based	4.6 x 20	5	26,000 @ 7.0 GPM			6	42
CB97010	Coal Based	4.25 x 20	10	26,000 @ 7.0 GPM			9	59

* Estimated capacity using 2 ppm free available chlorine at continuous flow to a 0.1 ppm breakthrough.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1148
EFFECTIVE
JANUARY 1998

Carbon Cartridges

10 MICRON COCONUT SHELL CARBON BLOCK



This activated carbon block provides chlorine, taste and odor reduction capabilities that typically exceed granular activated carbon (GAC) filters. The carbon block is formulated from 100% coconut shell carbon. Its design offers a strong, uniform, permeable filter medium that prevents channeling and bypassing throughout its service life. The carbon block O.D. is wrapped with a protective layer of spun filter matting that removes silt and other particles to extend the life of the cartridge. An outer netting offers protection from abrasion during shipping and handling. The inner core of the cartridge is also lined with a layer of spun filter matting to reduce media migration. White polypropylene end caps are securely bonded to the carbon block with a food-grade accepted adhesive. Buna end gaskets are formulated for use in drinking water applications designed to fit in most standard 10-inch housings. This filter cartridge offers the superior performance of carbon block technology at an economical price that is an attractive alternative to GAC filters.

Features

- Chlorine, Taste and Odor Reduction
- 99% Chlorine Reduction
- 10 Micron Nominal Filtration
- 1200 Gallon Capacity (4.54 m³)

Specifications

Filter Dimensions . . . . . 2.8 inch x 9.8 inch (71.12 mm x 248.92 mm)
Material Components . . . . . FDA Accepted
Carbon Source . . . . . 100% Coconut Shell
Carbon Type . . . . . Block
Operating Temperature . . . . . 33°F to 125°F (0.5°C to 52°C)
Maximum Operating Pressure . . . . . 125 psi (8.62 Bar)
PSID vs Flowrate . . . . . 1.0 psid @ 1.0 gpm (0.07 Bar Drop @ 0.22 m³/hr)

Carbon Block Cartridges, 2.8 x 9.8 inch, to fit most standard 10 inch housings

Part Number	Description	Micron (Nominal)	Size (O.D. x L) Inches	Chlorine Reduction	Case Qty	Weight Lb
CB67010-C	Coconut Shell Carbon Block	10	2.8 x 9.8	1,200 gal.	20	26

This filter is not designed to sanitize water, remove cysts, bacteria, or viruses. Filter performance can be affected by fluctuations in water quality.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1280
EFFECTIVE
APRIL 2002

CARBON CARTRIDGES

CARBON BLOCK CARTRIDGES
WITH LEAD REDUCTION



Pictured above (left to right)
CB90410
CB90420
CB90010
CB90020

Working temperature:
39.2°F (4°C) to 125°F (52°C)

Designed to reduce lead, volatile organic compounds, cyst, chlorine, taste, odor and sediments

These filter cartridges are designed to perform at high flow rates with a low pressure drop. They have a high adsorptive capability and dirt holding capacity with shorter flush time to efficiently reduce lead and other contaminants from water. The cartridges are available in 10 and 20 inch lengths with a nominal filtration rate at 0.5 micron.

Carbon block cartridges with lead reduction are ideal for a wide range of residential, food service, commercial, and industrial applications.

Features

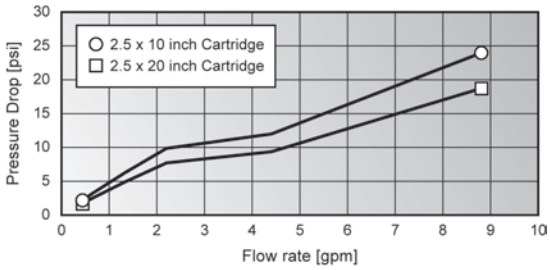
- Reduces lead, VOC, cysts, chlorine, sediments, taste & odor
- 0.5 micron filtration
- Double open-ended (DOE) configuration
- Tested and certified by NSF International against NSF/ANSI Standard 42 for materials
- Made in USA

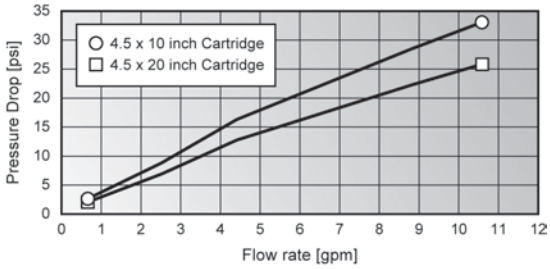
Materials

Filter media:	Coconut Shell Carbon
End-caps:	Polypropylene
Gaskets:	Trexprene
Outer wrap:	Polypropylene
Netting:	Polypropylene

Flow Rate vs Pressure Drop

Testing mode: 68°F (20°C), 43.5 psi (3 bar)





Carbon Block Cartridges with Lead Reduction

Part Number	Description	Size (OD x L) Inches	Micron Rating	Initial Pressure Drop @ Flow Rate	Capacity
CB90010	Carbon Block	2-1/2 x 10	0.5	4.0 psi @ 0.75 gpm (0.28 bar @ 2.8 lpm)	2,500 g @ 0.75 gpm (9,450 l @ 2.8 lpm)
CB90020	Carbon Block	2-1/2 x 20	0.5	6.0 psi @ 1.5 gpm (0.42 bar @ 5.7 lpm)	5,000 g @ 1.5 gpm (18,900 l @ 5.7 lpm)
CB90410	Carbon Block	4-1/2 x 10	0.5	8.8 psi @ 2.5 gpm (0.61 bar @ 9.5 lpm)	8,000 g @ 2.5 gpm (30,240 l @ 9.5 lpm)
CB90420	Carbon Block	4-1/2 x 20	0.5	10.0 psi @ 3.6 gpm (0.69 bar @ 13.7 lpm)	17,000 g @ 5 gpm (64,260 l @ 18.9 lpm)
Similar Product — Made in China					
LU90010	Carbon Block	2-7/8 x 9-3/4	0.5	15.0 psi @ 1.0 gpm (1.0 bar @ 3.8 lpm)	2,000 g @ 0.6 gpm (7,570 l @ 3.8 lpm)

Performance and capacity claims are based on independent and internal testing, and upon the filter cartridge being integrated with a complete system (i.e. filter, housing, fittings, tubing) connected to a regulated pressurized water source. The system must be operated according to system installation and operation manual, for proper installation and proper filter cartridge replacement process. It is essential to follow operational, maintenance and filter replacement procedures to ensure proper filter cartridge performance.The cartridge capacity may vary upon the of the inlet water conditions and according to flow rate and inlet line pressure, which may require more frequent filter cartridge replacement. The contaminants and substances reduced by this filter cartridge are not necessarily in user's water. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before and after the system. To start, flush the system for 5 minutes before use.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1510
EFFECTIVE
MAY 2021

Carbon Cartridges

CARBON CARTRIDGES



Part Number	Description	Size Inches	Micron (Nominal)	Case Qty
Carbon Impregnated Fiber Cartridges (C-1 Style)				
CF65005	Powdered Carbon / Sediment	2.5 x 9.875	5	25/100
CF85005	Powdered Carbon / Sediment	4.5 x 9.875	5	8
Granular Activated Carbon (GAC) Cartridges				
FH56001	Coal Based Carbon — 12 x 40 Mesh	2.5 x 5	20	25
FH56002	Coconut Shell Carbon — 20 x 50 Mesh	2.5 x 5	20	25
FH66001	Coal Based Carbon — 12 x 40 Mesh	2.5 x 9.75	20	25
FH66002	Coconut Shell Carbon — 20 x 50 Mesh	2.5 x 9.75	20	25
YH66005	Coal Based Carbon — Acid Washed, NSF Listed	2.5 x 9.75	5	—
FH76001	Coal Based Carbon — 12 x 40 Mesh	2.5 x 20	20	15
FH76002	Coconut Shell Carbon — 20 x 50 Mesh	2.5 x 20	20	15
YH76005	Coal Based Carbon — Acid Washed, NSF Listed	2.5 x 20	5	—

Shower Filters

Part Number	Description	Shower Head Included (2.5 GPM)	Packaging	Case Qty
FH-SHWR-R	Shower Filter — 100% KDF-55	Yes	Retail Box	12
FH-SHWR-W	Shower Filter — 100% KDF-55	Yes	White Box	12
FH-SHWR-B	Shower Filter — 100% KDF-55	Yes	Bulk	12
FH-SHWR-RNH	Shower Filter — 100% KDF-55	No	Retail Box	12
FH-SHWR-WNH	Shower Filter — 100% KDF-55	No	White Box	12
FH-SHWR-BNH	Shower Filter — 100% KDF-55	No	Bulk	12

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1149
EFFECTIVE
NOVEMBER 1998

INLINE FILTERS

INLINE FILTER CARTRIDGES



Part Number	Description	Size Inches	Connections	Micron (Nominal)	Case Qty	Weight Lb
CHLORINE, TASTE & ODOR — ACID WASHED BITUMINOUS GAC *						
FH-GS6-B	12 x 40 Bituminous GAC	2 x 6	1/4 inch FPT	20	12	6
FH-GS6-G	12 x 40 Bituminous GAC	2 x 6	1/4 inch JG	20	12	6
FH-GS6-H	12 x 40 Bituminous GAC	2 x 6	3/8 inch JG	20	12	6
FH-GS10-B	12 x 40 Bituminous GAC	2 x 10	1/4 inch FPT	20	12	9
FH-GS10-G	12 x 40 Bituminous GAC	2 x 10	1/4 inch JG	20	12	9
FH-GS10-H	12 x 40 Bituminous GAC	2 x 10	3/8 inch JG	20	12	9
FH-GS210-B	12 x 40 Bituminous GAC	2.5 x 11	1/4 inch FPT	20	12	10
FH-GS210-C	12 x 40 Bituminous GAC	2.5 x 11	3/8 inch FPT	20	12	10
FH-GS215-H	12 x 40 Bituminous GAC	2.5 x 14	3/8 inch JG	20	12	12
CHLORINE, TASTE & ODOR — WATER WASHED COCONUT SHELL GAC *						
FH-GS6RO-B	20 x 50 Coconut Shell GAC	2 x 6	1/4 inch FPT	5	12	6
FH-GS6RO-G	20 x 50 Coconut Shell GAC	2 x 6	1/4 inch JG	5	12	6
FH-GS10RO-B	20 x 50 Coconut Shell GAC	2 x 10	1/4 inch FPT	5	12	12
FH-GS10RO-C	20 x 50 Coconut Shell GAC	2 x 10	3/8 inch FPT	5	12	12
FH-GS10RO-G	20 x 50 Coconut Shell GAC	2 x 10	1/4 inch JG	5	12	12
FH-GS10RO-H	20 x 50 Coconut Shell GAC	2 x 10	3/8 inch JG	5	12	12
FH-GS210RO-C	20 x 50 Coconut Shell GAC	2.5 x 11	3/8 inch FPT	5	12	14
FH-GS215RO-B	20 x 50 Coconut Shell GAC	2.5 x 14	1/4 inch FPT	5	12	18
pH STABILIZER (POST RO) — CALCITE & WATER WASHED COCONUT SHELL GAC						
FH-GS10CALRO-B	Calcite/20 x 50 Coconut GAC	2 x 10	1/4 inch FPT	20	12	13
FH-GS10CALRO-H	Calcite/20 x 50 Coconut GAC	2 x 10	3/8 inch JG	20	12	13
BACTERIOSTATIC — KDF-55 & WATER WASHED COCONUT SHELL GAC						
FH-GS6EX.25-B	0.25 lb KDF / 20 x 50 Coconut	2 x 6	1/4 inch FPT	5	12	10
FH-GS6EX.25-C	0.25 lb KDF / 20 x 50 Coconut	2 x 6	3/8 inch FPT	5	12	10
FH-GS6EX.25-G	0.25 lb KDF / 20 x 50 Coconut	2 x 6	1/4 inch JG	5	12	10
FH-GS10EX.5-B	0.5 lb KDF / 20 x 50 Coconut	2 x 10	1/4 inch FPT	5	12	15
FH-GS10EX.5-C	0.5 lb KDF / 20 x 50 Coconut	2 x 10	3/8 inch FPT	5	12	15
FH-GS10EX.5-G	0.5 lb KDF / 20 x 50 Coconut	2 x 10	1/4 inch JG	5	12	15
FH-GS210EX1-B	1.0 lb KDF / 20 x 50 Coconut	2.5 x 11	1/4 inch FPT	5	12	24
FH-GS210EX1-C	1.0 lb KDF / 20 x 50 Coconut	2.5 x 11	3/8 inch FPT	5	12	24
FH-GS210EX1-G	1.0 lb KDF / 20 x 50 Coconut	2.5 x 11	1/4 inch JG	5	12	24
SEDIMENT & RUST PARTICULATE — SPUN BONDED POLYPROPYLENE *						
FH-GS6SED-B	100% Polypropylene	2 x 6	1/4 inch FPT	5	12	5
FH-GS6SED-G	100% Polypropylene	2 x 6	1/4 inch JG	5	12	5
FH-GS10SED-C	100% Polypropylene	2 x 10	3/8 inch FPT	5	12	7
FH-GS10SED-G	100% Polypropylene	2 x 10	1/4 inch JG	5	12	7
FH-GS210SED-C	100% Polypropylene	2.5 x 11	3/8 inch FPT	5	12	14
FH-GS215SED-G	100% Polypropylene	2.5 x 14	1/4 inch JG	5	12	18
FH-GS215SED-H	100% Polypropylene	2.5 x 14	3/8 inch JG	5	12	18

* ANSI/NSF Standard 42 Certified

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1150
EFFECTIVE
JULY 2009

INLINE FILTERS

INLINE FILTER CARTRIDGES



Part Number	Description	Size Inches	Connections	Micron (Nominal)	Case Qty	Weight Lb
LIME, SCALE, CHLORINE, TASTE & ODOR — HEXAMETAPHOSPHATE & WATER WASHED COCONUT SHELL GAC *						
FH-GS6ALS-B	Hexametaphosphate/Coconut	2 x 6	1/4 inch FPT	20	12	6
FH-GS6ALS-C	Hexametaphosphate/Coconut	2 x 6	3/8 inch FPT	20	12	6
FH-GS6ALS-G	Hexametaphosphate/Coconut	2 x 6	1/4 inch JG	20	12	6
FH-GS10ALS-B	Hexametaphosphate/Coconut	2 x 10	1/4 inch FPT	20	12	10
FH-GS10ALS-C	Hexametaphosphate/Coconut	2 x 10	3/8 inch FPT	20	12	10
FH-GS10ALS-G	Hexametaphosphate/Coconut	2 x 10	1/4 inch JG	20	12	10
FH-GS10ALS-H	Hexametaphosphate/Coconut	2 x 10	3/8 inch JG	20	12	10
LIME & SCALE — HEXAMETAPHOSPHATE						
FH-GS6PH-B	100% Hexametaphosphate	2 x 6	1/4 inch FPT	—	12	13
FH-GS10PH-B	100% Hexametaphosphate	2 x 10	1/4 inch FPT	—	12	22
FH-GS10PH-G	100% Hexametaphosphate	2 x 10	1/4 inch JG	—	12	22
CHLORINE, TASTE & ODOR — 1 MICRON CARBON BLOCK						
FH-GS6CB1-G	1 Micron Carbon Block	2 x 6	1/4 inch JG	1	12	5
FH-GS10CB1-G	1 Micron Carbon Block	2 x 10	1/4 inch JG	1	12	9
FH-GS10CB1-H	1 Micron Carbon Block	2 x 10	3/8 inch JG	1	12	9
FH-GS210CB1-B	1 Micron Carbon Block	2.5 x 11	1/4 inch FPT	1	12	11
FH-GS210CB1-C	1 Micron Carbon Block	2.5 x 11	3/8 inch FPT	1	12	11
CHLORINE, TASTE & ODOR — 5 MICRON CARBON BLOCK						
FH-GS6CB5-B	5 Micron Carbon Block	2 x 6	1/4 inch FPT	5	12	5
FH-GS6CB5-C	5 Micron Carbon Block	2 x 6	3/8 inch FPT	5	12	5
FH-GS6CB5-G	5 Micron Carbon Block	2 x 6	1/4 inch JG	5	12	5
FH-GS6CB5-H	5 Micron Carbon Block	2 x 6	3/8 inch JG	5	12	5
FH-GS10CB5-B	5 Micron Carbon Block	2 x 10	1/4 inch FPT	5	12	9
FH-GS10CB5-C	5 Micron Carbon Block	2 x 10	3/8 inch FPT	5	12	9
FH-GS10CB5-G	5 Micron Carbon Block	2 x 10	1/4 inch JG	5	12	9
FH-GS10CB5-H	5 Micron Carbon Block	2 x 10	3/8 inch JG	5	12	9
FH-GS210CB5-B	5 Micron Carbon Block	2.5 x 11	1/4 inch FPT	5	12	11
FH-GS210CB5-G	5 Micron Carbon Block	2.5 x 11	1/4 inch JG	5	12	11
FH-GS215CB5-B	5 Micron Carbon Block	2.5 x 14	1/4 inch FPT	5	12	13
FH-GS215CB5-C	5 Micron Carbon Block	2.5 x 14	3/8 inch FPT	5	12	13
FH-GS215CB5-G	5 Micron Carbon Block	2.5 x 14	1/4 inch JG	5	12	13
FH-GS215CB5-H	5 Micron Carbon Block	2.5 x 14	3/8 inch JG	5	12	13
LEAD, CYSTS, PARTICULATE, CHLORINE, TASTE & ODOR **						
FH-GS10LS-G	Carbon/ATS™ Sorbent Block	2 x 10	1/4 inch JG	0.5	12	9
FH-GS210LS-B	Carbon/ATS™ Sorbent Block	2.5 x 11	1/4 inch FPT	1	12	15
TDS REDUCTION — HIGH CAPACITY DI Resin						
FH-GS210DI-B	Premium Mixed Bed DI Resin	2.5 x 11	1/4 inch FPT	20	12	17
FH-GS215DI-B	Premium Mixed Bed DI Resin	2.5 x 14	1/4 inch FPT	20	12	24

* ANSI/NSF Standard 42 Certified

** ANSI/NSF Standard 53 Certified

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1150
EFFECTIVE
JULY 2009

SPECIALTY CARTRIDGES

RESIN & MEDIA CARTRIDGES

We loaded our most popular resins into handy disposable cartridges to fit most industry standard plastic filter housings. All cartridges feature the SWT ProSoft™, ProSelect™, and ProActive™ media lines, and have a 20-micron polypropylene filter pad for prefiltration. All carbon is water or acid pre-washed to remove carbon fines. These cartridges are quickly becoming the professional choice in water filtration. SWT's Specialty Cartridges are more affordable than ever.

Part Number	Description	Nominal Size Inches	Capacity	Flow Rate		Case Qty.	Case Wt. Lb
				Operating GPM	Maximum GPM		
ProActive Acid Washed Coal Based Carbon Cartridges — Chlorine & VOC Removal							
ER66005	20 x 50 Acid Washed Coal GAC	2.5 x 10	4,000 gal.	0.75	1.00	12*	15
ER76005	20 x 50 Acid Washed Coal GAC	2.5 x 20	6,300 gal.	1.00	2.00	9*	21
ER86005	12 x 40 Acid Washed Coal GAC	4.5 x 10	7,750 gal.	2.00	4.00	8*	20
ER96005	12 x 40 Acid Washed Coal GAC	4.5 x 20	17,000 gal.	3.00	5.00	4*	21
ProActive Acid Washed Coconut Shell Carbon Cartridges — Chlorine & Organics Removal							
ER66006	20 x 50 Acid Washed Coconut GAC	2.5 x 10	4,000 gal.	0.75	1.00	12*	15
ER76006	20 x 50 Acid Washed Coconut GAC	2.5 x 20	9,000 gal.	1.00	2.00	9*	21
ER86006	12 x 40 Acid Washed Coconut GAC	4.5 x 10	13,000 gal.	2.00	4.00	8*	20
ER96006	12 x 40 Acid Washed Coconut GAC	4.5 x 20	30,000 gal.	3.00	5.00	4*	21
ProActive Centaur Catalytic Carbon Cartridges — Chloramine & Hydrogen Sulfide Removal							
ER66007	20 x 50 Centaur Catalytic GAC	2.5 x 10	4,000 gal.	0.75	1.00	12*	18
ER76007	20 x 50 Centaur Catalytic GAC	2.5 x 20	6,300 gal.	1.00	2.00	9*	25
ER86007	12 x 40 Centaur Catalytic GAC	4.5 x 10	7,700 gal.	2.00	4.00	8*	24
ER96007	12 x 40 Centaur Catalytic GAC	4.5 x 20	17,000 gal.	3.00	5.00	4*	25
High Purity Mixed Bed Deionization Resin Cartridges — TDS Removal							
ER68100	Mixed Bed Deionization Resin	2.5 x 10	450 gr.	0.20	0.30	12*	42
ER78100	Mixed Bed Deionization Resin	2.5 x 20	900 gr.	0.20	0.60	9*	32
ER88100	Mixed Bed Deionization Resin	4.5 x 10	1,050 gr.	0.50	0.80	8*	29
ER98100	Mixed Bed Deionization Resin	4.5 x 20	2,350 gr.	0.50	1.50	4	32
Color Changing High Purity Demineralization Resin Cartridges — TDS Removal							
ER68100C-CC	Self Indication Mixed Bed Resin	2.5 x 10	450 gr.	0.20	0.30	12*	42
ProSoft Gold Cation Resin Cartridges — Hardness & Iron Removal							
ER68200	Softening Resin, NSF/ANSI 44/61	2.5 x 10	1,113 gr.	0.05	0.27	12*	42
ER78200	Softening Resin, NSF/ANSI 44/61	2.5 x 20	2,520 gr.	0.12	0.60	8*	32
ER88200	Softening Resin, NSF/ANSI 44/61	4.5 x 10	2,818 gr.	0.13	0.67	8*	32
ER98200	Softening Resin, NSF/ANSI 44/61	4.5 x 20	6,237 gr.	0.30	1.49	4*	37

* Sold in case quantities only.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1268
EFFECTIVE
APRIL 2013

SPECIALTY CARTRIDGES

RESIN & MEDIA CARTRIDGES

Part Number	Description	Nominal Size Inches	Capacity	Flow Rate		Case Qty.	Case Wt. Lb
				Operating GPM	Maximum GPM		
MetalEase-AS+5™ Cartridges — Arsenic (As^{+5}) Removal							
METAL-AS5-10	Arsenic Removal Media, NSF/ANSI 61	2.5 x 10	5,936 gal.	0.10	0.40	12	44
METAL-AS5-20	Arsenic Removal Media, NSF/ANSI 61	2.5 x 20	13,440 gal.	0.22	0.90	9*	34
METAL-AS5-10BB	Arsenic Removal Media, NSF/ANSI 61	4.5 x 10	15,030 gal.	0.25	1.00	8*	31
METAL-AS5-20BB	Arsenic Removal Media, NSF/ANSI 61	4.5 x 20	33,264 gal.	0.56	2.22	4*	34
Fluoride Removal Cartridges							
METAL-ALF-10	MetalEase-ALF™ Media, NSF/ANSI 61	2.5 x 10	2,406 gal.	0.03	0.06	12	40
ER78400	Fluoride Removal Media	2.5 x 20	5,448 gal.	0.06	0.12	9*	35
ER88400	Fluoride Removal Media	4.5 x 10	6,093 gal.	0.07	0.13	8*	30
ER98400	Fluoride Removal Media	4.5 x 20	13,484 gal.	0.15	0.30	4*	34
ProSelect Tannin Resin Cartridges — Organics & Tannins Removal							
ER68500	Tannin Selective Resin, NSF/ANSI 61	2.5 x 10	119 gal.	0.05	0.11	12*	42
ER78500	Tannin Selective Resin, NSF/ANSI 61	2.5 x 20	269 gal.	0.12	0.24	8*	32
ER88500	Tannin Selective Resin, NSF/ANSI 61	4.5 x 10	300 gal.	0.13	0.27	8*	32
ER98500	Tannin Selective Resin, NSF/ANSI 61	4.5 x 20	665 gal.	0.30	0.59	4*	37
ProSelect Nitrate Resin Cartridges — Nitrate Removal							
ER68300	Nitrate Selective Resin, NSF/ANSI 61	2.5 x 10	334 gr.	0.05	0.21	12*	42
ER78300	Nitrate Selective Resin, NSF/ANSI 61	2.5 x 20	756 gr.	0.12	0.48	9*	31
ER88300	Nitrate Selective Resin, NSF/ANSI 61	4.5 x 10	845 gr.	0.13	0.54	8*	27
ER98300	Nitrate Selective Resin, NSF/ANSI 61	4.5 x 20	1,871 gr.	0.30	1.19	4*	31

* Sold in case quantities only.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1268
EFFECTIVE
APRIL 2013

OIL/WATER SEPARATION

REPLACES PENTAIR P/N OAC PLUS-30 222 FLAT AND FIBREDYNE P/N C-170X30S2N



NOTE: Other sizes and configurations available.

OAC Series Oil/Water Separation Cartridges *utilize media that can economically reduce hydrocarbon contamination in aqueous solutions. The radial flow design provides the largest possible surface area, reducing the media bed depth.*

The OAC Series is capable of removing very high concentrations of free oil, dispersed oil, surfactant based emulsions, and dissolved hydrocarbons to non-detectable levels. These cartridges can be used as stand-alone oil water separators, or to enhance or protect other systems.

OAC Series cartridges are capable of breaking the IMO 107(49) surfactant based emulsion in a single pass. The special patented non-swelling organic clay allows the cartridge to be filled with 100% active oil absorbing media, providing greater oil holding capacity.

FEATURES

- Meet governmental regulations
- Reduced maintenance due to fouling
- Can be incinerated
- Minimal pressure drop
- Withstands harsh environments
- Industry standard size and end caps
- Withstands high differential pressure up to 5 bar
- Typically removes better than 99% in a single pass

APPLICATIONS

- Commercial bilge and ballast water
- Post oil/water separator polishing
- Oil field produced water
- Pipeline maintenance activities
- Hydraulic tramp oil removal
- Parts washing and plating baths
- Compressor condensates
- Boiler blow down
- Membrane & GAC pretreatment
- Pump sump discharge

SPECIFICATIONS

Part Number: OAC-PLUS-30-2F-EQUIV

Max. Operating Temperature: 150°F (65°C)

Max. Differential Pressure: 75 psid (5 bar)

Max. Flowrate: 1 gpm per 10 inch length (recommended flow < 50% of max.)

Changeout Pressure Drop: 35 psid (2.4 bar)

Approx. Oil Capacity Removal: 160 to 200 ml per 10 inch length

MATERIALS OF CONSTRUCTION

Absorbent: Polypropylene & Proprietary Medias

Support Construction: 100% Polypropylene

Seal Material: Buna-N

SIZE & CONFIGURATION

Dimensions: 2.75 inch Dia. x 30 inch Length

End Cap: Single Open Ended (222 O-ring / Flat Top)

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1511
EFFECTIVE
JULY 2022

PENTAIR



FILTRATION & INDUSTRIAL
2019 PRICE LIST

PRICES EFFECTIVE FOR ALL PRODUCTS SHIPPED AFTER JANUARY 1, 2019.
SUPERSEDES ALL PREVIOUS ISSUES. ALL CONTENT IS SUBJECT TO CHANGE.

waterpurification.pentair.com

TABLE OF CONTENTS

SYSTEMS

FreshPoint Filtration Systems 5
FreshPoint Reverse Osmosis Systems 5
Inline Filter Systems 5
Quick-Change Filter Systems 7
Reverse Osmosis Filtration Systems 7
Quick-Change Cartridge Style Filter Systems 8
Basic Filter Systems 9
Microguard Filter Systems 9
Complete Cartridge Filter Systems 9

HOUSINGS

Traditional Slim Line§ Housings 9
3G Slim Line Housings 13
Flat Cap Slim Line Housings 15
Traditional Standard Housings 17
Valve-In-Head Housing Assemblies 18
3G Standard Housings 19
Big Blue§ Heavy Duty Housings 20
Big Black Heavy Duty Housings 24
Big White§ Heavy Duty Housings 25
Big Clear Heavy Duty Housings 27
High Temperature Nylon Housings 27
All Natural - Pure Polypropylene Housings 28
All Natural "White" - Pure Polypropylene Housings 29
Reverse Osmosis Membrane Housing 30
E-Series Stainless Steel Cartridge Housings 30
ST-Series Stainless Steel Cartridge Housings 31
PBH Bag Filter Housings 32
E-Series Stainless Steel Bag Housings 32
Aluminum Bag Housings 33

FILTER CARTRIDGES

SEDIMENT CARTRIDGES
- Pleated Cellulose 33
- Pleated Cellulose-Polyester 33
- Pleated Polyester 34
- PolyDepth§ 34
- Spun Polypropylene 35
- String Wound - Polypropylene 36
- String Wound - Fibrillated 36
- Pleated Polypropylene 36

CARBON CARTRIDGES
- Diamond Flow 37
- Carbon Impregnated Media 37
- Granular Activated Carbon 37
- Carbon Block 38

SPECIALTY CARTRIDGES
- Fibredyne§ Carbon Block 39
- Fibredyne Electroplating 39
- Deionization 40
- Fibredyne oil adsorbing 40
- Iron Reduction 40
- Microguard§ Membrane 40
- Phosphate Crystal 41
- Water Softening 41
- Empty Cartridges - Unassembled 41

FILTER BAGS

PBH Filter Bags 41
Industrial Filter Bags 42

MEMBRANES

Pentair Residential Reverse Osmosis Membrane Elements 45
Pentair Residential GRO Membranes 46
Pentair Res. GRO Membranes w/ Drain Line Flow Control 46
Pentair Residential GRO Adaptor Kits 46

ACCESSORIES

Replacement Filter Housing Caps 46
Replacement Filter Housing Sumps 50
Replacement O-Rings 51
Mounting Brackets 51
Wrenches 52
Cartridge Couplers 52
Differential Pressure Gauges (Fits All 3G Meter Mount Caps) 52
Pressure Relief Button Kits 52
E-Series Cartridge Housing Service Parts 53
ST-Series Stainless Steel Housing Service Parts 53
STBC Series Stainless Steel Housing Service Parts 53
PBH Bag Housing Service Parts 53
E-Series Bag Housing Service Parts 53
Counter Top Accessories 54
All Natural Replacements 54
All Natural "White" Replacements 55
Media 55
Ultrafiltration Flush Kits (Global) 55
Ultrafiltration Controller (Global) 55
Ultrafiltration Solenoids 55
Ultrafiltration Vessel End Caps 55
Ultrafiltration Fitting Kits 56
Ultrafiltration Spare Parts 56

Parts Listing - Sorted By Part Number 57

KEY TO ABBREVIATIONS									
BB	Big Blue	HDPE	HIGH-DENSITY POLYETHYLENE	PC	POWDER COATED	SS	STAINLESS STEEL	W	WITH
BC	BIG CLEAR	HFPP	HIGH FLOW POLY-PROPYLENE	PR	PRESSURE RELIEF	VIH	VALVE-IN-HEAD	W/O	WITHOUT
BW	BIG WHITE	IB	INTEGRAL BRACKET	SL	Slim Line	WB	WALL BRACKET	ZP	ZINC PLATED

PART NUMBER	DESCRIPTION	µm (NOMINAL)	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT

FRESHPOINT FILTRATION SYSTEMS



FILTRATION SYSTEMS

158837	F1000-DFB, Filter 1 Stage, Chlorine, Taste and Odor	NR	0.43	3.9	1	*	$87.48
158838	F1000-B1B, Filter 1 Stage, Cyst and Lead	0.5	0.43	4.1	1	*	$91.80
158839	F2000-B2B, Filter 2 Stage VOC	0.5	0.73	6.8	1	*	$172.80
158853	F2000-B2M, Filter 2 Stage VOC, Monitored	0.5	0.73	6.8	1	*	$189.00
158840	F3000-B2B, Filter 3 Stage, SED, VOC	0.5	0.96	8.6	1	*	$210.60
158854	F3000-B2M, Filter 3 Stage, SED, VOC, Monitored	0.5	0.96	8.6	1	*	$237.60

REPLACEMENT CARTRIDGES

655116-96	F1S5-RC, Cartridge Filter, Sediment, PP, 5 Micron	5	1.56	11.3	12		$22.03
655123-96	FDF1-RC, Cartridge Filter, Chlorine Taste and Odor	NR	1.56	16.6	12		$33.05
655120-96	F1B1-RC, Cartridge Filter, Cyst and Lead	0.5	1.56	17	12		$38.56
655126-96	F2B2-RC2, Cartridge Filters, Twin Pack, VOC	0.5	1.11	20.4	6		$77.11

FRESHPOINT REVERSE OSMOSIS SYSTEMS



FILTRATION SYSTEMS

161110	GRO-350B, GRO 3 Stage, DF, 50 GPD, GAC				1	*	$353.70
161111	GRO-475B, GRO 4 Stage, DF, CMR, 75 GPD, GAC				1	*	$472.50
161112	GRO-575B, GRO 5 Stage, DF, VOC, 75 GPD, GAC				1	*	$567.00
161151	GRO-475M, GRO 4 Stage, DF, CMR, 75 GPD, GAC, Monitored				1	*	$513.00
161152	GRO-575M, GRO 5 Stage, DF, VOC, 75 GPD, GAC, Monitored				1	*	$634.50
161113	GRO-350BP, GRO 3 Stage, DF, 50 GPD, GAC, With Pump				1	*	$580.00
161114	GRO-475BP, GRO 4 Stage, DF, CMR, 75 GPD, GAC, With Pump				1	*	$687.50

REPLACEMENT CARTRIDGES

655117-96	F1GC-RC, Cartridge Filter, GAC, 12/C				12		$27.00
655121-96	GRO50-RC, Cartridge Membrane, 50 GPD, 12/C				12		$91.80
655122-96	GRO75-RC, Cartridge Membrane, 75 GPD, 12/C				12		$97.20
655123-96	FDF1-RC, Cartridge Filter, Chlorine Taste and Odor				12		$33.05
655120-96	F1B1-RC, Cartridge Filter, Cyst and Lead				12		$38.56
655126-96	F2B2-RC2, Cartridge Filters, Twin Pack, VOC				12		$77.11

INLINE FILTER SYSTEMS

BACTERIOSTATIC (KDF AND COCONUT SHELL CARBON)

255553-43	GS-10EXTRA.5-B-1/4" FPT 2" x 6"	5	0.37	10	12		$19.94
255559-43	GS-210EXTRA1-B-1/4" FPT 2.5" x 11"	5	0.61	24	12		$33.89
255561-43	GS-210EXTRA1-G-1/4" John Guest 2.5" x 11"	5	0.61	24	12		$38.04

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	µm (NOMINAL)	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
BITUMINOUS GRANULAR ACTIVATED CARBON							
255503-43	GS-10-B-1/4" FPT 2" x 10"	20	0.37	9	12	*	$11.22
255505-43	GS-10-G-1/4" John Guest 2" x 10"	20	0.37	9	12	*	$15.15
CHLORINE TASTE AND ODOR - 5 MICRON CARBON BLOCK FILTERS							
255631-43	GS-10CB-5-B-1/4" FPT 2" x 10"	5	0.37	9	12		$22.62
255632-43	GS-10CB-5-C-3/8" FPT 2" x 10"	5	0.37	9	12		$23.07
255635-43	GS-10CB-5-G-1/4" John Guest 2" x 10"	5	0.37	9	12		$26.15
255636-43	GS-10CB-5-H-3/8" John Guest 2" x 10"	5	0.37	9	12		$26.72
COCONUT SHELL GRANULAR ACTIVATED CARBON							
255521-43	GS-10RO-B-1/4" FPT 2" x 10"	5	0.37	12	12	*	$11.52
255522-43	GS-10RO-C-3/8" FPT 2" x 10"	5	0.37	12	12	*	$11.85
255525-43	GS-10RO-G-1/4" John Guest 2" x 10"	5	0.37	12	12	*	$14.85
255526-43	GS-10RO-H-3/8" John Guest 2" x 10"	5	0.37	12	12	*	$15.53
TDS REDUCTION - HIGH CAPACITY DI RESIN FILTERS							
255655-43	GS-210DI-B-1/4" FPT 2.5" x 11"	20	0.61	17	12		$26.32
TRADITIONAL INLINE FILTER SYSTEMS							
155656-06	IC-101L Bulk - No Fittings w/4-Color Label	20	1.51	40	48		$11.94
155083-06	TS-101L Bulk - No Fittings w/4-Color Label w/Carbon and Crystals	20	1.51	40	48		$16.10
LIME AND SCALE (HEXAMETAPHOSPHATE FEEDER)							
255604-43	GS-10PH-G-1/4" John Guest 2" x 10"	NR	0.24	22	12		$33.00
LIME, SCALE, AND CHLORINE TASTE AND ODOR (HEXAMETAPHOSPHATE AND COCONUT SHELL CARBON)							
255595-43	GS-10ALS-B-1/4" FPT 2" x 10"	20	0.37	10	12	*	$17.31
255596-43	GS-10ALS-C-3/8" FPT 2" x 10"	20	0.37	10	12	*	$17.23
255599-43	GS-10ALS-G-1/4" John Guest 2" x 10"	20	0.37	10	12	*	$20.54
PH STABILIZER (CALCITE AND COCONUT SHELL CARBON) POST RO							
255541-43	GS-10CAL/RO-B-1/4" FPT 2" x 10"	20	0.37	13	12		$13.24
255546-43	GS-10CAL/RO-H-3/8" John Guest 2" x 10"	20	0.37	13	12		$17.36
SEDIMENT AND RUST PARTICULATE							
255576-43	GS-10SED/5-C-3/8" FPT 2" x 10"	5	0.37	7	12		$12.45
255579-43	GS-10SED/5-G-1/4" John Guest 2" x 10"	5	0.37	7	12		$15.77
255582-43	GS-210SED/5-C-3/8" FPT 2.5" x 11"	5	0.61	14	12		$20.06
FILTER CLIPS							
244454	INLINE CLIP, #COSW, 2"				100		$1.65



Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

QUICK-CHANGE FILTER SYSTEMS

PART NUMBER	DESCRIPTION	µm (NOMINAL)	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
1/4" QUICK-CHANGE REPLACEMENT PARTS							
244435	Quick-Change Replacement Head 1/4" JG PF Ð Straight Across				1		$22.98
155785-43	QC10-CBRR Replacement Cartridge	0.5	0.41	13.2	12	*	$35.22
155901-43	QC10-GACR Replacement Cartridge	NR	0.41	13.1	12	*	$23.10
155962-43	QC10-EPR Replacement Cartridge	5	0.41	13.2	12	*	$34.43
255705-43	QC10-CB1R Replacement Cartridge	1	0.41	10.2	12	*	$33.75
255706-43	QC10-TSGACR Replacement Cartridge	NR	0.41	10.1	12	*	$26.41
1/4" QUICK-CHANGE ACCESSORIES							
257441-06	Bracketed Triple Quick-Change Replacement Head 3/8" JG PF Ð Straight Across				16		$157.36
257730-06	Bracketed Double Quick-Change Replacement Head 3/8" JG PF Ð Straight Across				24		$132.86

REVERSE OSMOSIS FILTRATION SYSTEMS

REPLACEMENT CARTRIDGES							
155584-44	P-250 Replacement Cartridge Kit for US-1500		0.16	1.6	2		$35.14
155832-44	P-250A Replacement Cartridge Kit for US-1000		0.16	1.6	2		$36.20
REPLACEMENT PARTS AND ACCESSORIES							
SH143431	Water Supply Adapter				1		$15.11
SH244818	Monitor Assembly for US-1500				1		$98.73
244960	Faucet				1		$43.79
RO-3000/3500 RO REPLACEMENT PARTS							
155855-43	RO Element for RO-3000/RO-3500		0.11	0.6	1		$133.02
155923-43	RO Replacement Filter Cartridge Kit for RO-3000/3500		0.17		1		$48.57
RO-3000/3500 RO ACCESSORIES							
144616	Drain Tap Valve 3/8"				1		$2.48
144653	Auto Shut-off Valve - RO-3000/RO-3500				1		$60.37
144988	#10 White RO Membrane Housing/Sump for RO-3000/ RO-3500				1		$32.69
153126	#10 White Sump for RO-3000/RO-3500 RO				1		$9.73
SH144165	Storage Tank, 3.2 Gallon RO-3000/RO-3500			7.5	1		$95.73
SH144747	Cover, RO-3000/RP-3500				1		$4.65
SH157845	Circuit Board, RO-3500				1		$104.32

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	µm (NOMINAL)	VOL. (ft.³)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
RO-2550/GRO2550 RO FILTER SYSTEM							
161079	RO-2550 4 Stage, 50 GPD, RO System				1		$87.86 (net)
161154	GRO-2550 4 Stage, 50 GPD, GRO System				1		$120.00 (net)
RO-2550/GRO2550 RO FILTER SYSTEM REPLACEMENT PARTS							
555574-43	GAC Post Filter, RO-2550			10.8	12		$27.51
155014-43	P5 Spun Polypropylene	5	1.02	9.4	24	*	$4.24
155634-43	EPM-10 Carbon Block	10	0.74	14	12	*	$8.12
255521-43	GS-10RO-B-1/4" FPT 2" x 10"	5	0.37	12	12	*	$11.52
555583-43	RO Element, 50 GPD, RO-2550		0.11	0.6	1		$42.97
555235-43	RO Element, 36 GPD, RO-2500		0.11	0.6	1		$40.72
4004424	GRO-50EN GRO Membranes W/ Drain Line Flow Control				16	*	$79.25
RO-2550/GRO2550 RO FILTER SYSTEM ACCESSORIES							
153049	Housing - RO-2500/RO-2550				1		$17.65
244787	Auto Shut-off Valve - RO-2500/RO-2550				1		$8.47
244796	Drain Clamp - RO-2500/RO-2550				1		$1.39
244833	Storage Tank, 2.8 Gallon - RO-2550			7	1		$81.11
244835	Faucet Adapter, RO-2550				1		$4.20



QUICK-CHANGE CARTRIDGE STYLE FILTER SYSTEMS

ONE STAGE FILTER SYSTEM ACCESSORIES							
SH244771	Faucet, Non-RO				1		$34.78
REPLACEMENT CARTRIDGES AND ELEMENTS							
555612-96	Cartridge, Sediment PW-S2500R, Yellow		6.1	14	12		$11.53
555586-96	Cartridge, Carbon Block PW-C5000R, Blue			18	12		$22.11
555676-96	Cartridge, RO Element, 75 GPD PW-RO75R, Green			17.6	12		$60.20
555585-96	Cartridge, GAC PW-C2500R, Violet			18	12		$16.29
REPLACEMENT PARTS AND ACCESSORIES							
SH244820	Faucet, Model Airgap				1		$59.85
244796	Drain Clamp, 3/8" Quick-Change				1		$1.39
244849	Tube, 3/8" OD Red - Faucet Drain				1		$2.51
244848	Tube, 3/8" OD Blue - Permeate				1		$2.51
244850	Tube, 1/4" OD Green				1		$0.96
244875	Tube, 1/4" OD Red				1		$1.29



Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*



BASIC FILTER SYSTEMS

SYSTEMS LESS CARTRIDGES

PART NUMBER	DESCRIPTION	VOL. (ft.³)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
160196	BFS-201 Consisting of: Two 3/8" Slim Line Blue Housings, Unit Mounting Bracket		5.1	1		$88.51
160166	BBFS-22 Consisting of: Two 20" BB 1" Housings On Unit Mounting Bracket - Assembled - Cartridges Not Included	0.69	29	1		$263.88
160168	BBFS-222 w/Three 1" BB Housings - Cartridges Not Included	2.27	35.3	1		$380.59
160405	BBFS - 1FX22 w/Triple, Piped System - Cartridges Not Included	3.43	35.3	1		$593.45

NOTE: Completely assembled and packed within shipping carton. Cartridges not included.

MICROGUARD FILTER SYSTEMS

MICROGUARD ACCESSORIES

154678	Black Cap (MGS-1/2)			1		$17.16
153197	Blue Housing (MGS-3/4)			1		$21.73
150580	Screw Kit, MicroGuard			1		$1.36

COMPLETE CARTRIDGE FILTER SYSTEMS

160365	#10 1/2" SL Red Nylon Housing with PD5 Cartridge			1		$165.36
160362	#20 3/4" STD Housings with WS-20 Cartridge			1		$197.51
160363	#20 1" BB Housing with WS-20BB Cartridge			1		$385.37
160364	#20 1" BB Housing with RFFE20 Cartridge			1		$500.96
160367	#20 1-1/2" BB Housing with NCP-20BB Cartridge			1		$223.85

NOTE: Systems include Housing, Cartridge, Wrench, and Bracket.

TRADITIONAL Slim Line HOUSINGS



1/4" NPT Slim Line HOUSING ASSEMBLIES

158133	1/4" #5 Slim Line Blue/Clear w/o PR	1.31	19	12		$24.68
158138	1/4" #5 Slim Line Black/Blue w/o PR	1.31	16	12		$18.28
158115	1/4" #10 Slim Line Black/Blue w/PR	2.05	26.4	12	*	$13.44
158114	1/4" #10 Slim Line Black/Blue w/o PR	2.05	26.2	12	*	$13.00
158117	1/4" #10 Slim Line Blue/Clear Housing w/PR	2.05	22.2	12		$19.28
158116	1/4" #10 Slim Line Blue/Clear Housing w/o PR	2.05	22.2	12		$19.16
158120	1/4" #10 Slim Line Black/Black Housing w/o PR	2.05	22.2	12	*	$13.13
158125	1/4" #10 Slim Line White/White Housing w/o PR	2.05	22.2	12	*	$10.32
158126	1/4" #10 Slim Line Black/White Housing w/o PR	2.05	22.2	12	*	$19.32
158326	1/4" #10 Slim Line White/Clear Housing w/o PR	2.05	22.2	12		$19.34

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	VOL. (ft.³)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
158131	1/4" #20 Slim Line Black/Blue w/o PR	2.05	22.2	12	*	$35.32
158841	1/4" #20 Slim Line White/White w/o PR	2.05	22.2	12		$37.64
1/4" NPT Slim Line REPLACEMENT PARTS						
151039	Pressure Relief Button Kit			1		$3.53
151121	#237 EPDM O-ring for #5, #10 and #20 Slim Line			1		$2.24
153014	#5 Blue Sump for Slim Line			1		$15.48
153056	#5 Clear Sump for Slim Line			1		$25.60
153078	#5 White Sump for Slim Line			1		$14.56
153017	#10 Blue Sump for Slim Line			1		$17.16
153018	#10 Clear Sump for Slim Line			1		$25.89
153049	#10 White Sump for Slim Line			1		$17.65
153062	#10 Black Sump for Slim Line			1		$18.68
153058	#20 Blue Sump for Slim Line			1		$43.25
153081	#20 White Sump for Slim Line			1		$43.51
154143	1/4" Black Cap w/ PR for Slim Line			1		$9.78
154049	1/4" Black Cap w/o PR for Slim Line			1		$9.49
154150	1/4" Blue Cap w/ PR for Slim Line			1		$11.09
154053	1/4" Blue Cap w/o PR for Slim Line			1		$9.49
154062	1/4" White Cap w/o PR for Slim Line			1		$9.49
1/4" NPT Slim Line ACCESSORIES						
150539	SW-1A Wrench for Slim Line Housings			1		$4.29
155003	Cartridge Coupler for Standard Cartridges			1		$2.25
158095	FKM #237 O-ring for Slim Line Housings			1		$12.61
158096	Silicone #237 O-ring for Slim Line Housings			1		$11.52
244047	SL-ZP Kit - Zinc Plated Bracket for Slim Line Housing		0.22	1		$5.30
357644	SL-SS Kit - Stainless Steel Bracket for Slim Line Housing		0.22	1		$31.67
244046-00	SL-ZP - Zinc Plated Bracket ONLY for Slim Line Housing		0.15	1		$2.29
244627-02	Two-Housing CCF and RO System Bracket		1	1		$17.36
1/4" NPT COUNTER TOP Slim Line HOUSING ASSEMBLIES						
158179	1/4" #10 Counter Top Slim Line White/White w/o PR	2.05	26.4	12	*	$21.04
1/4" COUNTER TOP Slim Line REPLACEMENT PARTS						
151121	#237 EPDM O-ring for #5, #10 and #20 Slim Line			1		$2.24
154075	1/4" Black Counter Top Cap w/o PR for Slim Line			1		$8.75
154082	1/4" White Counter Top Cap w/o PR for Slim Line			1		$11.44
165266	#10 White Sump for Slim Line			1		$17.66
1/4" COUNTER TOP Slim Line ACCESSORIES						
150539	SW-1A Wrench for Slim Line Housings			1		$4.29
SH144585	Diverter Valve - Double Barb			1		$52.96



154143



154049



244047

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

HOUSINGS







154108



154006

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
SH244538	1/4" X 36" White Vinyl Tubing			1		$1.54
SH244542	1/4" Chrome Elbow for SH244544			1		$9.68
SH244543	1/4" Chrome Elbow with 1/4" Barb Fitting			1		$5.46
SH244544	1/4" Chrome Spout			1		$9.48
SH244545	Diverter Valve - Single Barb			1		$17.79
SH244546	Diverter Valve Adapter Set 13/16"			1		$3.16
SH244547	Diverter Valve Adapter Set 15/16"			1		$3.16
3/8" NPT SLIM LINE HOUSING ASSEMBLIES						
158002	3/8" #5 Slim Line Black/Blue w/PR	1.31	16	12		$18.95
158003	3/8" #5 Slim Line Black/Blue w/o PR	1.31	16	12		$19.08
158110	3/8" #5 Slim Line Blue/Clear w/PR	1.31	19	12		$19.96
158111	3/8" #5 Slim Line Blue/Clear w/o PR	1.31	19	12		$19.45
158005	3/8" #10 Slim Line Black/Blue w/PR	2.05	26.4	12	*	$13.51
158006	3/8" #10 Slim Line Black/Blue w/o PR	2.05	26.2	12	*	$13.06
158007	3/8" #10 Slim Line Blue/Clear w/PR	2.05	22.4	12		$20.17
158008	3/8" #10 Slim Line Blue/Clear w/o PR	2.05	22.2	12		$19.95
158149	3/8" #10 Slim Line White/White w/PR	2.05	22.2	12	*	$14.06
158098	3/8" #10 Slim Line White/White w/o PR	2.05	22.2	12	*	$13.54
158129	3/8" #20 Slim Line Black/Blue w/o PR	3.19	37	8	*	$42.07
158842	3/8" #20 Slim Line White/white w/o PR	3.19	37	8		$37.64
3/8" NPT Slim Line REPLACEMENT PARTS						
151039	Pressure Relief Button Kit			1		$3.53
151121	#237 EPDM O-ring for #5, #10 and #20 Slim Line			1		$2.24
153014	#5 Blue Sump for Slim Line			1		$15.48
153056	#5 Clear Sump for Slim Line			1		$25.60
153017	#10 Blue Sump for Slim Line			1		$17.16
153018	#10 Clear Sump for Slim Line			1		$25.89
153049	#10 White Sump for Slim Line			1		$17.65
153058	#20 Blue Sump for Slim Line			1		$43.25
153081	#20 White Sump for Slim Line			1		$43.51
154108	3/8" Black Cap w/PR for Slim Line			1		$10.26
154006	3/8" Black Cap w/o PR for Slim Line			1		$9.49
154111	3/8" Blue Cap w/PR for Slim Line			1		$10.26
154010	3/8" Blue Cap w/o PR for Slim Line			1		$9.49
154159	3/8" White Cap w/PR for Slim Line			1		$7.01
154040	3/8" White Cap w/o PR for Slim Line			1		$6.37
3/8" NPT Slim Line ACCESSORIES						
150539	SW-1A Wrench for Slim Line Housings			1		$4.29

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
155003	Cartridge Coupler for Standard Cartridges			1		$2.25
158095	FKM #237 O-ring for Slim Line Housings			1		$12.61
158096	Silicone #237 O-ring for Slim Line Housings			1		$11.52
244047	SL-ZP Kit - Zinc Plated Bracket for Slim Line Housing		0.22	1		$5.30
357644	SL-SS Kit - Stainless Steel Bracket for Slim Line Housing		0.22	1		$31.67
244046-00	SL-ZP - Zinc Plated Bracket ONLY for Slim Line Housing		0.15	1		$2.29
244627-02	Two-Housing CCF and RO System Bracket		1	1		$17.36
1/2" NPT Slim Line HOUSING ASSEMBLIES						
158203	1/2" #5 Slim Line Black/Blue w/o PR	1.31	16	12		$19.79
158195	1/2" #10 Slim Line Black/Blue w/PR	2.05	26.4	12	*	$19.41
158196	1/2" #10 Slim Line Black/Blue w/o PR	2.05	26.2	12	*	$19.11
158214	1/2" #10 Slim Line Blue/Clear w/PR	2.05	22.4	12		$28.77
158215	1/2" #10 Slim Line Blue/Clear w/o PR	2.05	22.2	12		$28.74
158765	1/2" #10 Slim Line White/White w/o PR	2.05	26.4	12		$18.35
158204	1/2" #20 Slim Line Black/Blue w/PR	3.19	37	8	*	$41.66
158205	1/2" #20 Slim Line Black/Blue w/o PR	3.19	37	8	*	$41.34
1/2" NPT Slim Line REPLACEMENT PARTS						
151039	Pressure Relief Button Kit			1		$3.53
151121	#237 EPDM O-ring for #5, #10 and #20 Slim Line			1		$2.24
153014	#5 Blue Sump for Slim Line			1		$15.48
153017	#10 Blue Sump for Slim Line			1		$17.16
153018	#10 Clear Sump for Slim Line			1		$25.89
153049	#10 White Sump for Slim Line			1		$17.65
153062	#10 Black Sump for Slim Line			1		$18.68
153058	#20 Blue Sump for Slim Line			1		$43.25
153081	#20 White Sump for Slim Line			1		$43.51
154171	1/2" Black Cap w/PR for Slim Line			1		$13.33
154083	1/2" Black Cap w/o PR for Slim Line			1		$12.61
154175	1/2" Blue Cap w/PR for Slim Line			1		$13.33
154088	1/2" Blue Cap w/o PR for Slim Line			1		$12.01
SH154435	1/2" White Cap w/o PR for Slim Line			1		$12.50
1/2" NPT Slim Line ACCESSORIES						
150539	SW-1A Wrench for Slim Line Housings			1		$4.29
155003	Cartridge Coupler for Standard Cartridges			1		$2.25
158095	FKM #237 O-ring for Slim Line Housings			1		$12.61
158096	Silicone #237 O-ring for Slim Line Housings			1		$11.52
244047	SL-ZP Kit - Zinc Plated Bracket for Slim Line Housing		0.22	1		$5.30
357644	SL-SS Kit - Stainless Steel Bracket for Slim Line Housing		0.22	1		$31.67



154171



154083

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
244046-00	SL-ZP - Zinc Plated Bracket ONLY for Slim Line Housing		0.15	1		$2.29
244627-02	Two-Housing CCF and RO System Bracket		1	1		$17.36

3G Slim Line HOUSINGS

1/4" 3G NPT Slim Line HOUSING ASSEMBLIES

158598	1/4" #10 3G Slim Line Black/Blue Mounting Bracket Cap w/PR	2.69	32.4	12		$19.89
158601	1/4" #10 3G Slim Line White/White Mounting Bracket Cap w/o PR	2.69	32.2	12		$19.73

1/4" 3G Slim Line REPLACEMENT PARTS

144802	3G - Pressure Relief Button Kit			1		$4.58
151121	#237 EPDM O-ring for #5, #10 and #20 Slim Line			1		$2.24
153202	3G - #10 Blue Sump for Slim Line			1		$16.61
153203	3G - #10 Clear Sump for Slim Line			1		$25.17
153209	3G - #10 White Sump for Slim Line			1		$12.95
154741	3G - 1/4" Mounting Bracket Blue Cap w/PR for Slim Line			1		$11.15
154809	3G - 1/4" Integral Bracket Blue Cap w/PR for Slim Line			1		$11.46
154955	3G - 1/4" Quick-Change Mounting Bracket Blue Cap w/o PR for Slim Line			1		$24.05
154792	3G - 1/4" Mounting Bracket Black Cap w/PR for Slim Line			1		$13.01
154814	3G - 1/4" Quick-Change Integral Bracket Black Cap w/PR for Slim Line			1		$20.69
154798	3G - 1/4" Quick-Change Mounting Bracket Black Cap w/PR for Slim Line			1		$22.99
154833	3G - 1/4" Mounting Bracket White Cap w/PR for Slim Line			1		$9.73
154856	3G - 1/4" Integral Bracket White Cap w/PR for Slim Line			1		$11.72
154851	3G - 1/4" Quick-Change Mounting Bracket White Cap w/o PR for Slim Line			1		$21.31
154857	3G - 1/4" Quick-Change Integral Bracket White Cap w/PR for Slim Line			1		$26.16

1/4" 3G Slim Line ACCESSORIES

158096	Silicone #237 O-ring for Slim Line Housings			1		$11.52
158095	FKM #237 O-ring for Slim Line Housings			1		$12.61
244046-00	SL-ZP - Zinc Plated Bracket ONLY for Slim Line Housing		0.15	1		$2.29
244047	SL-ZP Kit - Zinc Plated Bracket for Slim Line Housing		0.22	1		$5.30
357644	SL-SS Kit - Stainless Steel Bracket for Slim Line Housing		0.22	1		$31.67
244627-02	Two-Housing CCF and RO System Bracket		1	1		$17.36
150539	SW-1A Wrench for Slim Line Housings			1		$4.29
155003	Cartridge Coupler for Standard Cartridges			1		$2.25
143550	2 Color Gauge			1		$35.54
143549	3 Color Needle Gauge			1		$84.63

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

HOUSINGS

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
3/8" 3G NPT SLIM LINE HOUSING ASSEMBLIES						
158610	3/8" #10 3G Slim Line Blue/Clear Mounting Bracket Cap w/o PR	2.69	30.6	12		$28.38
158643	3/8" #10 3G Slim Line Blue/Clear Integral Bracket w/PR	2.69	32.2	12		$31.17
158608	3/8" #10 3G Slim Line Black/Blue Mounting Bracket Cap w/o PR	2.69	32.2	12		$19.17
158642	3/8" #10 3G Slim Line Black/Blue Integral Bracket Cap w/PR	2.69	33.7	12		$22.04
158647	3/8" #10 3G Slim Line White/White Quick-Change Integral Bracket w/PR	2.69	33.8	12		$29.99
3/8" 3G NPT Slim Line REPLACEMENT PARTS						
144802	3G Pressure Relief Button Kit			1		$4.58
151121	#237 EPDM O-ring for #5, #10 and #20 Slim Line			1		$2.24
153202	3G - #10 Blue Sump for Slim Line			1		$16.61
153203	3G - #10 Clear Sump for Slim Line			1		$25.17
153209	3G - #10 White Sump for Slim Line			1		$12.95
154737	3G - 3/8" Mounting Bracket Blue Cap w/o PR for Slim Line			1		$9.55
154806	3G - 3/8" Integral Bracket Blue Cap w/PR for Slim Line			1		$12.20
154951	3G - 3/8" Quick-Change Mounting Bracket Blue Cap w/o PR for Slim Line			1		$24.22
154665	3G - 3/8" Mounting Bracket Black Cap w/o PR for Slim Line			1		$12.64
154804	3G - 3/8" Integral Bracket Black Cap w/PR for Slim Line			1		$12.20
154860	3G - 3/8" Quick-Change Mounting Bracket Black Cap w/o PR for Slim Line			1		$24.35
154858	3G - 3/8" Integral Bracket White Cap w/PR for Slim Line			1		$11.64
154859	3G - 3/8" Quick-Change Integral Bracket White Cap w/PR for Slim Line			1		$25.41
154855	3G - 3/8" Quick-Change Mounting Bracket White Cap w/o PR for Slim Line			1		$23.49
3/8" 3G NPT Slim Line ACCESSORIES						
150539	SW-1A Wrench for Slim Line Housings			1		$4.29
158095	FKM #237 O-ring for Slim Line Housings			1		$12.61
158096	Silicone #237 O-ring for Slim Line Housings			1		$11.52
244047	SL-ZP Kit - Zinc Plated Bracket for Slim Line Housing		0.22	1		$5.30
357644	SL-SS Kit - Stainless Steel Bracket for Slim Line Housing		0.22	1		$31.67
244046-00	SL-ZP - Zinc Plated Bracket ONLY for Slim Line Housing		0.15	1		$2.29
244627-02	Two-Housing CCF and RO System Bracket		1	1		$17.36
1/2" 3G NPT SLIM LINE HOUSING ASSEMBLIES						
158623	1/2" #10 3G Slim Line Blue/Clear Mounting Bracket Cap w/PR	2.69	30.8	12		$30.39
158622	1/2" #10 3G Slim Line Blue/Clear Mounting Bracket Cap w/o PR	2.69	30.6	12		$29.49
158649	1/2" #10 3G Slim Line Blue/Clear Integral Bracket w/PR	2.69	32.2	12		$32.58
158621	1/2" #10 3G Slim Line Black/Blue Mounting Bracket Cap w/PR	2.69	32.4	12		$21.50







Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
158620	1/2" #10 3G Slim Line Black/Blue Mounting Bracket Cap w/o PR	2.69	32.2	12		$20.34
158648	1/2" #10 3G Slim Line Black/Blue Integral Bracket w/PR	2.69	33.7	12		$22.71
158794	1/2" #10 3G Quick-Change Slim Line Black/Clear Integral Bracket w/PR	2.69	33.8	12		$60.00
1/2" 3G Slim Line REPLACEMENT PARTS						
144802	3G Pressure Relief Button Kit			1		$4.58
151121	#237 EPDM O-ring for #5, #10 and #20 Slim Line			1		$2.24
153202	3G - #10 Blue Sump for Slim Line			1		$16.61
153203	3G - #10 Clear Sump for Slim Line			1		$25.17
154786	3G - 1/2" Mounting Bracket Blue Cap w/PR for Slim Line			1		$11.72
154733	3G - 1/2" Mounting Bracket Blue Cap w/o PR for Slim Line			1		$6.38
154802	3G - 1/2" Integral Bracket Blue Cap w/PR for Slim Line			1		$11.53
154784	3G - 1/2" Mounting Bracket Black Cap w/PR for Slim Line			1		$11.53
154662	3G - 1/2" Mounting Bracket Black Cap w/o PR for Slim Line			1		$6.07
154800	3G - 1/2" Integral Bracket Black Cap w/PR for Slim Line			1		$12.64
154810	3G - 1/2" Quick-Change Integral Bracket Black Cap w/PR for Slim Line			1		$33.85
154794	3G - 1/2" Quick-Change Mounting Bracket Black Cap w/o PR for Slim Line			1		$30.87
1/2" 3G Slim Line ACCESSORIES						
150539	SW-1A Wrench for Slim Line Housings			1		$4.29
155003	Cartridge Coupler for Standard Cartridges			1		$2.25
158095	FKM #237 O-ring for Slim Line Housings			1		$12.61
158096	Silicone #237 O-ring for Slim Line Housings			1		$11.52
244047	SL-ZP Kit - Zinc Plated Bracket for Slim Line Housing		0.22	1		$5.30
357644	SL-SS Kit - Stainless Steel Bracket for Slim Line Housing		0.22	1		$31.67
244046-00	SL-ZP - Zinc Plated Bracket ONLY for Slim Line Housing		0.15	1		$2.29
244627-02	Two-Housing CCF and RO System Bracket		1	1		$17.36

FLAT CAP Slim Line HOUSINGS

1/4" NPT FLAT CAP Slim Line HOUSING ASSEMBLIES						
158739	1/4" #10 Flat Cap Slim Line White/White w/o PR	2.69	33.8	12		$13.96
158784	1/4" #10 Flat Cap Slim Line White/Clear w/o PR	2.69	33.8	12		$26.02
1/4" NPT FLAT CAP Slim Line REPLACEMENT PARTS						
151121	#237 EPDM O-ring for #5, #10 and #20 Slim Line			1		$2.24
153018	#10 Clear Sump for Slim Line			1		$25.89
153049	#10 White Sump for Slim Line			1		$17.65
SH154420	1/4" White Flat Cap w/o PR for Slim Line			1		$8.55

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	VOL. (ft.³)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
1/4" NPT FLAT CAP Slim Line ACCESSORIES						
150539	SW-1A Wrench for Slim Line Housings			1		$4.29
151121	#237 EPDM O-ring for #5, #10 and #20 Slim Line			1		$2.24
158095	FKM #237 O-ring for Slim Line Housings			1		$12.61
158096	Silicone #237 O-ring for Slim Line Housings			1		$11.52
244047	SL-ZP Kit - Zinc Plated Bracket for Slim Line Housing		0.22	1		$5.30
357644	SL-SS Kit - Stainless Steel Bracket for Slim Line Housing		0.22	1		$31.67
244046-00	SL-ZP - Zinc Plated Bracket ONLY for Slim Line Housing		0.15	1		$2.29
244627-02	Two-Housing CCF and RO System Bracket		1	1		$17.36
1/2" NPT FLAT CAP SLIM LINE HOUSING ASSEMBLIES						
158785	1/2" #10 Flat Cap Slim Line White/White w/o PR	2.69	33.8	12		$19.52
158861	1/4" #10 Flat Cap Slim Line Black/Clear w/o PR	2.69	33.8	12		$13.79
158862	1/2" #10 Flat Cap Slim Line White/Clear w/o PR	2.69	33.8	12		$13.79
1/2" NPT FLAT CAP Slim Line REPLACEMENT PARTS						
151121	#237 EPDM O-ring for #5, #10 and #20 Slim Line			1		$2.24
153049	#10 White Sump for Slim Line			1		$17.65
SH154368	1/2" White Flat Cap w/o PR for Slim Line			1		$11.36
SH154440	1/2" Black Flat Cap w/o PR for Slim Line			1		$11.64
1/2" NPT FLAT CAP Slim Line ACCESSORIES						
150539	SW-1A Wrench for Slim Line Housings			1		$4.29
158095	FKM #237 O-ring for Slim Line Housings			1		$12.61
158096	Silicone #237 O-ring for Slim Line Housings			1		$11.52
244047	SL-ZP Kit - Zinc Plated Bracket for Slim Line Housing		0.22	1		$5.30
357644	SL-SS Kit - Stainless Steel Bracket for Slim Line Housing		0.22	1		$31.67
244046-00	SL-ZP - Zinc Plated Bracket ONLY for Slim Line Housing		0.15	1		$2.29
244627-02	Two-Housing CCF and RO System Bracket		1	1		$17.36
3/4" NPT FLAT CAP SLIM LINE HOUSING ASSEMBLIES						
158759	3/4" #10 Flat Cap Slim Line White/White w/o PR	2.69	32.3	12		$19.75
158758	3/4" #10 Flat Cap Slim Line Black/Blue 3/4" w/o PR	2.69	32.3	12		$20.73
158753	3/4" #10 Flat Cap Slim Line Black/Clear w/PR	2.69	32.3	12		$28.14
3/4" NPT FLAT CAP Slim Line REPLACEMENT PARTS						
151039	Pressure Relief Button Kit			1		$3.53
151121	#237 EPDM O-ring for #5, #10 and #20 Slim Line			1		$2.24
153017	#10 Blue Sump for Slim Line			1		$17.16
153018	#10 Clear Sump for Slim Line			1		$25.89
153049	#10 White Sump for Slim Line			1		$17.65



151121



Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
SH154423	3/4" White Flat Cap w/PR for Slim Line			1		$13.61
SH154421	3/4" White Flat Cap w/PR for Slim Line			1		$12.87
SH154428	3/4" Black Flat Cap w/PR for Slim Line			1		$13.27
SH154430	3/4" Black Flat Cap w/o PR for Slim Line			1		$13.38
3/4" NPT FLAT CAP Slim Line ACCESSORIES						
150539	SW-1A Wrench for Slim Line Housings			1		$4.29
155003	Cartridge Coupler for Standard Cartridges			1		$2.25
158095	FKM #237 O-ring for Slim Line Housings			1		$12.61
158096	Silicone #237 O-ring for Slim Line Housings			1		$11.52
244047	SL-ZP Kit - Zinc Plated Bracket for Slim Line Housing		0.22	1		$5.30
357644	SL-SS Kit - Stainless Steel Bracket for Slim Line Housing		0.22	1		$31.67
244046-00	SL-ZP - Zinc Plated Bracket ONLY for Slim Line Housing		0.15	1		$2.29
244627-02	Two-Housing CCF and RO System Bracket		1	1		$17.36

TRADITIONAL STANDARD HOUSINGS



3/4" NPT STANDARD HOUSING ASSEMBLIES						
150071	3/4" #10 Standard Blue/Clear w/ PR Mounting Bracket Cap	2.75	34.7	12	*	$39.30
150072	3/4" #10 Standard Blue/Clear w/o PR Mounting Bracket Cap	2.75	34.7	12	*	$39.37
150067	3/4" #10 Standard Black/Blue w/PR Mounting Bracket Cap	2.75	37.4	12	*	$30.81
150068	3/4" #10 Standard Black/Blue w/o PR Mounting Bracket Cap	2.75	37.4	12	*	$30.83
150002	3/4" #10 Standard Black/Blue w/PR (Non-Mountable Cap)	2.75	37.4	12	*	$26.88
150001	3/4" #10 Standard Black/Blue w/o PR (Non-Mountable Cap)	2.75	37.4	12	*	$27.04
150435	3/4" #10 Standard Black/Clear w/PR Mounting Bracket Cap	2.75	34.9	12	*	$39.30
150436	3/4" #10 Standard Black/Clear w/o PR Mounting Bracket Cap	2.75	34.7	12	*	$38.99
150328	3/4" #10 Standard Black/Black w/PR Mounting Bracket Cap	2.75	34.7	12		$27.80
150069	3/4" #20 Standard Black/Blue w/PR Mounting Bracket Cap	3.19	37.5	8		$52.63
150070	3/4" #20 Standard Black/Blue w/o PR Mounting Bracket Cap	3.19	37.3	8		$52.83
150326	3/4" #20 Standard Black/Black w/PR Mounting Bracket Cap	3.19	37.5	8		$52.14
3/4" NPT STANDARD REPLACEMENT PARTS						
151039	Pressure Relief Button Kit			1		$3.53
151120	#241 EPDM O-ring for Standard Housings			1		$2.24
153001	#10 Blue Sump for Standard Housings			1		$26.21
153128	#10 Clear Sump for Standard Housings			1		$33.27
153084	#10 Black Sump for Standard Housings			1		$27.40
153013	#20 Blue Sump for Standard Housings			1		$47.97
153110	#20 Black Sump for Standard Housings			1		$47.53
154116	3/4" Blue Mounting Bracket Cap w/PR for Standard Housings			1		$14.86

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
154018	3/4" Blue Mounting Bracket Cap w/o PR for Standard Housings			1		$14.09
154115	3/4" Black Mounting Bracket Cap w/PR for Standard Housings			1		$14.66
154017	3/4" Black Mounting Bracket Cap w/o PR for Standard Housings			1		$14.09
154101	3/4" Black Cap w/PR for Standard Housings			1		$14.86
154001	3/4" Black Cap w/o PR for Standard Housings			1		$14.86
3/4" NPT STANDARD ACCESSORIES						
150295	SW-2 Wrench for Standard Housings			1		$4.29
150578	MC-1A Kit - Zinc Plated Bracket for Standard Housing		0.64	1		$8.07
151117	#241 FKM O-ring for Standard Housings			1		$12.61
151118	#241 Silicone O-ring for Standard Housings			1		$11.52
155003	Cartridge Coupler for Standard Cartridges			1		$2.25
244043	MC-1A - Zinc Plated Bracket ONLY for Standard Housing		0.41	1		$3.62
244686	Two-Housing Standard System Bracket			1		$32.07

VALVE-IN-HEAD HOUSING ASSEMBLIES



3/4" NPT VALVE-IN-HEAD HOUSING ASSEMBLIES						
150437	3/4" Valve-In-Head #10 Blue/Clear w/PR	2.75	43	12		$66.82
150164	3/4" Valve-In-Head #10 Black/Blue w/PR	2.75	44	12	*	$56.00
150329	3/4" Valve-In-Head #10 Black/Clear w/PR	2.75	43	12		$69.10
150166	3/4" Valve-In-Head #20 Black/Blue w/PR	3.09	40	8		$78.11
3/4" NPT VALVE-IN-HEAD REPLACEMENT PARTS						
151120	#241 EPDM O-ring for Standard Housings			1		$2.24
153001	#10 Blue Sump for Standard Housings			1		$26.21
153128	#10 Clear Sump for Standard Housings			1		$33.27
153013	#20 Blue Sump for Standard Housings			1		$47.97
154138	3/4" Blue VIH Cap w/PR for housing			1		$39.91
154134	3/4" Black VIH Cap w/PR for #10 and #20 VIH Blue Housings			1		$39.91
3/4" NPT VALVE-IN-HEAD ACCESSORIES						
150295	SW-2 Wrench for Standard Housings			1		$4.29
151011	UB-1 Kit - Zinc Plated Bracket for Valve-In-Head Housing (U-Shaped)		0.35	1		$8.29
151117	#241 FKM O-ring for Standard Housings			1		$12.61
151118	#241 Silicone O-ring for Standard Housings			1		$11.52
155003	Cartridge Coupler for Standard Cartridges			1		$2.25
144012-00	UB-1 - Zinc Plated Bracket ONLY for Valve-In-Head Housing (U-Shaped)		0.32	1		$3.80



Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

3G STANDARD HOUSINGS

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
3/4" 3G NPT STANDARD HOUSING ASSEMBLIES						
150558	3/4" #10 3G Standard Blue/Clear Mounting Bracket Cap w/PR	2.69	32.3	12		$40.29
150566	3/4" #10 3G Standard Blue/Clear Integral Bracket Cap w/PR	4.74	56.9	12		$43.74
150542	3/4" #10 3G Standard Black/Blue Mounting Bracket Cap w/PR	3.22	38.6	12		$31.82
150546	3/4" #10 3G Standard Black/Blue Mounting Bracket Cap w/o PR	3.22	38.6	12		$31.19
150550	3/4" #10 3G Standard Black/Blue Integral Bracket Cap w/PR	4.67	56	12		$35.37
150574	3/4" #10 3G Standard Black/Blue Integral Bracket Meter Mount Cap w/PR	3.63	43.6	12		$50.05
150587	3/4" #10 3G Standard Black/Clear Mounting Bracket Cap w/PR	2.69	32.3	12		$40.33
150560	3/4" #20 3G Standard Blue/Clear Mounting Bracket Cap w/PR	4.09	32.7	8		$77.01
150564	3/4" #20 3G Standard Blue/Clear Mounting Bracket Cap w/o PR	4.09	32.7	8		$78.17
150568	3/4" #20 3G Standard Blue/Clear Integral Bracket w/PR	4.2	33.6	8		$81.30
150544	3/4" #20 3G Standard Black/Blue Mounting Bracket Cap w/PR	4.11	32.9	8		$54.19
150552	3/4" #20 3G Standard Black/Blue Integral Bracket w/PR	6.16	49.3	8		$58.18
NOTE: Integral Bracket Meter Mount Housings are not designed to operate without a differential pressure gauge. See accessories on page 52.						
3/4" NPT STANDARD REPLACEMENT PARTS						
144802	3G Pressure Relief Button Kit			1		$4.58
151120	#241 EPDM O-ring for Standard Housings			1		$2.24
153194	3G #10 Standard Clear Sump			1		$32.37
153197	3G #10 Standard Blue Sump			1		$25.47
153195	3G #20 Standard Clear Sump			1		$82.24
153200	3G #20 Standard Blue Sump			1		$46.66
154639	3G 3/4" Blue Mounting Bracket Cap w/PR			1		$14.22
154585	3G 3/4" Blue Mounting Bracket Cap w/o PR			1		$13.40
154647	3G 3/4" Blue Integral Bracket Cap w/PR			1		$17.84
154638	3G 3/4" Black Mounting Bracket Cap w/PR			1		$14.22
154584	3G 3/4" Black Mounting Bracket Cap w/o PR			1		$13.40
154646	3G 3/4" Black Integral Bracket Cap w/PR			1		$17.84
154622	3G 3/4" Black Integral Bracket Cap Meter Mount PR			1		$48.41
3/4" NPT STANDARD ACCESSORIES						
143549	3 Color Needle Gauge			1		$84.63
143550	2 Color Gauge			1		$35.54
150295	SW-2 Wrench for Standard Housings			1		$4.29
150578	MC-1A Kit - Zinc Plated Bracket for Standard Housing		0.64	1		$8.07
151117	#241 FKM O-ring for Standard Housings			1		$12.61
151118	#241 Silicone O-ring for Standard Housings			1		$11.52

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	VOL. (ft.³)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
155003	Cartridge Coupler for Standard Cartridges			1		$2.25
244043	MC-1A - Zinc Plated Bracket ONLY for Standard Housing		0.41	1		$3.62
244686	Two-Housing Standard System Bracket			1		$32.07

Big Blue HEAVY DUTY HOUSINGS

3/4" NPT Big Blue HOUSING ASSEMBLIES

150469	3/4" #10 BB Black/Blue HFPP w/PR	2.79	33.4	6	*	$44.20
150470	3/4" #10 BB Black/Blue HFPP w/o PR	2.79	33.4	6	*	$43.56
150467	3/4" #20 BB Black/Blue HFPP w/PR	3.55	27.9	4	*	$62.41
150468	3/4" #20 BB Black/Blue HFPP w/o PR	3.55	27.9	4	*	$61.30
158799	3/4" #20 BB Black/White HFPP w/PR			4		$65.25



3/4" NPT Big Blue REPLACEMENT PARTS

151039	Pressure Relief Button Kit			1		$3.53
151122	Big Blue O-ring			1		$7.34
153029	#10 Big Blue Sump			1		$39.61
153098	#10 Big Blue Sump with 3/8" NPT Drain			1		$135.84
153070	#20 Big Blue Sump			1		$70.09
153080	#20 Big Blue White Sump HFPP			1		$70.09
153097	#20 Big Blue Sump with 3/8" NPT Drain			1		$168.58
154195	3/4" Black HFPP Cap w/PR for Big Blue Housings			1		$57.19
154196	3/4" Black HFPP Cap w/o PR for Big Blue Housings			1		$25.67



150296

3/4" NPT Big Blue ACCESSORIES

144258	Two-Housing Big Blue Bracket		3.2	1		$63.54
144259	Three-Housing Big Blue Bracket		5.5	1		$108.16
144928	WB-PC Kit - Powder Coated White Bracket for Big Blue Housing		1.72	1		$39.81
150061	WB-ZP Kit - Zinc Plated Bracket for Big Blue Housing		1.72	1		$43.36
150296	SW-3 Wrench Big Blue 10" Housings			1		$4.60

NOTE: Mounting system uses up to four Big Blue, Big Clear, or PBH Bag Housings in 10" or 20" lengths. Housings can be installed in series, parallel, or any combination.Piping and housings must be purchased separately.

244718	WB-ZP - Zinc Plated Bracket ONLY for Big Blue Housing		0.86	1		$37.51
357639	WB-SS - Stainless Steel Bracket ONLY for Big Blue Housing		0.86	1		$48.52
357640	WB-SS Kit - Stainless Steel Bracket for Big Blue Housing		1.72	1		$53.54
SH144229	Cartridge Coupler for Big Blue Cartridges			1		$3.21
SH144368	SW-4 Wrench for Big Blue for 20" Housings			1		$4.60



SH144229

1" NPT BIG BLUE HOUSING ASSEMBLIES

150237	1" #10 BB Black/Blue HFPP w/PR	2.56	33.4	6	*	$41.98
150238	1" #10 BB Black/Blue HFPP w/o PR	2.56	33.1	6	*	$40.11
150233	1" #20 BB Black/Blue HFPP w/PR	3.16	27.9	4	*	$61.28



144258

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
150234	1" #20 BB Black/Blue HFPP w/o PR	3.16	27.6	4	*	$60.17
1" NPT Big Blue REPLACEMENT PARTS						
151039	Pressure Relief Button Kit			1		$3.53
151122	Big Blue O-ring			1		$7.34
153029	#10 Big Blue Sump			1		$39.61
153098	#10 Big Blue Sump with 3/8" NPT Drain			1		$135.84
153070	#20 Big Blue Sump			1		$70.09
153097	#20 Big Blue Sump with 3/8" NPT Drain			1		$168.58
154166	1" Black HFPP Cap w/PR for Big Blue Housings			1		$57.19
154077	1" Black HFPP Cap w/o PR for Big Blue Housings			1		$57.19
1" NPT Big Blue ACCESSORIES						
144258	Two-Housing Big Blue Bracket		3.2	1		$63.54
144259	Three-Housing Big Blue Bracket		5.5	1		$108.16
144928	WB-PC Kit - Powder Coated White Bracket for Big Blue Housing		1.72	1		$39.81
150061	WB-ZP Kit - Zinc Plated Bracket for Big Blue Housing		1.72	1		$43.36
150296	SW-3 Wrench Big Blue 10" Housings			1		$4.60
NOTE: Mounting system uses up to four Big Blue, Big Clear, or PBH Bag Housings in 10" or 20" lengths. Housings can be installed in series, parallel, or any combination.Piping and housings must be purchased separately.						
244718	WB-ZP - Zinc Plated Bracket ONLY for Big Blue Housing		0.86	1		$37.51
357639	WB-SS - Stainless Steel Bracket ONLY for Big Blue Housing		0.86	1		$48.52
357640	WB-SS Kit - Stainless Steel Bracket for Big Blue Housing		1.72	1		$53.54
SH144229	Cartridge Coupler for Big Blue Cartridges			1		$3.21
SH144368	SW-4 Wrench for Big Blue for 20" Housings			1		$4.60
1" NPT BIG BLUE HOUSING ASSEMBLIES W/ BYPASS						
655106	1" #10 BB White/White w/Bypass			6		$123.58
655107	1" #20 BB White/White w/Bypass			4		$140.48
1" NPT Big Blue REPLACEMENT PARTS W/BYPASS						
151122	Big Blue O-ring			1		$7.34
SH153114	#10 Big Blue White Sump HFPP			1		$37.03
153080	#20 Big Blue White Sump HFPP			1		$70.09
1" NPT Big Blue ACCESSORIES W/BYPASS						
SH144229	Cartridge Coupler for Big Blue Cartridges			1		$3.21
150296	SW-3 Wrench Big Blue 10" Housings			1		$4.60
SH144368	SW-4 Wrench for Big Blue for 20" Housings			1		$4.60
1-1/2" NPT Big Blue HOUSING ASSEMBLIES						
150239	1-1/2" #10 BB Black/Blue HFPP w/PR	2.56	34.6	6	*	$45.67
150240	1-1/2" #10 BB Black/Blue HFPP w/o PR	2.56	34.3	6	*	$45.45



Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
150235	1-1/2" #20 BB Black/Blue HFPP w/PR			4	*	$65.04
150236	1-1/2" #20 BB Black/Blue HFPP w/o PR	3.16	29.4	4	*	$64.55
1-1/2" NPT Big Blue REPLACEMENT PARTS						
151039	Pressure Relief Button Kit			1		$3.53
151122	Big Blue O-ring			1		$7.34
153029	#10 Big Blue Sump			1		$39.61
153070	#20 Big Blue Sump			1		$70.09
153097	#20 Big Blue Sump with 3/8" NPT Drain			1		$168.58
154167	1-1/2" Black HFPP Cap w/PR for Big Blue Housings			1		$58.67
154078	1-1/2" Black HFPP Cap w/o PR for Big Blue Housings			1		$57.89
1-1/2" NPT Big Blue ACCESSORIES						
144258	Two-Housing Big Blue Bracket		3.2	1		$63.54
144259	Three-Housing Big Blue Bracket		5.5	1		$108.16
144928	WB-PC Kit - Powder Coated White Bracket for Big Blue Housing		1.72	1		$39.81
150061	WB-ZP Kit - Zinc Plated Bracket for Big Blue Housing		1.72	1		$43.36
150296	SW-3 Wrench Big Blue 10" Housings			1		$4.60
NOTE: Mounting system uses up to four Big Blue, Big Clear, or PBH Bag Housings in 10" or 20" lengths. Housings can be installed in series, parallel, or any combination.Piping and housings must be purchased separately.						
244718	WB-ZP - Zinc Plated Bracket ONLY for Big Blue Housing		0.86	1		$37.51
357639	WB-SS - Stainless Steel Bracket ONLY for Big Blue Housing		0.86	1		$48.52
357640	WB-SS Kit - Stainless Steel Bracket for Big Blue Housing		1.72	1		$53.54
SH144229	Cartridge Coupler for Big Blue Cartridges			1		$3.21
SH144368	SW-4 Wrench for Big Blue for 20" Housings			1		$4.60
3/4" NPT BIG BLUE HOUSING ASSEMBLIES W/ DRAIN VALVE						
150689	3/4" #20 BB Black/Blue HFPP w/PR and 3/8" Sump Drain Valve	3.55	27.9	4		$78.58
3/4" NPT Big Blue REPLACEMENT PARTS						
151039	Pressure Relief Button Kit			1		$3.53
151122	Big Blue O-ring			1		$7.34
153098	#10 Big Blue Sump with 3/8" NPT Drain			1		$135.84
153097	#20 Big Blue Sump with 3/8" NPT Drain			1		$168.58
154195	3/4" Black HFPP Cap w/PR for Big Blue Housings			1		$57.19
3/4" NPT Big Blue ACCESSORIES						
144258	Two-Housing Big Blue Bracket		3.2	1		$63.54
144259	Three-Housing Big Blue Bracket		5.5	1		$108.16
144928	WB-PC Kit - Powder Coated White Bracket for Big Blue Housing		1.72	1		$39.81
150061	WB-ZP Kit - Zinc Plated Bracket for Big Blue Housing		1.72	1		$43.36
150296	SW-3 Wrench Big Blue 10" Housings			1		$4.60
NOTE: Mounting system uses up to four Big Blue, Big Clear, or PBH Bag Housings in 10" or 20" lengths. Housings can be installed in series, parallel, or any combination.Piping and housings must be purchased separately.						

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
244718	WB-ZP - Zinc Plated Bracket ONLY for Big Blue Housing		0.86	1		$37.51
357639	WB-SS - Stainless Steel Bracket ONLY for Big Blue Housing		0.86	1		$48.52
357640	WB-SS Kit - Stainless Steel Bracket for Big Blue Housing		1.72	1		$53.54
SH144229	Cartridge Coupler for Big Blue Cartridges			1		$3.21
SH144368	SW-4 Wrench for Big Blue for 20" Housings			1		$4.60
1" NPT BIG BLUE HOUSING ASSEMBLIES W/ DRAIN VALVE						
150690	1" #20 BB Black/Blue w/PR and 3/8" Sump Drain Valve	3.16	27.9	4		$78.58
1" NPT Big Blue REPLACEMENT PARTS						
151039	Pressure Relief Button Kit			1		$3.53
151122	Big Blue O-ring			1		$7.34
153098	#10 Big Blue Sump with 3/8" NPT Drain			1		$135.84
153097	#20 Big Blue Sump with 3/8" NPT Drain			1		$168.58
154166	1" Black HFPP Cap w/PR for Big Blue Housings			1		$57.19
1" NPT Big Blue ACCESSORIES						
144258	Two-Housing Big Blue Bracket		3.2	1		$63.54
144259	Three-Housing Big Blue Bracket		5.5	1		$108.16
144928	WB-PC Kit - Powder Coated White Bracket for Big Blue Housing		1.72	1		$39.81
150061	WB-ZP Kit - Zinc Plated Bracket for Big Blue Housing		1.72	1		$43.36
150296	SW-3 Wrench Big Blue 10" Housings			1		$4.60
NOTE: Mounting system uses up to four Big Blue, Big Clear, or PBH Bag Housings in 10" or 20" lengths. Housings can be installed in series, parallel, or any combination.Piping and housings must be purchased separately.						
244718	WB-ZP - Zinc Plated Bracket ONLY for Big Blue Housing		0.86	1		$37.51
357639	WB-SS - Stainless Steel Bracket ONLY for Big Blue Housing		0.86	1		$48.52
357640	WB-SS Kit - Stainless Steel Bracket for Big Blue Housing		1.72	1		$53.54
SH144229	Cartridge Coupler for Big Blue Cartridges			1		$3.21
SH144368	SW-4 Wrench for Big Blue for 20" Housings			1		$4.60
1-1/2" NPT Big Blue REPLACEMENT PARTS						
151039	Pressure Relief Button Kit			1		$3.53
151122	Big Blue O-ring			1		$7.34
153098	#10 Big Blue Sump with 3/8" NPT Drain			1		$135.84
153097	#20 Big Blue Sump with 3/8" NPT Drain			1		$168.58
154167	1-1/2" Black HFPP Cap w/PR for Big Blue Housings			1		$58.67
1-1/2" NPT Big Blue ACCESSORIES						
144258	Two-Housing Big Blue Bracket		3.2	1		$63.54
144259	Three-Housing Big Blue Bracket		5.5	1		$108.16
144928	WB-PC Kit - Powder Coated White Bracket for Big Blue Housing		1.72	1		$39.81
150061	WB-ZP Kit - Zinc Plated Bracket for Big Blue Housing		1.72	1		$43.36
150296	SW-3 Wrench Big Blue 10" Housings			1		$4.60

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

HOUSINGS

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
NOTE: Mounting system uses up to four Big Blue, Big Clear, or PBH Bag Housings in 10" or 20" lengths. Housings can be installed in series, parallel, or any combination.Piping and housings must be purchased separately.						
244718	WB-ZP - Zinc Plated Bracket ONLY for Big Blue Housing		0.86	1		$37.51
357639	WB-SS - Stainless Steel Bracket ONLY for Big Blue Housing		0.86	1		$48.52
357640	WB-SS Kit - Stainless Steel Bracket for Big Blue Housing		1.72	1		$53.54
SH144229	Cartridge Coupler for Big Blue Cartridges			1		$3.21
SH144368	SW-4 Wrench for Big Blue for 20" Housings			1		$4.60

BIG BLACK HEAVY DUTY HOUSINGS

1" NPT BIG BLACK HOUSING ASSEMBLIES

150426	1" #10 BB Black/Black HFPP w/PR			6		$53.54
150671	1" #10 BB Black/Black HFPP w/o PR	2.56	33.1	6		$53.32
150383	1" #20 BB Black/Black HFPP w/PR	3.16	2.79	4		$68.74
150672	1" #20 BB Black/Black HFPP w/o PR	3.16	2.79	4		$66.53

1" NPT BIG BLACK REPLACEMENT PARTS

151039	Pressure Relief Button Kit			1		$3.53
151122	BB O-Ring			1		$7.34
153129	#10- Big Black Sump			1		$20.92
153125	#20- Big Black Sump			1		$70.09
154166	1" Black HFPP Cap w/PR for Big Black Housings			1		$57.19
154077	1" Black HFPP Cap w/o PR for Big Black Housings			1		$57.19

1" NPT BIG BLACK ACCESSORIES

144258	Two-Housing Big Black Bracket		3.2	1		$63.54
144259	Three-Housing Big Black Bracket		5.5	1		$108.16
144928	WB-PC Kit - Powder Coated White Bracket for Big Black Housing		1.72	1		$39.81
150061	WB-ZP Kit - Zinc Plated Bracket for Big Black Housing		1.72	1		$43.36
150296	SW-3 Wrench Big Blue 10" Housings			1		$4.60
NOTE: Mounting system uses up to four Big Blue, Big Clear, or PBH Bag Housings in 10" or 20" lengths. Housings can be installed in series, parallel, or any combination.Piping and housings must be purchased separately.						
244718	WB-ZP - Zinc Plated Bracket ONLY for Big Black Housing		0.86	1		$37.51
357639	WB-SS - Stainless Steel Bracket ONLY for Big Black Housing		0.86	1		$48.52
357640	WB-SS Kit - Stainless Steel Bracket for Big Black Housing		1.72	1		$53.54
SH144229	Cartridge Coupler for Big Black Cartridges			1		$3.21
SH144368	SW-4 Wrench for Big Black for 20" Housings			1		$4.60

1-1/2" NPT BIG BLACK REPLACEMENT PARTS

153125	#20- Big Black Sump			1		$70.09
154078	1-1/2" Black HFPP Cap w/o PR for Big Black Housings			1		$57.89

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

HOUSINGS

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
1-1/2" NPT BIG BLACK ACCESSORIES						
144258	Two-Housing Big Black Bracket		3.2	1		$63.54
144259	Three-Housing Big Black Bracket		5.5	1		$108.16
144928	WB-PC Kit - Powder Coated White Bracket for Big Black Housing		1.72	1		$39.81
150061	WB-ZP Kit - Zinc Plated Bracket for Big Black Housing		1.72	1		$43.36
150296	SW-3 Wrench Big Black 10" Housings			1		$4.60
NOTE: Mounting system uses up to four Big Blue, Big Clear, or PBH Bag Housings in 10" or 20" lengths. Housings can be installed in series, parallel, or any combination.Piping and housings must be purchased separately.						
244718	WB-ZP - Zinc Plated Bracket ONLY for Big Black Housing		0.86	1		$37.51
357639	WB-SS - Stainless Steel Bracket ONLY for Big Black Housing		0.86	1		$48.52
357640	WB-SS Kit - Stainless Steel Bracket for Big Black Housing		1.72	1		$53.54
SH144229	Cartridge Coupler for Big Black Cartridges			1		$3.21
SH144368	SW-4 Wrench for Big Black for 20" Housings			1		$4.60



BIG WHITE HEAVY DUTY HOUSINGS

3/4" NPT BIG WHITE HOUSING ASSEMBLIES						
166081	3/4" #10 BW White/White w/PR	2.56	34.6	6	*	$58.34
3/4" NPT BIG WHITE REPLACEMENT PARTS						
151039	Pressure Relief Button Kit			1		$3.53
151254	Square-cut O-ring for Big White Housings			1		$7.34
153163	#10 Big White Sump			1		$29.25
153167	#20 Big White Sump			1		$68.07
154284	3/4" Big White Cap w/PR			1		$41.64
154419	3/4" Big White Cap w/o PR			1		$39.66
3/4" NPT BIG WHITE ACCESSORIES						
244718	WB-ZP - Zinc Plated Bracket ONLY for Big White Housing		0.86	1		$37.51
150061	WB-ZP Kit - Zinc Plated Bracket for Big White Housing		1.72	1		$43.36
357639	WB-SS - Stainless Steel Bracket ONLY for Big White Housing		0.86	1		$48.52
357640	WB-SS Kit - Stainless Steel Bracket for Big White Housing		1.72	1		$53.54
144928	WB-PC Kit - Powder Coated White Bracket for Big White Housing		1.72	1		$39.81
144258	Two-Housing Big White Bracket		3.2	1		$63.54
144259	Three-Housing Big White Bracket		5.5	1		$108.16
NOTE: Mounting system uses up to four Big Blue, Big Clear, or PBH Bag Housings in 10" or 20" lengths. Housings can be installed in series, parallel, or any combination.Piping and housings must be purchased separately.						
SH144880	BW/BC Wrench for Big Clear, Big White Housings			1		$6.99
SH144229	Cartridge Coupler for Big White Cartridges			1		$3.21



Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

HOUSINGS

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
1" NPT BIG WHITE HOUSING ASSEMBLIES						
166083	1" #10 BW White/White w/PR	2.56	34.6	6		$70.03
166142	1" #20 BW White/White w/PR	3.16	29.7	4		$92.76
166141	1" #20 BW White/White w/o PR	3.16	29.7	4		$81.63
1" NPT BIG WHITE REPLACEMENT PARTS						
151039	Pressure Relief Button Kit			1		$3.53
151254	Square-cut O-ring for Big White Housings			1		$7.34
153163	#10 Big White Sump			1		$29.25
153167	#20 Big White Sump			1		$68.07
154299	1" Big White Cap w/PR			1		$40.44
154290	1" Big White Cap w/o PR			1		$38.52
1" NPT BIG WHITE ACCESSORIES						
244718	WB-ZP - Zinc Plated Bracket ONLY for Big White Housing		0.86	1		$37.51
150061	WB-ZP Kit - Zinc Plated Bracket for Big White Housing		1.72	1		$43.36
357639	WB-SS - Stainless Steel Bracket ONLY for Big White Housing		0.86	1		$48.52
357640	WB-SS Kit - Stainless Steel Bracket for Big White Housing		1.72	1		$53.54
144928	WB-PC Kit - Powder Coated White Bracket for Big White Housing		1.72	1		$39.81
144258	Two-Housing Big White Bracket		3.2	1		$63.54
144259	Three-Housing Big White Bracket		5.5	1		$108.16
NOTE: Mounting system uses up to four Big Blue, Big Clear, or PBH Bag Housings in 10" or 20" lengths. Housings can be installed in series, parallel, or any combination.Piping and housings must be purchased separately.						
SH144880	BW/BC Wrench for Big Clear, Big White Housings			1		$6.99
SH144229	Cartridge Coupler for Big White Cartridges			1		$3.21
1-1/2" NPT BIG WHITE HOUSING ASSEMBLIES						
166144	1-1/2" #20 BW White/White w/PR	3.16	29.7	4		$84.07
1-1/2" NPT BIG WHITE REPLACEMENT PARTS						
151039	Pressure Relief Button Kit			1		$3.53
151254	Square-cut O-ring for Big White Housings			1		$7.34
153167	#20 Big White Sump			1		$68.07
154302	1-1/2" Big White Cap w/PR			1		$40.44
1-1/2" NPT BIG WHITE ACCESSORIES						
244718	WB-ZP - Zinc Plated Bracket ONLY for Big White Housing		0.86	1		$37.51
150061	WB-ZP Kit - Zinc Plated Bracket for Big White Housing		1.72	1		$43.36
357639	WB-SS - Stainless Steel Bracket ONLY for Big White Housing		0.86	1		$48.52
357640	WB-SS Kit - Stainless Steel Bracket for Big White Housing		1.72	1		$53.54
144928	WB-PC Kit - Powder Coated White Bracket for Big White Housing		1.72	1		$39.81

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
144258	Two-Housing Big White Bracket		3.2	1		$63.54
144259	Three-Housing Big White Bracket		5.5	1		$108.16
NOTE: Mounting system uses up to four Big Blue, Big Clear, or PBH Bag Housings in 10" or 20" lengths. Housings can be installed in series, parallel, or any combination.Piping and housings must be purchased separately.						
SH144880	BW/BC Wrench for Big Clear, Big White Housings			1		$6.99
SH144229	Cartridge Coupler for Big White Cartridges			1		$3.21



BIG CLEAR HEAVY DUTY HOUSINGS

1" NPT BIG CLEAR HOUSING ASSEMBLIES

166219	1" #10 BC (Lexan) Blue/Clear w/PR	2.56	33.4	6		$142.95
166201	1" #20 BC (SAN) Blue/Clear w/PR	3.167	27.9	4		$147.05

1" NPT BIG CLEAR REPLACEMENT PARTS

151039	Pressure Relief Button Kit			1		$3.53
151254	Square-cut O-ring for Big Clear Housings			1		$7.34
151362	O-RING, 20" BIG CL SAN, BUNA			1		$7.37
153208	#10 Big Clear (Lexan Material) Sump			1		$129.44
153166	#20 Big Clear (SAN Material) Sump			1		$78.96
154291	1" Blue Cap w/PR for Big Clear Housings			1		$45.68

1" NPT BIG CLEAR ACCESSORIES



244718	WB-ZP - Zinc Plated Bracket ONLY for Big Clear Housing		0.86	1		$37.51
150061	WB-ZP Kit - Zinc Plated Bracket for Big Clear Housing		1.72	1		$43.36
357639	WB-SS - Stainless Steel Bracket ONLY for Big Clear Housing		0.86	1		$48.52
357640	WB-SS Kit - Stainless Steel Bracket for Big Clear Housing		1.72	1		$53.54
144928	WB-PC Kit - Powder Coated White Bracket for Big Clear Housing		1.72	1		$39.81
144258	Two-Housing Big Clear Bracket		3.2	1		$63.54
144259	Three-Housing Big Clear Bracket		5.5	1		$108.16
NOTE: Mounting system uses up to four Big Blue, Big Clear, or PBH Bag Housings in 10" or 20" lengths. Housings can be installed in series, parallel, or any combination.Piping and housings must be purchased separately.						
SH144880	BW/BC Wrench for Big Clear, Big White Housings			1		$6.99
SH144229	Cartridge Coupler for Big Blue Cartridges			1		$3.21



HIGH TEMPERATURE NYLON HOUSINGS

1/2" Slim Line HIGH TEMPERATURE NYLON HOUSING ASSEMBLIES

158319	1/2" #10 Slim Line Black/Black High Temperature Housing w/o PR	1.21	38	12		$82.11

1/2" Slim Line HIGH TEMPERATURE NYLON REPLACEMENT PARTS

158095	O-ring FKM #237 O-ring for Slim Line Housings			1		$12.61
153093	#10 Slim Line Black Nylon Sump			1		$65.13
154503	1/2" Black Nylon Cap w/o PR			1		$39.91

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
1/2" Slim Line HIGH TEMPERATURE NYLON ACCESSORIES						
150539	SW-1A Wrench for Slim Line Housings			1		$4.29
244047	SL-ZP Kit - Zinc Plated Bracket for Slim Line Housing		0.22	1		$5.30
357644	SL-SS Kit - Stainless Steel Bracket for Slim Line Housing		0.22	1		$31.67
244046-00	SL-ZP - Zinc Plated Bracket ONLY for Slim Line Housing		0.15	1		$2.29
244627-02	Two-Housing CCF and RO System Bracket		1	1		$17.36
3/4" STANDARD HIGH TEMPERATURE NYLON HOUSING ASSEMBLIES						
150015	3/4" #10 Standard Red/Red High Temperature Housing w/o PR	2.57	49.5	12		$153.22
150111	3/4" #20 Standard Red/Red High Temperature Housing w/o PR	3.19	57	8		$240.59
3/4" STANDARD HIGH TEMPERATURE NYLON REPLACEMENT PARTS						
151117	O-ring #241 for #10, #12, and #20 Housings			1		$12.61
151118	O-ring #241 for Standard Housings			1		$11.52
153005	#10 Std Red High Temp Sump			1		$145.20
153031	#20 Standard Red Nylon Sump			1		$165.07
154003	3/4" Red High Temperature Cap w/o PR			1		$51.69
154061	3/4" Black Nylon Cap w/o PR			1		$52.17
3/4" STANDARD HIGH TEMPERATURE NYLON ACCESSORIES						
144012-00	UB-1 - Zinc Plated Bracket ONLY for Valve-In-Head Housing (U-Shaped)		0.32	1		$3.80
151011	UB-1 Kit - Zinc Plated Bracket for Valve-In-Head Housing (U-Shaped)		0.35	1		$8.29
150295	SW-2 Wrench for Standard Housings			1		$4.29

ALL NATURAL - PURE POLYPROPYLENE HOUSINGS

3/4" STANDARD ALL NATURAL HOUSING ASSEMBLIES						
150132	3/4" #10 Standard All Natural w/Mounting Bracket Cap w/Double Cap Plugs	0.27	3	1		$90.59
150150	3/4" #10 Standard All Natural w/Mounting Bracket Cap w/o Cap Plugs	0.27	2.7	1		$60.13
150134	3/4" #12 Standard All Natural w/ Mounting Bracket Cap w/222 Cartridge Sealing Cap w/Double Cap Plugs, w/o V-bead w/Drain	0.33	3.1	1		$75.02
150154	3/4" #12 Standard All Natural w/Mounting Bracket Cap w/222 Cartridge Sealing Cap w/o Cap Plugs and w/o V-bead	0.33	3	1		$58.72
150135	3/4" #20 Standard All Natural w/Mounting Bracket Cap w/Double Cap Plugs and Sump Drain	0.47	5	1		$79.46
150141	3/4" #20 Standard All Natural w/Mounting Bracket Cap w/Extended 222 Cartridge Sealing Cap w/Double Cap Plugs and w/o V-bead	0.47	4.4	1		$132.86
150156	3/4" #20 Standard All Natural w/Mounting Bracket Cap w/o Cap Plugs	0.47	5.2	1		$59.53
150158	3/4" #20 Standard All Natural w/Mounting Bracket Cap w/Extended 222 Cartridge Sealing Cap w/o Cap Plugs and w/o V-bead	1.47	4.7	1		$83.95

NOTE: All Natural housings contain no fillers, colorants, plasticizers, or lubricants.



Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
3/4" STANDARD ALL NATURAL REPLACEMENT PARTS						
144457	All Natural Vent/Drain Plug Kit (Included Plug and O-ring)			1		$3.93
151117	O-ring #241 for #10, #12, and #20 Housings			1		$12.61
153042	#10 All Natural Standard Sump w/o Drain			1		$31.22
153047	#10 All Natural Standard Sump w/o V-bead and w/o Drain			1		$34.71
153106	#12 All Natural Sump w/o V-bead and w/Drain			1		$50.84
153046	#12 All Natural Sump w/o V-bead and w/o Drain			1		$38.97
153102	#20 All Natural Sump w/Drain			1		$44.83
153040	#20 All Natural Sump w/o Drain			1		$51.56
153107	#20 All Natural Extended Sump w/Drain			1		$89.73
153055	#20 All Natural Extended Sump w/o Drain			1		$77.88
154025	3/4" All Natural Mounting Bracket Cap w/o Cap Plugs			1		$24.89
154135	3/4" All Natural Mounting Bracket Cap w/Double Cap Plugs			1		$41.77
154136	3/4" All Natural Mounting Bracket Cap w/222 Cartridge Sealing w/ Double Cap Plugs			1		$97.17
154351	3/4" All Natural Mounting Bracket Cap w/222 Cartridge Sealing w/o Cap Plugs			1		$38.78
3/4" STANDARD ALL NATURAL ACCESSORIES						
144457	All Natural Vent/Drain Plug Kit (Included Plug and O-ring)			1		$3.93
150295	SW-2 Wrench for Standard Housings			1		$4.29
150578	MC-1A Kit - Zinc Plated Bracket for Standard Housing		0.64	1		$8.07
155003	Cartridge Coupler for Standard Cartridges			1		$2.25
157209	All Natural Sump Extension Adapter for #12 Housing			1		$9.37
244043	MC-1A - Zinc Plated Bracket ONLY for Standard Housing		0.41	1		$3.62
244686	Two-Housing Standard System Bracket			1		$32.07

ALL NATURAL "WHITE" - PURE POLYPROPYLENE HOUSINGS



3/4" STANDARD ALL NATURAL "WHITE" HOUSING ASSEMBLIES						
150512	#12 Standard All Natural "White" w/Mounting Bracket Cap w/222 Cartridge Sealing Cap and Double Cap Plugs			1		$117.37
150514	#20 Standard All Natural "White" Mounting Bracket Cap w/222 Cartridge Sealing Cap and Double Cap Plugs			1		$141.85
NOTE: All Natural "White" housings contain no fillers, colorants, plasticizers, or lubricants.						
3/4" STANDARD ALL NATURAL "WHITE" REPLACEMENT PARTS						
244009	All Natural "White" Drain Plug Kit (Includes Plug and O-ring)			1		$6.27
151117	O-ring #241 for #10, #12, and #20 Housings			1		$12.61
153186	#20 All Natural "White" Extended Sump w/Drain			1		$53.06
153188	#20 All Natural "White" Extended Sump w/o V-bead and w/Drain			1		$75.50
154567	3/4" All Natural "White" Mounting Bracket Cap w/222 Cartridge Sealing w/Double Cap Plugs			1		$38.79

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

HOUSINGS

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
3/4" STANDARD ALL NATURAL "WHITE" ACCESSORIES						
150295	SW-2 Wrench for Standard Housings			1		$4.29
150578	MC-1A Kit - Zinc Plated Bracket for Standard Housing		0.64	1		$8.07
244043	MC-1A - Zinc Plated Bracket ONLY for Standard Housing		0.41	1		$3.62
244686	Two-Housing Standard System Bracket			1		$32.07

REVERSE OSMOSIS MEMBRANE HOUSING

161080-06	Reverse Osmosis Membrane Housing - 90i Outlet	2.45	35	12		$12.33

*Minimum order quantity is 40 (2 cases)

E-SERIES STAINLESS STEEL CARTRIDGE HOUSINGS

ESC3202NB410	ESC cartridge housing, holds 3- 20" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish			1		$344.39
ESC3302NB410	ESC cartridge housing, holds 3- 30" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish			1		$416.69
ESC3402NB410	ESC cartridge housing, holds 3- 40" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish			1		$471.95
ESC3402NB6L10	ESC cartridge housing, holds 3- 40" cartridges, 2" NPT I/O, side outlet, 316L SS, 100 psi, polished finish			1		$849.51
ESC4202NB410	ESC cartridge housing, holds 5- 20" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish			1		$416.69
ESC4302NB410	ESC cartridge housing, holds 5- 30" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish			1		$501.71
ESC5202NB410	ESC cartridge housing, holds 5- 20" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish			1		$416.69
ESC5302NB410	ESC cartridge housing, holds 5- 30" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish			1		$501.71
ESC5302NB6L10	ESC cartridge housing, holds 5- 30" cartridges, 2" NPT I/O, side outlet, 316L SS, 100 psi, polished finish			1		$903.09
ESC5402NB410	ESC cartridge housing, holds 5- 40" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish			1		$561.23
ESC5402NB6L10	ESC cartridge housing, holds 5- 40" cartridges, 2" NPT I/O, side outlet, 316L SS, 100 psi, polished finish			1		$1,010.22
ESC7202NB410	ESC cartridge housing, holds 7- 20" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish			1		$739.81
ESC7202NB6L10	ESC cartridge housing, holds 7- 20" cartridges, 2" NPT I/O, side outlet, 316L SS, 100 psi, polished finish			1		$1,331.66
ESC7302NB410	ESC cartridge housing, holds 7- 30" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish			1		$871.61
ESC7302NB6L10	ESC cartridge housing, holds 7- 30" cartridges, 2" NPT I/O, side outlet, 316L SS, 100 psi, polished finish			1		$1,568.91
ESC7402NB410	ESC cartridge housing, holds 7- 40" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish			1		$969.41





Prices effective January 1, 2019 - Prices are subject to change without notice.

*This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.

PART NUMBER	DESCRIPTION	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
ESC7402NB6L10	ESC cartridge housing, holds 7- 40" cartridges, 2" NPT I/O, side outlet, 316L SS, 100 psi, polished finish			1		$1,744.93
REPLACEMENT PARTS						
4003581	EPDM lid O-ring for ESC3			1		$10.93
4003548	EPDM lid O-ring for ESC4 & ESC5			1		$14.57
4003582	EPDM lid O-ring for ESC7			1		$18.21
4004788	ESC3 band clamp, 304 SS			1		$139.08
4004789	ESC4 & ESC5 band clamp, 304 SS			1		$166.89
4004790	ESC7 band clamp, 304 SS			1		$211.40

ST-SERIES STAINLESS STEEL CARTRIDGE HOUSINGS



3/4" 304 STAINLESS STEEL CARTRIDGE FILTER HOUSINGS						
156017-02	3/4" 10" ST-1 Housing (10" Cartridges)	0.23	6	1		$262.98
156018-02	3/4" 20" ST-2 Housing (20" Cartridges)	0.36	9	1		$466.01
2" 304 STAINLESS STEEL CARTRIDGE FILTER HOUSINGS						
143216	ST Housing Gasket, BUNA-N			1		$16.61
143220	ST Housing Cap Nut			1		$86.57
143339	Head Nut Gasket Kit for ST-1, ST-2, and ST-3			1		$6.03
144128	Wall Bracket for ST-1, ST-2, and ST-3		0.2	1		$19.94
156037	Mounting Bracket Kit for ST-1, ST-2, and ST-3		0.2	1		$25.22
243301	ST Cap Nut Gasket, Silicone			1		$11.12
243302	ST Cap Nut Gasket, PTFE			1		$16.86
243303	ST Cap Nut Gasket, FKM			1		$22.26
243304	ST Housing Gasket, Silicone			1		$20.85
243305	ST Housing Gasket, PTFE			1		$34.08
243306	ST Housing Gasket, FKM			1		$37.56
243311	ST 20" Housing Only			1		$364.17
243313	ST 1/8" Drain Petcock			1		$19.62
2" 304 STAINLESS STEEL CARTRIDGE FILTER HOUSINGS						
156025-02	ST-BC-4 (Holds 4-10" Cartridges)	2	25	1		$1,393.42
156026-02	ST-BC-8 (Holds 8-10" or 4-20" Cartridges)	2.88	33	1		$1,508.13
156027-02	ST-BC-12 (Holds 12-10" or 4-30" Cartridges)	4	38	1		$1,640.88
156032-02	ST-BC-20 (Holds 20-10" or 5-40" Cartridges)	4.98	50	1		$2,319.86
2" STAINLESS STEEL CARTRIDGE HOUSING ACCESSORIES						
143218	Gasket for STBC Series			1		$105.57
143221	ST-BC Housing/Cover Clamp			1		$256.99

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	µm (NOMINAL)	VOL. (ft.³)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT

PBH BAG FILTER HOUSINGS

PBH BAG FILTER HOUSINGS

150360	PBH-410-1 1" #10 Big Blue Bag Filter Housing		0.51	6	1		$178.52
150367	PBH-420-1 1" #20 Big Blue Bag Filter Housing		0.92	9	1		$204.97
150338	PBH-410-1.5 1-1/2" #10 Big Blue Bag Filter Housing		0.51	7	1		$191.74
150337	PBH-420-1.5 1-1/2 #20 Big Blue Bag Filter Housing		0.92	10	1		$216.05

PBH BAG FILTER REPLACEMENT PARTS

151122	Big Blue O-Ring				1		$7.34
153097	#20 Big Blue Sump with 3/8" NPT Drain				1		$168.58
153098	#10 Big Blue Sump with 3/8" NPT Drain				1		$135.84
154508	PBC 1-1/2" Bag Filter Cap - 1/4" Vent				1		$79.51
154515	PBC 1" Bag Filter Cap - 1/4" Vent				1		$75.35
144258	Two-Housing Big Blue Bracket			3.2	1		$63.54
144259	Three-Housing Big Blue Bracket			5.5	1		$108.16
144928	WB-PC Kit - Powder Coated White Bracket for Big Blue Housing			1.72	1		$39.81
150061	WB-ZP Kit - Zinc Plated Bracket for Big Blue Housing			1.72	1		$43.36
150296	SW-3 Wrench Big Blue 10" Housings				1		$4.60



NOTE: Mounting system uses up to four Big Blue, Big Clear, or PBH Bag Housings in 10" or 20" lengths. Housings can be installed in series, parallel, or any combination.Piping and housings must be purchased separately.

244718	WB-ZP - Zinc Plated Bracket ONLY for Big Blue Housing			0.86	1		$37.51
357639	WB-SS - Stainless Steel Bracket ONLY for Big Blue Housing			0.86	1		$48.52
357640	WB-SS Kit - Stainless Steel Bracket for Big Blue Housing			1.72	1		$53.54
155373-03	PBR-420-BK 20" Replacement Basket				1		$147.74
155374-03	PBR-410-BK 10" Replacement Basket				1		$90.73
SH144162	1/4" Vent Plug				1		$1.90
144357	3/8" FNPT x 3/8" NPT PVC Ball Valve				1		$20.92
SH144362	3/8" Drain Plug HDPE				1		$1.58
SH144368	SW-4 Wrench for Big Blue for 20" Housings				1		$4.60
SH144369	0-100 PSI Gauge				1		$24.93



E-SERIES STAINLESS STEEL BAG HOUSINGS

ES12NA410	ES1 bag housing, size 1, 2" NPT I/O, bottom outlet, 304 SS, 100 psi, polished finish				1		$987.45
ES22NA410	ES2 bag housing, size 2, 2" NPT I/O, bottom outlet, 304 SS, 100 psi, polished finish				1		$1,158.98
ES31NA410	ES3 bag housing, size 3, 1" NPT I/O, bottom outlet, 304 SS, 100 psi, polished finish				1		$727.83
ES41NA410	ES4 bag housing, size 4, 1" NPT I/O, bottom outlet, 304 SS, 100 psi, polished finish				1		$876.19



Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

E-SERIES STAINLESS STEEL BAG HOUSING REPLACEMENT PARTS

PART NUMBER	DESCRIPTION	CASE QTY.	PRICE ($) PER UNIT
4003548	Lid O-ring for ES1 and ES2 housings, EPDM	1	$14.57
4003549	Basket O-ring for ES1 and ES2 housings, EPDM	1	$3.64
4003550	Lid O-ring for ES3 and ES4 housings, EPDM	1	$7.28
4004786	ES1 & ES2 band clamp, 304 SS	1	$166.89
4004787	ES3 & ES4 band clamp, 304 SS	1	$194.71

ALUMINUM BAG HOUSINGS

156110	Aluminum filter bag housing, size 4, 1-1/4" NPT Inlet/outlet	1	$1,212.79
156111	Aluminum filter bag housing, size 1, 2" NPT Inlet/outlet	1	$1,729.75
156112	Aluminum filter bag housing, size 2, 2" NPT Inlet/outlet	1	$1,980.84
156113	Aluminum filter bag housing, size 2, 3" NPT Inlet/outlet	1	$2,265.47

ALUMINUM BAG HOUSING REPLACEMENT PARTS

243135	O-ring, 8", Buna-N for Size 2 housing	1	$23.65
243140	Replacement Basket, #2, for Size 2 housing	1	$790.65

SEDIMENT CARTRIDGES

PLEATED CELLULOSE



LENGTH - 9-3/4"						
155001-43	S1 Pleated Cellulose	20	1.21	8.8	24	$5.15
LENGTH - 20"						
155303-43	S1-20 Pleated Cellulose	20	1.36	14	14	$11.74
LENGTH - 10" Big Blue						
155405-43	S1-BB Pleated Cellulose	20	1.23	8	8	$14.63
LENGTH - 20" Big Blue						
155305-43	S1-20BB Pleated Cellulose	20	2.13	10	6	$26.13

PLEATED CELLULOSE-POLYESTER

LENGTH - 9-3/4"						
255481-43	ECP1-10 Pleated Cellulose-Polyester	1	1.22	8.8	24	$7.95
255482-43	ECP5-10 Pleated Cellulose-Polyester	5	1.22	8.8	24	$7.37
255483-43	ECP20-10 Pleated Cellulose-Polyester	20	1.22	8.8	24	$7.02
255484-43	ECP50-10 Pleated Cellulose-Polyester	50	1.22	8.8	24	$7.31
LENGTH - 20"						
255485-43	ECP1-20 Pleated Cellulose-Polyester	1	1.37	14	14	$18.64

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

FILTER CARTRIDGES

PART NUMBER	DESCRIPTION	µm (NOMINAL)	VOL. (ft.³)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
255486-43	ECP5-20 Pleated Cellulose-Polyester	5	1.37	14	14		$14.60
255487-43	ECP20-20 Pleated Cellulose-Polyester	20	1.37	14	14		$14.60
LENGTH - 10" Big Blue							
255489-43	ECP1-BB Pleated Cellulose-Polyester	1	1.23	8	8		$18.90
255490-43	ECP5-BB Pleated Cellulose-Polyester	5	1.23	8	8		$18.11
255491-43	ECP20-BB Pleated Cellulose-Polyester	20	1.23	8	8		$18.11
255492-43	ECP50-BB Pleated Cellulose-Polyester	50	1.23	8	8		$18.65
LENGTH - 20" Big Blue							
255493-43	ECP1-20BB Pleated Cellulose-Polyester	1	2.14	10	6		$37.42
255494-43	ECP5-20BB Pleated Cellulose-Polyester	5	2.14	10	6		$33.99
255495-43	ECP20-20BB Pleated Cellulose-Polyester	20	2.14	10	6		$33.99
255496-43	ECP50-20BB Pleated Cellulose-Polyester	50	2.14	10	6		$35.01



PLEATED POLYESTER

LENGTH - 4-7/8"							
155031-43	R30-478 Pleated Polyester - Reusable	30	0.68	5.5	24		$9.80
LENGTH - 9-3/4"							
155017-43	R30 Pleated Polyester - Reusable	30	1.21	8.8	24		$10.43
155038-43	R50 Pleated Polyester - Reusable	50	1.21	8.3	24		$10.07
LENGTH - 20"							
155416-43	R30-20 Pleated Polyester - Reusable	30	1.36	14	14		$20.02
LENGTH - 10" Big Blue							
155053-43	R50-BB Pleated Polyester - Reusable	50	1.23	8	8		$16.91
155101-43	R30-BB Pleated Polyester - Reusable	30	1.23	8.5	8		$21.33
LENGTH - 20" Big Blue							
155430-43	R30-20BB Pleated Polyester - Reusable	30	2.13	10	6		$42.40

POLYDEPTH

LENGTH - 9-3/4"							
155748-43	PD-1-934 PolyDepth	1	1.12	10.6	24	*	$6.73
155749-43	PD-5-934 PolyDepth	5	1.12	12	24	*	$6.56
155750-43	PD-10-934 PolyDepth	10	1.12	11.6	24	*	$6.42
155751-43	PD-25-934 PolyDepth	25	1.12	11.8	24	*	$6.35
155752-43	PD-50-934 PolyDepth	50	1.12	11.8	24	*	$6.30
LENGTH - 20"							
155755-43	PD-1-20 PolyDepth	1	1.73	18.6	20	*	$12.26



Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

FILTER CARTRIDGES

PART NUMBER	DESCRIPTION	µm (NOMINAL)	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
155756-43	PD-5-20 PolyDepth	5	1.73	19	20	*	$11.91
155757-43	PD-10-20 PolyDepth	10	1.73	20.7	20	*	$11.52
155758-43	PD-25-20 PolyDepth	25	1.73	21.1	20	*	$11.40
155759-43	PD-50-20 PolyDepth	50	1.73	21.1	20	*	$11.40
LENGTH - 30"							
155762-43	PD-1-30 PolyDepth	1	2.56	29.5	20		$17.31
155763-43	PD-5-30 PolyDepth	5	2.56	28.2	20		$17.06
155764-43	PD-10-30 PolyDepth	10	2.56	28.2	20		$17.06
155765-43	PD-25-30 PolyDepth	25	2.56	29.6	20		$16.85
LENGTH - 40"							
155769-43	PD-1-40 PolyDepth	1	3.23	38	20		$23.10
155770-43	PD-5-40 PolyDepth	5	3.23	35	20		$22.66
155772-43	PD-25-40 PolyDepth	25	3.23	41	20		$22.16

SPUN POLYPROPYLENE



LENGTH - 4-7/8"							
155030-43	P5-478 Spun Polypropylene	5	0.56	5.1	24		$3.95
LENGTH - 9-7/8"							
155225-43	P1 Spun Polypropylene	1	1.02	10.1	24	*	$4.60
155014-43	P5 Spun Polypropylene	5	1.02	9.4	24	*	$4.24
155015-43	P25 Spun Polypropylene	25	1.02	8.5	24		$4.14
LENGTH - 20"							
155304-43	P1-20 Spun Polypropylene	1	1.67	15.6	20	*	$9.49
155016-43	P5-20 Spun Polypropylene	5	1.67	15.6	20	*	$8.62
155226-43	P25-20 Spun Polypropylene	25	1.67	15.6	20		$8.37
LENGTH - 30"							
155227-43	P1-30 Spun Polypropylene	1	2.57	25	20		$11.74
155228-43	P5-30 Spun Polypropylene	5	2.57	25	20		$11.03
155224-43	P25-30 Spun Polypropylene	25	2.57	25	20		$12.41
LENGTH - 40"							
155422-43	P5-40 Spun Polypropylene	5	3.23	35	20		$16.77
LENGTH - 10" Big Blue							
155359-43	DGD-2501 Dual-Gradient Polypropylene	1	1.42	10	8	*	$15.71
155357-43	DGD-5005 Dual-Gradient Polypropylene	5	1.42	10	8	*	$15.14
155355-43	DGD-7525 Dual-Gradient Polypropylene	25	1.42	10	8	*	$15.03
LENGTH - 20" Big Blue							



Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	µm (NOMINAL)	VOL. (ft.³)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
155360-43	DGD-2501-20 Dual-Gradient Polypropylene	1	2.13	23	6	*	$29.06
155358-43	DGD-5005-20 Dual-Gradient Polypropylene	5	2.13	23	6	*	$27.89
155356-43	DGD-7525-20 Dual-Gradient Polypropylene	25	2.13	23	6	*	$27.76

STRING WOUND - POLYPROPYLENE



LENGTH - 9-7/8"

155071-43	WP5 Polypropylene String-Wound	5	1.02	10.1	24		$7.87
155072-43	WP30 Polypropylene String-Wound	30	1.02	10.1	24		$7.72
155186-43	CW-F Polypropylene String-Wound	10	1.02	11	24		$4.95
155187-43	CW-MF Polypropylene String-Wound	30	1.02	11	24		$4.53
155214-43	CW-50 Polypropylene String-Wound	50	1.02	8	24		$5.80

LENGTH - 10" Big Blue

355212-43	WP.5BB97P Polypropylene String-Wound	0.5	1.42	13.3	8		$25.61
355213-43	WP1BB97P Polypropylene String-Wound	1	1.42	12.3	8		$24.90
355214-43	WP5BB97P Polypropylene String-Wound	5	1.42	12.3	8		$24.56
355215-43	WP10BB97P Polypropylene String-Wound	10	1.42	12.3	8		$23.76
355216-43	WP25BB97P Polypropylene String-Wound	25	1.42	12.3	8		$23.48



LENGTH - 20" Big Blue

355222-43	WP1BB20P Polypropylene String-Wound	1	2.13	29.2	6		$60.59
355223-43	WP5BB20P Polypropylene String-Wound	5	2.13	29.2	6		$55.86
355225-43	WP25BB20P Polypropylene String-Wound	25	2.13	29.2	6		$55.09

STRING WOUND - FIBRILLATED

LENGTH - 10" Big Blue

355217-43	WPX5BB97P Fibrillated Polypropylene String-Wound	5	1.42	16.3	8		$28.25
355218-43	WPX10BB97P Fibrillated Polypropylene String-Wound	10	1.42	13.1	8		$27.69
355219-43	WPX25BB97P Fibrillated Polypropylene String-Wound	25	1.42	11.8	8		$27.14
355220-43	WPX50BB97P Fibrillated Polypropylene String-Wound	50	1.42	10.5	8		$26.59
355221-43	WPX100BB97P Fibrillated Polypropylene String-Wound	100	1.42	10	8		$26.07

LENGTH - 20" Big Blue

355226-43	WPX100BB20P Fibrillated Polypropylene String-Wound	100	2.13	29.2	6		$52.15

PLEATED POLYPROPYLENE

LENGTH - 10"

155120-43	PP30-BB Pleated Polypropylene	30	1.21	8.6	8		$19.47

CARBON CARTRIDGES

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

FILTER CARTRIDGES



DIAMOND FLOW

PART NUMBER	DESCRIPTION	µm (NOMINAL)	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
LENGTH - 9-3/4"							
655130-43	DFX-CB-10 Diamond Flow Polyspun/Carbon Block	10	1.21	13	12	*	$7.02

CARBON IMPREGNATED MEDIA



LENGTH - 4-7/8"							
155022-43	C2 Activated Carbon-Impregnated Cellulose	5	0.56	6.5	24		$7.85
LENGTH - 9-3/4"							
155002-43	C1 Activated Carbon-Impregnated Cellulose	5	1.21	11.3	24	*	$8.67
155220-43	C8 Powdered Activated Carbon-Impregnated Polyester	1	1.21	14	24		$14.62
155367-43	NCP-10 Pleated Carbon-Impregnated Polyester	10	1.21	11.3	24		$11.93
LENGTH - 20"							
155397-43	NCP-20 Pleated Carbon-Impregnated Polyester	10	1.36	11.1	14		$23.39
155597-43	C1-20 Activated Carbon-Impregnated Cellulose	5	1.52	12	14		$18.75
LENGTH - 10" Big Blue							
155398-43	NCP-BB Pleated Carbon-Impregnated Polyester	10	1.23	12.9	8		$28.46
LENGTH - 20" Big Blue							
155382-43	NCP-20BB Pleated Carbon-Impregnated Polyester	10	2.13	21.6	6		$55.51
155651-43	C1-20BB Activated Carbon-Impregnated Cellulose	5	2.13	21.6	6		$51.20

GRANULAR ACTIVATED CARBON





LENGTH - 4-7/8"							
155110-43	GAC-5 Granular Activated Carbon	NR	0.65	12.3	24		$11.70
LENGTH - 9-3/4"							
155063-43	RFC-93 Radial-Flow Granular Activated Carbon	25	0.74	12.1	24		$31.22
155109-43	GAC-10 Granular Activated Carbon	NR	0.74	12.1	12	*	$13.08
155131-43	TSGAC-10 Combination Carbon/Phosphate	NR	0.74	12.1	12	*	$28.52
155254-43	SGAC-10 Silver-Impregnated Granular Activated Carbon	NR	0.67	15	12		$50.13
255800-43	UDS-10EX1 Bacteriostatic KDF/GAC	5	0.624	22.8	12		$42.07
LENGTH - 20"							
155065-43	RFC-20 Radial-Flow Granular Activated Carbon	25	1.18	11.4	6		$45.77
155111-43	GAC-20 Granular Activated Carbon	NR	1.18	16.6	6		$26.63
LENGTH - 10" Big Blue							
155141-43	RFC-BB Radial-Flow Carbon	25	1.23	19.3	8	*	$49.31
155153-43	GAC-BB Granular Activated Carbon	NR	1.23	19.4	8		$34.01
355056-43	CRFC-BB Radial Flow Carbon	25	1.23	19.3	8		$108.38
255748-43	DBC-10EX2 Bacteriostatic KDF/GAC	NR	0.954	25.9	6		$74.76
LENGTH - 20" Big Blue							

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

FILTER CARTRIDGES

PART NUMBER	DESCRIPTION	µm (NOMINAL)	VOL. (ft.³)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
155247-43	RFC20-BB Radial-Flow Granular Activated Carbon	25	2.13	27.1	6	*	$97.04
155249-43	GAC20-BB Granular Activated Carbon	NR	1.36	19	4	*	$73.93
155967-43	CRFC-20BB Radial Flow Carbon	25	2.13	27.1	6	*	$217.25



CARBON BLOCK

LENGTH - 4-7/8"							
155169-43	CBC-5 Carbon Block	0.5	0.74	12.5	24		$7.39
255424-03	EP-5 Carbon Block	5	0.62	12.5	24		$6.35
LENGTH - 9-3/4"							
155162-43	CBC-10 Carbon Block	0.5	0.74	14	12	*	$18.36
155268-43	CBR2-10 Carbon Block	0.5	0.74	19.4	12	*	$24.27
155350-43	SCBC-10 Silver-Impregnated Carbon Block	0.5	0.75	19.4	12		$30.16
155403-43	CBR2-10R Carbon Block w/Flow Control	0.5	0.74	19.4	12	*	$24.68
155531-43	EP-10 Carbon Block	5	0.74	14	12	*	$10.41
155634-43	EPM-10 Carbon Block	10	0.74	14	12	*	$8.12
155713-43	CCBC-10 Coconut Carbon Block	1	0.74	12.8	12	*	$23.04
255382-43	CB1-10 Carbon Block	1	0.75	14	12	*	$12.39
255416-43	ChlorPlus 10 Carbon Block	1	0.75	11.6	12	*	$28.07
LENGTH - 20"							
155309-43	CBC-20 Carbon Block	0.5	1.17	15	12	*	$35.56
155529-43	EP-20 Carbon Block	5	1.17	17	6	*	$20.89
155635-43	EPM-20 Carbon Block	10	1.17	17	6	*	$17.61
255417-43	ChlorPlus 20 Carbon Block	1	0.85	13.7	6	*	$55.81
LENGTH - 30"							
155698-43	EP-30 Carbon Block	5	2.85	46	12		$70.41
LENGTH - 40"							
155815-03	EP5-40 Carbon Block	5	2.13	33	6	*	$86.86
LENGTH - 10" Big Blue							
155170-43	CBC-BB Carbon Block	0.5	0.62	12.5	4		$66.10
155548-43	EP-BB Carbon Br iquette	5	0.62	12.5	4	*	$40.86
155782-43	EPM-BB Carbon Block	10	0.62	12.5	4	*	$38.36
355752-43	ChlorPlus-BB Carbon Block	1	0.62	10	4		$81.49
LENGTH - 20" Big Blue							
155312-43	CBC20-BB Carbon Block	0.5	1.36	28	4	*	$124.53
155583-43	EP-20BB Carbon Block	5	1.36	28	4	*	$77.63
155783-43	EPM-20BB Carbon Block	10	1.36	28	4	*	$70.45
355753-43	ChlorPlus-20BB Carbon Block	1	1.36	20	4		$176.05



Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	µm (NOMINAL)	VOL. (ft.³)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT

SPECIALTY CARTRIDGES

FIBREDYNE CARBON BLOCK



LENGTH - 9-3/4"							
255671-43	CFB-10 Modified Carbon Block	10	0.66	7	12	*	$12.84
255674-43	CFB-Plus10 Modified Carbon Block	5	0.66	7	12	*	$14.08
255679-43	CFBC-10 Modified Carbon Block	0.5	0.66	7	12	*	$19.54
255681-43	CFB-PB10 Modified Carbon Block	0.5	0.66	7	12	*	$23.55
455903-43	FloPlus[s] 10 Carbon Block	0.5	0.66	7	12	*	$23.84
LENGTH - 20"							
255672-43	CFB-20 Modified Carbon Block	10	1.31	14.5	12	*	$25.07
255675-43	CFB-Plus20 Modified Carbon Block	5	1.31	14.5	12	*	$27.80
455904-43	FloPlus 20 Carbon Block	0.5	1.31	14.5	12	*	$46.39
LENGTH - 30"							
255673-43	CFB-30 Modified Carbon Block	10	1.94	22	12	*	$37.27
255676-43	CFB-Plus30 Modified Carbon Block	5	1.94	22	12	*	$40.86
LENGTH - 10" Big Blue							
255677-43	CFB-Plus10BB Modified Carbon Block	5	0.88	9	12	*	$40.94
455905-43	FloPlus 10BB Carbon Block	0.5	0.88	9	12	*	$70.86
LENGTH - 20" Big Blue							
255678-43	CFB-Plus20BB Carbon Block	5	1.76	18	6	*	$71.88
455906-43	FloPlus 20BB Carbon Block	0.5	1.76	18	6	*	$118.52

FIBREDYNE ELECTROPLATING

LENGTH - 9.8"							
C-155X9.8T	Electroplating Cartridge, 9.8" length, 2.62" diameter	10			30		$16.29
LENGTH - 10"							
255668-43	ELPC-10 Electroplating Cartridge	7	1.51	16	30		$14.89

NOTE: The ELPC-10 will not fit #10 Slim Line or #10 Standard Housings.

LENGTH - 20"							
255669-43	ELPC-20 Electroplating Cartridge	7	2.97	30	20		$29.64
C-155X20T	Electroplating Cartridge, 20" length, 2.62" diameter	10			20		$32.57
LENGTH - 30"							
255670-43	ELPC-30 Electroplating Cartridge	7	4.37	43	20		$44.45
C-155X30T	Electroplating Cartridge, 30" length, 2.62" diameter	10			20		$48.86

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

FILTER CARTRIDGES

PART NUMBER	DESCRIPTION	µm (NOMINAL)	VOL. ($ft.^3$)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
LENGTH - 40"							
C-155X40T	Electroplating Cartridge, 40" length, 2.62" diameter	10			30		$65.13

FIBREDYNE OIL ADSORBING

LENGTH - 10"							
C-170X10T	OAC Plus-10T	NR			30		$40.99
LENGTH - 20"							
C-170X20T	OAC Plus-20T	NR			20		$58.54
LENGTH - 30"							
C-170X30T	OAC Plus-30T	NR			20		$72.64
LENGTH - 40"							
C-170X40T	OAC Plus-40T	NR			12		$83.92
LENGTH - 20" Big Blue							
655139-03	OAC PLUS-20BB	NR	1.77	16	6		$140.99

DEIONIZATION



LENGTH - 10"							
155273-43	PCF1-10MB D.I. Resin	NR	0.54	10.3	6		$41.09
LENGTH - 20"							
155274-43	PCF1-20MB D.I. Resin	NR	1.18	21.3	6		$71.93
LENGTH - 20" Big Blue							
155281-43	BBF1-20MB D.I. Resin	NR	1.36	34	4		$173.89

IRON REDUCTION



LENGTH - 10" Big Blue							
655005-43	RFFE10-BB Radial-Flow Iron Reduction	NR	0.68	20	8		$86.30
LENGTH - 20" Big Blue							
155263-43	RFFE20-BB Radial-Flow Iron Reduction	NR	1.36	39	4		$130.27

MICROGUARD MEMBRANE

LENGTH - 10"							
255420-43	MG-10MCB Carbon Block/Membrane	0.15	0.34	4	4		$112.24

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

FILTER CARTRIDGES

PENTAIR



PHOSPHATE CRYSTAL

PART NUMBER	DESCRIPTION				CASE QTY.	CERT.	PRICE ($) PER UNIT
LENGTH - 10"							
155100-43	PCC-1 Phosphate Crystal Cartridge (24 oz.)	NR	0.35	10.9	6		$75.19
155632-22	PCC-106 Phosphate Cartridge Insert	NR	0.122	2.2	24		$27.27
155248-43	PCC212 Phosphate Crystal Cartridge (12 oz.)	NR	1.12	6.8	6		$30.95
155251-43	PCC218 Phosphate Crystal Cartridge (18 oz.)	NR	1.12	9.1	6		$36.90

WATER SOFTENING

LENGTH - 10"							
155319-43	WS-10 Softening Resin Cartridge	NR	0.54	10.3	6		$27.59
LENGTH - 20"							
155320-43	WS-20 Softening Resin Cartridge	NR	1.18	21.3	6		$38.50
LENGTH - 20" Big Blue							
155321-43	WS-20BB Softening Resin Cartridge	NR	1.36	34	4		$69.33



EMPTY CARTRIDGES - UNASSEMBLED

LENGTH -10"							
155164	GAC-10 Shell	NR	1.65	10.5	24		$14.17
LENGTH - 20"							
155165	GAC-20 Shell	NR	2.81	19.6	25		$21.03
LENGTH - 20" Big Blue							
155255	GAC20-BB Shell	NR	3.22	11.3	10		$43.53

FILTER BAGS

PBH FILTER BAGS



LENGTH - 10"							
155383-03	BP-410-1	1	1.67	5	20**		$4.89
155385-03	BP-410-5	5	1.67	5	20**		$4.80
155387-03	BP-410-10	10	1.67	5	20**		$4.56
155389-03	BP-410-25	25	1.67	5	20**		$4.56
155391-03	BP-410-50	50	1.67	5	20**		$4.56
155393-03	BP-410-100	100	1.67	5	20**		$4.56
155395-03	BP-410-200	200	1.67	5	20**		$4.44
255001-03	BPHE-410-1	1	1.67	5	20**		$8.89
255003-03	BPHE-410-5	5	1.67	5	20**		$6.52
255005-03	BPHE-410-25	25	1.67	5	20**		$6.35

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

FILTER CARTRIDGES

PART NUMBER	DESCRIPTION	µm (NOMINAL)	VOL. (ft.³)	CASE LBS.	CASE QTY.	CERT.	PRICE ($) PER UNIT
255006-03	BPHE-410-50	50	1.67	5	20**		$7.67
255254-03	BN-410-50	50	1.67	5	20**		$15.72
255009-03	BN-410-100	100	1.67	5	20**		$12.43
255011-03	BN-410-200	200	1.67	5	20**		$12.32
255013-03	BN-410-300	300	1.67	5	20**		$11.55
255014-03	BN-410-400	400	1.67	5	20**		$12.17
255015-03	BN-410-600	600	1.67	5	20**		$11.90
255016-03	BN-410-800	800	1.67	5	20**		$12.05
LENGTH - 20"							
155384-03	BP-420-1	1	1.67	5	20**		$6.18
155386-03	BP-420-5	5	1.67	5	20**		$6.00
155388-03	BP-420-10	10	1.67	5	20**		$5.76
155390-03	BP-420-25	25	1.67	5	20**		$5.76
155392-03	BP-420-50	50	1.67	5	20**		$5.76
155394-03	BP-420-100	100	1.67	5	20**		$5.76
155396-03	BP-420-200	200	1.67	5	20**		$5.64
255024-03	BPHE-420-1	1	1.67	5	20**		$20.89
255026-03	BPHE-420-5	5	1.67	5	20**		$21.73
255028-03	BPHE-420-25	25	1.67	5	20**		$18.49
255029-03	BPHE-420-50	50	1.67	5	20**		$15.06
255031-03	BPHE-420-100	100	1.67	5	20**		$15.06
255255-03	BN-420-50	50	1.67	5	20**		$20.46
255032-03	BN-420-100	100	1.67	5	20**		$16.18
255034-03	BN-420-200	200	1.67	5	20**		$16.03
255035-03	BN-420-250	250	1.67	5	20**		$15.01
255037-03	BN-420-400	400	1.67	5	20**		$15.83
255038-03	BN-420-600	600	1.67	5	20**		$15.47
255039-03	BN-420-800	800	1.67	5	20**		$15.66



**2 case minimum order quantity.

PART NUMBER	DESCRIPTION	CASE QTY.	CERT.	PRICE ($) PER UNIT

INDUSTRIAL FILTER BAGS

Other configurations available. Please contact customer service.
**2 case minimum order quantity.
All micron ratings are nominal

POLYESTER (KE), SIZE 1			
KE1K1S	Polyester filter bag, 1 micron, glazed finish, size 1, carbon steel ring	25**	$4.64
KE5K1S	Polyester filter bag, 5 micron, glazed finish, size 1, carbon steel ring	25**	$3.68

Prices effective January 1, 2019 - Prices are subject to change without notice.
*This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.

FILTER BAGS

PART NUMBER	DESCRIPTION	CASE QTY.	CERT.	PRICE ($) PER UNIT
KE10K1S	Polyester filter bag, 10 micron, glazed finish, size 1, carbon steel ring	25**		$3.68
KE25K1S	Polyester filter bag, 25 micron, glazed finish, size 1, carbon steel ring	25**		$3.68
KE50K1S	Polyester filter bag, 50 micron, glazed finish, size 1, carbon steel ring	25**		$3.68
KE100K1S	Polyester filter bag, 100 micron, glazed finish, size 1, carbon steel ring	25**		$3.68
KE100HE1	Polyester filter bag, 100 micron, glazed finish, high efficiency, size 1, carbon steel ring	25**		$18.50
POLYESTER (KE), SIZE 2				
KE1K2S	Polyester filter bag, 1 micron, glazed finish, size 2, carbon steel ring	25**		$8.10
KE1HE2	Polyester filter bag, 100 micron, glazed finish, high efficiency, size 2, carbon steel ring	25**		$36.59
KE5K2K	Polyester filter bag, 5 micron, glazed finish, size 2, FSI style flanged polyester ring	25**		$7.17
KE5K2S	Polyester filter bag, 5 micron, glazed finish, size 2, carbon steel ring	25**		$6.25
KE5K2SS	Polyester filter bag, 5 micron, glazed finish, size 2, SS ring	25**		$7.28
KE10K2K	Polyester filter bag, 10 micron, glazed finish, size 2, FSI style flanged polyester ring	25**		$7.17
KE10K2S	Polyester filter bag, 10 micron, glazed finish, size 2, carbon steel ring	25**		$6.25
KE25HE2	Polyester filter bag, 25 micron, glazed finish, high efficiency, size 2, carbon steel ring	25**		$34.72
KE25K2S	Polyester filter bag, 25 micron, glazed finish, size 2, carbon steel ring	25**		$6.25
KE50K2K	Polyester filter bag, 50 micron, glazed finish, size 2, FSI style flanged polyester ring	25**		$7.17
KE50K2S	Polyester filter bag, 50 micron, glazed finish, size 2, carbon steel ring	25**		$6.25
KE100K2K	Polyester filter bag, 100 micron, glazed finish, size 2, FSI style flanged polyester ring	25**		$7.17
KE100K2S	Polyester filter bag, 100 micron, glazed finish, size 2, carbon steel ring	25**		$6.25
KE200K2S	Polyester filter bag, 200 micron, glazed finish, size 2, carbon steel ring	25**		$8.10
POLYESTER (KE), SIZE 3				
KE5K3S	Polyester filter bag, 5 micron, glazed finish, size 3, carbon steel ring	25**		$2.32
KE10K3S	Polyester filter bag, 10 micron, glazed finish, size 3, carbon steel ring	25**		$2.32
KE25K3S	Polyester filter bag, 25 micron, glazed finish, size 3, carbon steel ring	25**		$2.32
KE100K3S	Polyester filter bag, 100 micron, glazed finish, size 3, carbon steel ring	25**		$2.32
POLYESTER (KE), SIZE 4				
KE5K4S	Polyester filter bag, 5 micron, glazed finish, size 4, carbon steel ring	25**		$3.18
KE10K4S	Polyester filter bag, 10 micron, glazed finish, size 4, carbon steel ring	25**		$3.18
KE25K4S	Polyester filter bag, 25 micron, glazed finish, size 4, carbon steel ring	25**		$3.18
KE50HE4	Polyester filter bag, 50 micron, glazed finish, high fficiency, size 4, carbon steel ring	25**		$12.44
KE50K4S	Polyester filter bag, 50 micron, glazed finish, size 4, carbon steel ring	25**		$3.18
KE100K4S	Polyester filter bag, 100 micron, glazed finish, size 4, carbon steel ring	25**		$3.18

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

FILTER BAGS

PART NUMBER	DESCRIPTION	CASE QTY.	CERT.	PRICE ($) PER UNIT
POLYPROPYLENE (KO), SIZE 1				
KO5K1S	Polypropylene filter bag, 5 micron, glazed finish, size 1, carbon steel ring	25**		$4.19
KO10K1S	Polypropylene filter bag, 10 micron, glazed finish, size 1, carbon steel ring	25**		$4.19
KO50K1S	Polypropylene filter bag, 50 micron, glazed finish, size 1, carbon steel ring	25**		$4.19
KO100K1S	Polypropylene filter bag, 100 micron, glazed finish, size 1, carbon steel ring	25**		$4.19
POLYPROPYLENE (KO), SIZE 2				
KO1K2S	Polypropylene filter bag, 1 micron, glazed finish, size 2, carbon steel ring	25**		$9.56
KO1HE2	Polypropylene filter bag, 1 micron, glazed finish, high efficiency, size 2, carbon steel ring	25**		$38.06
KO1K2K	Polypropylene filter bag, 1 micron, glazed finish, size 2, FSI style flanged polyester ring	25**		$10.49
KO1K2KO	Polypropylene filter bag, 1 micron, glazed finish, size 2, polypropylene ring	25**		$9.60
KO5K2S	Polypropylene filter bag, 5 micron, glazed finish, size 2, carbon steel ring	25**		$7.70
KO10K2K	Polypropylene filter bag, 10 micron, glazed finish, size 2, FSI style flanged polyester ring	25**		$8.63
KO10K2S	Polypropylene filter bag, 10 micron, glazed finish, size 2, carbon steel ring	25**		$7.70
KO25HE2	Polypropylene filter bag, 25 micron, glazed finish, high efficiency, size 2, carbon steel ring	25**		$36.19
KO25K2K	Polypropylene filter bag, 25 micron, glazed finish, size 2, FSI style flanged polyester ring	25**		$8.63
KO25K2S	Polypropylene filter bag, 25 micron, glazed finish, size 2, carbon steel ring	25**		$7.70
KO50K2K	Polypropylene filter bag, 50 micron, glazed finish, size 2, FSI style flanged polyester ring	25**		$8.63
KO50K2S	Polypropylene filter bag, 50 micron, glazed finish, size 2, carbon steel ring	25**		$7.70
KO100K2K	Polypropylene filter bag, 100 micron, glazed finish, size 2, FSI style flanged polyester ring	25**		$8.63
KO100K2S	Polypropylene filter bag, 10 micron, glazed finish, size 2, carbon steel ring	25**		$7.70
KO200K2K	Polypropylene filter bag, 200 micron, glazed finish, size 2, FSI style flanged polyester ring	25**		$10.49
KO200K2S	Polypropylene filter bag, 200 micron, glazed finish, size 2, carbon steel ring	25**		$9.56
POLYPROPYLENE (KO), SIZE 3				
KO25K3S	Polypropylene filter bag, 25 micron, glazed finish, size 3, carbon steel ring	25**		$3.29
KO50K3S	Polypropylene filter bag, 50 micron, glazed finish, size 3, carbon steel ring	25**		$3.29
KO100K3S	Polypropylene filter bag, 100 micron, glazed finish, size 3, carbon steel ring	25**		$3.29
POLYPROPYLENE (KO), SIZE 4				
KO5K4S	Polypropylene filter bag, 5 micron, glazed finish, size 4, carbon steel ring	25**		$3.82
KO50K4S	Polypropylene filter bag, 50 micron, glazed finish, size 4, carbon steel ring	25**		$3.82
KO100K4S	Polypropylene filter bag, 100 micron, glazed finish, size 4, carbon steel ring	25**		$3.82
POLYESTER MULTIFILAMENT MESH (KEM), SIZE 1				
KEM150K1S	Polyester multifilament filter bag, 150 micron, size 1, carbon steel ring	25**		$4.00
KEM200K1S	Polyester multifilament filter bag, 200 micron, size 1, carbon steel ring	25**		$4.00

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

FILTER BAGS

PART NUMBER	DESCRIPTION	CASE QTY.	CERT.	PRICE ($) PER UNIT
KEM300K1S	Polyester multifilament filter bag, 300 micron, size 1, carbon steel ring	25**		$4.00
KEM600K1S	Polyester multifilament filter bag, 600 micron, size 1, carbon steel ring	25**		$4.00
POLYESTER MULTIFILAMENT MESH (KEM), SIZE 2				
KEM100K2S	Polyester multifilament filter bag, 100 micron, size 2, carbon steel ring	25**		$13.26
KEM200K2K	Polyester multifilament filter bag, 200 micron, size 2, FSI style flanged polyester ring	25**		$7.00
KEM200K2S	Polyester multifilament filter bag, 200 micron, size 2, carbon steel ring	25**		$6.08
KEM400K2K	Polyester multifilament filter bag, 400 micron, size 2, FSI style flanged polyester ring	25**		$7.00
NYLON MONOFILAMENT MESH (NMO), SIZES 1 AND 2				
NMO100K1S	Nylon multifilament filter bag, 100 micron, size 1, carbon steel ring	25**		$9.44
NMO800K1S	Nylon multifilament filter bag, 800 micron, size 1, carbon steel ring	25**		$6.38
NMO100K2S	Nylon multifilament filter bag, 100 micron, size 2, carbon steel ring	25**		$17.97
NMO150K2S	Nylon multifilament filter bag, 150 micron, size 2, carbon steel ring	25**		$16.59
NMO200K2K	Nylon multifilament filter bag, 200 micron, size 2,FSI style flanged polyester ring	25**		$15.57
NMO200K2S	Nylon multifilament filter bag, 200 micron, size 2, carbon steel ring	25**		$14.61
NMO250K2S	Nylon multifilament filter bag, 250 micron, size 2, carbon steel ring	25**		$13.94
NMO400K2K	Nylon multifilament filter bag, 400 micron, size 2,FSI style flanged polyester ring	25**		$15.49
NMO400K2S	Nylon multifilament filter bag, 400 micron, size 2, carbon steel ring	25**		$14.53
NYLON MONOFILAMENT MESH (NMO), SIZES 3 AND 4				
NMO100K3S	Nylon multifilament filter bag, 100 micron, size 3, carbon steel ring	25**		$4.67
NMO200K3S	Nylon multifilament filter bag, 200 micron, size 3, carbon steel ring	25**		$4.01
NMO300K3S	Nylon multifilament filter bag, 300 micron, size 3, carbon steel ring	25**		$3.65
NMO400K3S	Nylon multifilament filter bag, 400 micron, size 3, carbon steel ring	25**		$4.47
NMO150K4S	Nylon multifilament filter bag, 150 micron, size 4, carbon steel ring	25**		$7.05
NMO600K4S	Nylon multifilament filter bag, 600 micron, size 4, carbon steel ring	25**		$5.67
MAXIMUM HIGH PERFORMANCE (MHP)				
MHP2.5ML2SS	Maximum high performance polypropylene filter bag, 2.5 micron, size 2, SS ring	25**		$69.74
MHP08ML2SS	Maximum high performance polypropylene filter bag, 8 micron, size 2, SS ring	25**		$66.95
MHP15ML2SS	Maximum high performance polypropylene filter bag, 15 micron, size 2, SS ring	25**		$66.95

PENTAIR RESIDENTIAL REVERSE OSMOSIS MEMBRANE ELEMENTS

655006-00	TLC-24	24	12" x 12" x 12"	15.4 lbs (7.0 Kg)	25	*	$32.34
655007-00	TLC-36	36	12" x 12" x 12"	15.4 lbs (7.0 Kg)	25	*	$34.60
555694-00	TLC-50	50	12" x 12" x 12"	15.4 lbs (7.0 Kg)	25	*	$36.68
555693-00	TLC-75	75	12" x 12" x 12"	15.4 lbs (7.0 Kg)	25	*	$41.26

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

FILTER BAGS

PART NUMBER			DESCRIPTION		CASE QTY.	CERT.	PRICE ($) PER UNIT
655045-00	TLC-100	100	12" x 12" x 12"	15.4 lbs (7.0 Kg)	25	*	$47.09
SHIPPING/PALLET							
Pallet			36"L x 36" W x 76" H		1350		
Pallet (Air)			36"L x 36" W x 64" H		1125		



PENTAIR RESIDENTIAL GRO MEMBRANES

4002573	GRO-36EN	36	11.5" x 12" x 17"	25.2 lbs (11.4 Kg)	16	*	$65.45
4002574	GRO-50EN	50	11.5" x 12" x 17"	26 lbs (11.8 Kg)	16	*	$66.71
4002575	GRO-75EN	75	11.5" x 12" x 17"	27.7 lbs (12.56 Kg)	16	*	$75.41

PENTAIR RESIDENTIAL GRO MEMBRANES W/ DRAIN LINE FLOW CONTROL

4004423	GRO-36EN	36	11.5" x 12" x 17"	25.2 lbs (11.4 Kg)	16	*	$78.78
4004424	GRO-50EN	50	11.5" x 12" x 17"	26 lbs (11.8 Kg)	16	*	$79.25
4004425	GRO-75EN	75	11.5" x 12" x 17"	27.7 lbs (12.56 Kg)	16	*	$86.72

PENTAIR RESIDENTIAL GRO ADAPTOR KITS

4004446	GRO-36EN						$17.07
4004447	GRO-50EN						$17.07
4004448	GRO-75EN						$17.07

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

REPLACEMENT FILTER HOUSING CAPS

PART NUMBER	DESCRIPTION	CASE QTY.	CERT.	PRICE ($) PER UNIT
1/4" Slim Line FILTER HOUSING CAPS				
154150	1/4" Blue Cap w/ PR for Slim Line	1		$11.09
154053	1/4" Blue Cap w/o PR for Slim Line	1		$9.49
154143	1/4" Black Cap w/ PR for Slim Line	1		$9.78
154049	1/4" Black Cap w/o PR for Slim Line	1		$9.49
154062	1/4" White Cap w/o PR for Slim Line	1		$9.49
3/8" Slim Line FILTER HOUSING CAPS				
154111	3/8" Blue Cap w/PR for Slim Line	1		$10.26
154010	3/8" Blue Cap w/o PR for Slim Line	1		$9.49
154108	3/8" Black Cap w/PR for Slim Line	1		$10.26
154006	3/8" Black Cap w/o PR for Slim Line	1		$9.49
154159	3/8" White Cap w/PR for Slim Line	1		$7.01
154040	3/8" White Cap w/o PR for Slim Line	1		$6.37
1/2" Slim Line FILTER HOUSING CAPS				
154175	1/2" Blue Cap w/PR for Slim Line	1		$13.33
154088	1/2" Blue Cap w/o PR for Slim Line	1		$12.01
154171	1/2" Black Cap w/PR for Slim Line	1		$13.33
154083	1/2" Black Cap w/o PR for Slim Line	1		$12.61
SH154435	1/2" White Cap w/o PR for Slim Line	1		$12.50
1/4" Slim Line COUNTER TOP CAPS				
154082	1/4" White Counter Top Cap w/o PR for Slim Line	1		$11.44
154075	1/4" Black Counter Top Cap w/o PR for Slim Line	1		$8.75
3/4" STANDARD FILTER HOUSING CAPS				
154102	3/4" Blue Cap w/PR for #10 Clear Housings	1		$14.86
154116	3/4" Blue Mounting Bracket Cap w/PR for #10 Clear Housings	1		$14.86
154018	3/4" Blue Mounting Bracket Cap w/o PR for #10 Clear Housings	1		$14.09
154101	3/4" Black Cap w/PR for #10 and #20 Blue Housings	1		$14.86
154001	3/4" Black Cap w/o PR for #10 and #20 Blue Housings	1		$14.86
154115	3/4" Black Mounting Bracket Cap w/PR for Standard Housings	1		$14.66
154017	3/4" Black Mounting Bracket Cap w/o PR for Standard Housings	1		$14.09
3/4" VALVE-IN-HEAD FILTER HOUSING CAPS				
154134	3/4" Black VIH Cap w/PR for VIH housing	1		$39.91
154138	3/4" Blue VIH Cap w/PR for VIH housing	1		$39.91

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	CASE QTY.	CERT.	PRICE ($) PER UNIT
1/2" NYLON FILTER HOUSING CAPS				
154503	1/2" Black Nylon Cap w/o PR for Slim Line Black Nylon Housings	1		$39.91
3/4" NYLON FILTER HOUSING CAPS				
154061	3/4" Black Nylon Cap w/o PR for Slim Line Black Nylon Housings	1		$52.17
154003	3/4" Red High Temperature Cap w/o PR	1		$51.69
3/4" Big Blue FILTER HOUSING CAPS				
154195	3/4" Black HFPP Cap w/PR for Big Blue Housings	1		$57.19
154196	3/4" Black HFPP Cap w/o PR for Big Blue Housings	1		$25.67
3/4" BIG WHITE FILTER HOUSING CAPS				
154284	3/4" Big White Cap w/PR	1		$41.64
154419	3/4" Big White Cap w/o PR	1		$39.66
1" Big Blue FILTER HOUSING CAPS				
154166	1" Black HFPP Cap w/PR for Big Blue Housings	1		$57.19
154077	1" Black HFPP Cap w/o PR for Big Blue Housings	1		$57.19
1" BIG WHITE FILTER HOUSING CAPS				
154299	1" Big White Cap w/PR	1		$40.44
154290	1" Big White Cap w/o PR	1		$38.52
1" BIG CLEAR FILTER HOUSING CAPS				
154291	1" Big Clear Cap w/PR	1		$45.68
1-1/2" Big Blue FILTER HOUSING CAPS				
154167	1-1/2" Black HFPP Cap w/PR for Big Blue Housings	1		$58.67
154078	1-1/2" Black HFPP Cap w/o PR for Big Blue Housings	1		$57.89
1-1/2" BIG WHITE FILTER HOUSING CAPS				
154302	1-1/2" Big White Cap w/PR	1		$40.44
1/4" 3G Slim Line FILTER HOUSING CAPS				
154741	3G - 1/4" Mounting Bracket Blue Cap w/PR for Slim Line	1		$11.15
154809	3G - 1/4" Integral Bracket Blue Cap w/PR for Slim Line	1		$11.46
154955	3G - 1/4" Quick-Change Mounting Bracket Blue Cap w/o PR for Slim Line	1		$24.05
154792	3G - 1/4" Mounting Bracket Black Cap w/PR for Slim Line	1		$13.01
154814	3G - 1/4" Quick-Change Integral Bracket Black Cap w/PR for Slim Line	1		$20.69
154954	3G - 1/4" Quick-Change Mounting Bracket Black Cap w/o PR for Slim Line	1		$24.17
154679	3G - 1/4" Integral Bracket, Meter Mount Black Cap w/PR for Slim Line	1		$15.67
154798	3G - 1/4" Quick-Change Mounting Bracket Black Cap w/PR for Slim Line	1		$22.99

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	CASE QTY.	CERT.	PRICE ($) PER UNIT
154833	3G - 1/4" Mounting Bracket White Cap w/PR for Slim Line	1		$9.73
154856	3G - 1/4" Integral Bracket White Cap w/PR for Slim Line	1		$11.72
154852	3G - 1/4" Quick-Change Mounting Bracket White Cap w/PR for Slim Line	1		$17.54
154851	3G - 1/4" Quick-Change Mounting Bracket White Cap w/o PR for Slim Line	1		$21.31
154857	3G - 1/4" Quick-Change Integral Bracket White Cap w/PR for Slim Line	1		$26.16
1/2" 3G Slim Line FILTER HOUSING CAPS				
154786	3G - 1/2" Mounting Bracket Blue Cap w/PR for Slim Line	1		$11.72
154733	3G - 1/2" Mounting Bracket Blue Cap w/o PR for Slim Line	1		$6.38
154802	3G - 1/2" Integral Bracket Blue Cap w/PR for Slim Line	1		$11.53
154784	3G - 1/2" Mounting Bracket Black Cap w/PR for Slim Line	1		$11.53
154662	3G - 1/2" Mounting Bracket Black Cap w/o PR for Slim Line	1		$6.07
154800	3G - 1/2" Integral Bracket Black Cap w/PR for Slim Line	1		$12.64
154678	3G - 1/2" NPT Integral Bracket, Meter Mount Black Cap w/PR for Slim Line	1		$17.16
154810	3G - 1/2" Quick-Change Integral Bracket Black Cap w/PR for Slim Line	1		$33.85
154794	3G - 1/2" Quick-Change Mounting Bracket Black Cap w/o PR for Slim Line	1		$30.87
154829	3G - 1/2" Quick-Change Integral Bracket, Meter Mount Black Cap w/PR for Slim Line	1		$35.08
3/8" 3G STANDARD FILTER HOUSING CAPS				
154737	3G - 3/8" Mounting Bracket Blue Cap w/PR for Slim Line	1		$9.55
154806	3G - 3/8" Blue Integral Bracket Cap w/PR for Slim Line	1		$12.20
154951	3G - 3/8" Quick-Change Mounting Bracket Blue Cap w/o PR for Slim Line	1		$24.22
154665	3G - 3/8" Mounting Bracket Black Cap w/PR for Slim Line	1		$12.64
154804	3G - 3/8" Black Integral Bracket Cap w/PR for Slim Line	1		$12.20
154860	3G - 3/8" Quick-Change Mounting Bracket Black Cap w/o PR for Slim Line	1		$24.35
154858	3G - 3/8" Integral Bracket White Cap w/PR for Slim Line	1		$11.64
154859	3G - 3/8" Quick-Change Integral Bracket White Cap w/PR for Slim Line	1		$25.41
154855	3G - 3/8" Quick-Change Mounting Bracket White Cap w/o PR for Slim Line	1		$23.49
3/4" 3G STANDARD FILTER HOUSING CAPS				
154639	3G 3/4" Standard Blue Mounting Bracket Cap w/PR	1		$14.22
154585	3G 3/4" Standard Blue Mounting Bracket Cap w/o PR	1		$13.40
154647	3G 3/4" Standard Blue Integral Bracket Cap w/PR	1		$17.84
154638	3G 3/4" Standard Black Mounting Bracket Cap w/PR	1		$14.22
154584	3G 3/4" Standard Black Mounting Bracket Cap w/o PR	1		$13.40
154646	3G 3/4" Standard Black Integral Bracket Cap w/PR	1		$17.84
154622	3G 3/4" Standard Black Integral Bracket Cap, Meter Mount w/PR	1		$48.41

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

REPLACEMENT FILTER HOUSING SUMPS

PART NUMBER	DESCRIPTION	CASE QTY.	CERT.	PRICE ($) PER UNIT
#5 Slim Line FILTER HOUSING SUMPS				
153014	#5 Slim Line Blue Sump	1		$15.48
153056	#5 Slim Line Clear Sump	1		$25.60
153078	#5 White Sump for Slim Line	1		$14.56
#10 Slim Line FILTER HOUSING SUMPS				
153017	#10 Slim Line Blue Sump	1		$17.16
153018	#10 Slim Line Clear Sump	1		$25.89
153049	#10 Slim Line White Sump	1		$17.65
153062	#10 Slim Line Black Sump	1		$18.68
165266	#10 Slim Line White Sump	1		$17.66
#20 Slim Line FILTER HOUSING SUMPS				
153058	#20 Slim Line Blue Sump	1		$43.25
153081	#20 Slim Line White Sump	1		$43.51
#10 3G Slim Line FILTER HOUSING SUMPS				
153202	3G #10 Slim Line Blue Sump	1		$16.61
153203	3G #10 Slim Line Clear Sump	1		$25.17
153209	3G #10 Slim Line White Sump	1		$12.95
#10 STANDARD FILTER HOUSING SUMPS				
153001	#10 Standard Blue Sump	1		$26.21
153128	#10 Standard Clear Sump	1		$33.27
#20 STANDARD FILTER HOUSING SUMPS				
153013	#20 Standard Blue Sump	1		$47.97
#10 3G FILTER HOUSING SUMPS				
153194	3G #10 Standard Clear Sump	1		$32.37
153197	3G #10 Standard Blue Sump	1		$25.47
#20 3G FILTER HOUSING SUMPS				
153195	3G #20 Standard Clear Sump	1		$82.24
153200	3G #20 Standard Blue Sump	1		$46.66
Big Blue FILTER HOUSING SUMPS				
153029	#10 Big Blue Sump	1		$39.61
153070	#20 Big Blue Sump	1		$70.09
153097	#20 Big Blue Sump with 3/8" NPT Drain	1		$168.58
153080	#20 Big Blue Sump - White	1		$70.09

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	CASE QTY.	CERT.	PRICE ($) PER UNIT
BIG BLACK FILTER HOUSING SUMPS				
153129	#10 Big Black Sump	1		$20.92
153125	#20 Big Black Sump	1		$70.09
BIG WHITE FILTER HOUSING SUMPS				
153163	#10 Big White Sump	1		$29.25
SH153114	#10 Big Blue White Sump HFPP	1		$37.03
153080	#20 Big Blue Sump - White	1		$70.09
153167	#20 Big White Sump (WP-20-BW)	1		$68.07
BIG CLEAR FILTER HOUSING SUMPS				
153208	#10 Big Clear (Lexan Material) Sump	1		$129.44
153166	#20 Big Clear (SAN Material) Sump	1		$78.96
NYLON FILTER HOUSING SUMPS				
153093	#10 Slim Line Black Nylon Sump	1		$65.13
153005	#10 Standard Red High Temp Sump	1		$145.20
153031	#20 Standard Red Nylon Sump	1		$165.07

REPLACEMENT O-RINGS

BUNA-N				
151231	#233 Buna-N O-ring for RO and US Systems	1		$9.70
151254	Big Clear and Big White 10" Housing Square Cut Buna-N O-ring	1		$7.34
SILICONE				
158096	#237 Silicone O-ring for #5 and #10 Slim Line Housings	1		$11.52
151118	#241 Silicone O-ring for Standard #10, #12, and #20 Housings	1		$11.52
FKM				
158095	#237 FKM O-ring for Slim Line Housings	1		$12.61
151117	#241 FKM O-ring for Standard #10, #12, and #20 Housings	1		$12.61

MOUNTING BRACKETS

Slim Line BRACKETS				
244046-00	SL-ZP - Zinc Plated Bracket ONLY for Slim Line Housing	1		$2.29
244047	SL-ZP Kit - Zinc Plated Bracket for Slim Line Housing	1		$5.30
357644	SL-SS Kit - Stainless Steel Bracket for Slim Line Housing	1		$31.67
STANDARD BRACKETS				
244043	MC-1A - Zinc Plated Bracket ONLY for Standard Housing	1		$3.62
150578	MC-1A Kit - Zinc Plated Bracket for Standard Housing	1		$8.07

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	CASE QTY.	CERT.	PRICE ($) PER UNIT
144012-00	UB-1 - Zinc Plated Bracket ONLY for Valve-In-Head Housing (U-Shaped)	1		$3.80
151011	UB-1 Kit - Zinc Plated Bracket for Valve-In-Head Housing (U-Shaped)	1		$8.29
Big Blue, BIG WHITE AND BIG CLEAR BRACKETS				
244718	WB-ZP - Zinc Plated Bracket ONLY for Big Blue Housing	1		$37.51
150061	WB-ZP Kit - Zinc Plated Bracket for Big Blue Housing	1		$43.36
244994	WB-UB Kit - Zinc Plated Bracket ONLY for #10 Big Blue Housing w/Bypass (U-Shaped)	1		$38.87
357639	WB-SS - Stainless Steel Bracket ONLY for Big Blue Housing	1		$48.52
357640	WB-SS Kit - Stainless Steel Bracket for Big Blue Housing	1		$53.54
144928	WB-PC Kit - Powder Coated White Bracket for Big Blue Housing	1		$39.81
MULTI HOUSING BRACKETS				
244627-02	Two-Housing CCF and RO System Bracket	1		$17.36
244686	Two-Housing Standard System Bracket	1		$32.07
144258	Two-Housing Big Blue Bracket	1		$63.54
144259	Three-Housing Big Blue Bracket	1		$108.16

WRENCHES

150539	SW-1A Wrench for Slim Line Housings (formerly 150294)	1		$4.29
150295	SW-2 for 3/4" Housings	1		$4.29
150296	SW-3 for Big Blue Housings (10-inch)	1		$4.60
SH144368	SW-4 for Big Blue Housings (20-inch)	1		$4.60
150424	SW-5 Spanner Wrench	1		$4.00
SH144880	BW/BC Wrench for Big Clear and Big White Housings	1		$6.99

CARTRIDGE COUPLERS

155003	Cartridge Coupler for Standard Cartridges	1		$2.25
SH144229	Cartridge Coupler for Big Blue Cartridges	1		$3.21

DIFFERENTIAL PRESSURE GAUGES (FITS ALL 3G METER MOUNT CAPS)

143550	2 Color Gauge	1		$35.54
143549	3 Color Needle Gauge	1		$84.63

PRESSURE RELIEF BUTTON KITS

151039	Pressure Relief Button Kit (Except VIH Assemblies)	1		$3.53
144802	3G Pressure Relief Button Kit	1		$4.58

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	CASE QTY.	CERT.	PRICE ($) PER UNIT
E-SERIES CARTRIDGE HOUSING SERVICE PARTS				
4003581	EPDM lid O-ring for ESC3	1		$10.93
4003548	EPDM lid O-ring for ESC4 & ESC5	1		$14.57
4003582	EPDM lid O-ring for ESC7	1		$18.21
4004788	ESC3 band clamp, 304 SS	1		$139.08
4004789	ESC4 & ESC5 band clamp, 304 SS	1		$166.89
4004790	ESC7 band clamp, 304 SS	1		$211.40
ST-SERIES STAINLESS STEEL HOUSING SERVICE PARTS				
144128	Wall Bracket for ST-1, ST-2, and ST-3	1		$19.94
156037	Mounting Bracket Kit for ST-1, ST-2, and ST-3	1		$25.22
143220	Head Nut Kit for ST-1, ST-2, and ST-3	1		$86.57
143339	Head Nut Gasket Kit for ST-1, ST-2, and ST-3	1		$6.03
143216	Gasket for ST-1, ST-2, and ST-3	1		$16.61
STBC SERIES STAINLESS STEEL HOUSING SERVICE PARTS				
143218	Gasket for STBC Series	1		$105.57
143221	Belly Clamp for STBC	1		$256.99
PBH BAG HOUSING SERVICE PARTS				
155374-03	PBR-410-BK 10" Replacement Basket	1		$90.73
155373-03	PBR-420-BK 20" Replacement Basket	1		$147.74
153098	#10 Big Blue Sump with 3/8" NPT Drain	1		$135.84
153097	#20 Big Blue Sump with 3/8" NPT Drain	1		$168.58
154515	PBC 1" Bag Filter Cap - 1/4" Vent	1		$75.35
154508	PBC 1-1/2" Bag Filter Cap - 1/4" Vent	1		$79.51
150296	SW-3 Big Blue Wrench	1		$4.60
SH144162	1/4" Vent Plug	1		$1.90
SH144369	0-100 PSI Gauge	1		$24.93
144357	3/8" FNPT x 3/8" NPT PVC Ball Valve	1		$20.92
SH144362	3/8" Drain Plug HDPE	1		$1.58
151122	Big Blue O-Ring	1		$7.34
E-SERIES BAG HOUSING SERVICE PARTS				
4003548	EPDM Lid O-ring for ES1 & ES2 housings	1		$14.57
4003549	EPDM basket O-ring for ES1 & ES2 housings	1		$3.64
4003550	EPDM lid O-ring for ES3 & ES4 housings	1		$7.28
4004786	ES1 & ES2 band clamp, 304 SS	1		$166.89

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	CASE QTY.	CERT.	PRICE ($) PER UNIT
4004787	ES3 & ES4 band clamp, 304 SS	1		$194.71

COUNTER TOP ACCESSORIES

SH144585	Diverter Valve - Double Barb	1		$52.96
SH244538	1/4" X 36" White Vinyl Tubing	1		$1.54
SH244542	1/4" Chrome Elbow for SH244544	1		$9.68
SH244543	1/4" Chrome Elbow with 1/4" Barb Fitting	1		$5.46
SH244545	Diverter Valve - Single Bard	1		$17.79
SH244546	Diverter Valve Adapter Set 13/16"	1		$3.16
SH244547	Diverter Valve Adapter Set 15/16"	1		$3.16

ALL NATURAL REPLACEMENTS

ALL NATURAL REPLACEMENT CAPS

154025	3/4" All Natural Mounting Bracket Cap w/o Cap Plugs	1		$24.89
154135	3/4" All Natural Mounting Bracket Cap w/Double Cap Plugs	1		$41.77
154136	3/4" All Natural Mounting Bracket Cap w/222 Cartridge Sealing w/Double Cap Plugs	1		$97.17
154351	3/4" All Natural Mounting Bracket Cap w/222 Cartridge Sealing w/o Cap Plugs	1		$38.78

ALL NATURAL REPLACEMENT SUMPS

153040	#20 All Natural Sump w/o Drain	1		$51.56
153042	#10 All Natural Standard Sump w/o Drain	1		$31.22
153046	#12 All Natural Sump w/o V-bead and w/o Drain	1		$38.97
153047	#10 All Natural Standard Sump w/o V-bead and w/o Drain	1		$34.71
153055	#20 All Natural Extended Sump w/o Drain	1		$77.88
153102	#20 All Natural Sump w/Drain	1		$44.83
153106	#12 All Natural Sump w/o V-bead and w/Drain	1		$50.84
153107	#20 All Natural Extended Sump w/Drain	1		$89.73

VENT AND DRAIN PLUG

144457	All Natural Vent/Drain Plug Kit (Included Plug and O-ring)	1		$3.93

SUMP EXTENSION

157209	All Natural Sump Extension Adapter for #12 Housing	1		$9.37

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	CASE QTY.	CERT.	PRICE ($) PER UNIT
ALL NATURAL "WHITE" REPLACEMENTS				
ALL NATURAL "WHITE" REPLACEMENT CAPS				
244009	All Natural "White" Drain Plug Kit (Includes Plug and O-ring)	1		$6.27
ALL NATURAL "WHITE" REPLACEMENT SUMPS				
153188	#20 All Natural "White" Extended Sump w/o V-bead and w/Drain	1		$75.50
154567	3/4" All Natural "White" Mounting Bracket Cap w/222 Cartridge Sealing w/Double Cap Plugs	1		$38.79
MEDIA				
RESIN MESH BAG				
CH20676	Cation Resin STD Mesh 8% CL 1 Cu. Ft. Bag	1		$111.87
ULTRAFILTRATION FLUSH KITS (GLOBAL)				
61667-11	Backflush Kit, Freshpoint§, w/Tank			$788.07
4002786	Backflush Kit, Freshpoint, No Tank			$235.31
4002788	Inlet Flush Kit			$263.28
ULTRAFILTRATION CONTROLLER (GLOBAL)				
4002601	TIMER ASSY, UF, U440, 24V DC (SXT Based)			$700.84
43445	POWER SUPPLY, 24V DC, 2.7A			$83.43
61592-01	TIMER ASSY, UF, U440, 120V (ET Based)			$693.91
4002815	U440 MULTI-UNIT SYSTEM KIT			$72.60
ULTRAFILTRATION SOLENOIDS				
4002607	1/2" NPT, NC, DC BLACK			$223.09
42047	HARNESS,SOLENOID,U440,36" (Black Valve Only)			$25.49
42047-01	HARNESS,SOLENIOD,U440,72" (Black Valve Only)			$25.49
42558	3/4" NPT, NO, AC BRASS			$304.46
43419	1/2" NPT, NC, AC BRASS			$412.99
42602	HARNESS, SOLENOID, ISO, 6' (Brass Valve Only)			$28.08
ULTRAFILTRATION VESSEL END CAPS				
244958	Vessel End Cap Assembly (1/2"ports)			$157.41
Includes: 1-End Cap, 1-U-Pin Kit, 1-internal O-ring, 1-external O-ring				
4002697	Vessel End Cap Assembly (1 cap w/ ½" ports; 1 cap w/ ¾" ports)			$360.73
Includes: 2-End Caps, 2-U-Pin Kits, 1-internal O-ring, 1-external O-ring				

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER	DESCRIPTION	CASE QTY.	CERT.	PRICE ($) PER UNIT
ULTRAFILTRATION FITTING KITS				
61650	Inlet Fitting Kit (244958 End Cap)			$39.68
61651	Outlet Fitting Kit (244958 End Cap)			$75.18
61652	Drain Fitting Kit (244958 End Cap)			$51.45
357716	Inlet Fitting Kit (4002697 End Cap)			$91.10
4002792	Outlet Fitting Kit (4002697 End Cap)			$52.11
4002793	Drain Fitting Kit (4002697 End Cap)			$52.71
4002676	3/4" Turn and Lock Fittings			$29.67
4002677	1/2" Turn and Lock Fittings			$29.67
ULTRAFILTRATION SPARE PARTS				
357707	Vessel Assembly			$1,147.80
61595-03	Membrane Element			$1,578.63
357719	UF Adapter Kit (357707/61595-03)			$43.88
4002947	UF Adapter Kit (357707/357708)			$66.63
61560-11	Assy, In-Line Meter, 3/4" NPT (7000)			$234.00
61823	Kit, 1" Turbine w/ 3/4" NPT Thread			$107.04
60699-70	DLFC, 3/4"F NPT, 7.0 gpm			$26.20
60700-10	DLFC, 3/4" F x 3/4" F NPT, 10 gpm			$39.98
41972	Bracket, Mounting, UF Filter			$27.38
41976	Clamp Assy, UF Filter			$39.77

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PARTS LISTING - SORTED BY PART NUMBER

PART #	DESCRIPTION	PRICE ($) PER UNIT
41972	Bracket, Mounting, UF Filter	$27.38
41976	Clamp Assy, UF Filter	$39.77
42047	HARNESS,SOLENOID,U440,36" (Black Valve Only)	$16.72
42558	3/4" NPT, NO, AC BRASS	$304.46
42602	HARNESS, SOLENOID, ISO, 6' (Brass Valve Only)	$28.08
43419	1/2" NPT, NC, AC BRASS	$412.99
43445	POWER SUPPLY, 24V DC, 2.7A	$83.43
61650	Inlet Fitting Kit (244958 End Cap)	$39.68
61651	Outlet Fitting Kit (244958 End Cap)	$75.18
61652	Drain Fitting Kit (244958 End Cap)	$51.45
61823	Kit, 1" Turbine w/ 3/4" NPT Thread	$107.04
143216	ST Housing Gasket, BUNA-N	$16.61
143218	Gasket for STBC Series	$105.57
143220	ST Housing Cap Nut	$86.57
143221	ST-BC Housing/Cover Clamp	$256.99
143339	Head Nut Gasket Kit for ST-1, ST-2, and ST-3	$6.03
143549	3 Color Needle Gauge	$84.63
143550	2 Color Gauge	$35.54
144128	Wall Bracket for ST-1, ST-2, and ST-3	$19.94
144258	Two-Housing Big Blue Bracket	$63.54
144259	Three-Housing Big Blue Bracket	$108.16
144357	3/8" FNPT x 3/8" NPT PVC Ball Valve	$20.92
144457	All Natural Vent/Drain Plug Kit (Included Plug and O-ring)	$3.93
144616	Drain Tap Valve 3/8"	$2.48
144653	Auto Shut-off Valve - RO-3000/RO-3500	$60.37
144802	3G - Pressure Relief Button Kit	$4.58
144928	WB-PC Kit - Powder Coated White Bracket for Big Blue Housing	$39.81
144988	#10 White RO Membrane Housing/Sump for RO-3000/RO-3500	$32.69
150001	3/4" #10 Standard Black/Blue w/o PR (Non-Mountable Cap)	$27.04
150002	3/4" #10 Standard Black/Blue w/PR (Non-Mountable Cap)	$26.88
150015	3/4" #10 Standard Red/Red High Temperature Housing w/o PR	$153.22
150061	WB-ZP Kit - Zinc Plated Bracket for Big Blue Housing	$43.36
150067	3/4" #10 Standard Black/Blue w/PR Mounting Bracket Cap	$30.81
150068	3/4" #10 Standard Black/Blue w/o PR Mounting Bracket Cap	$30.83
150069	3/4" #20 Standard Black/Blue w/PR Mounting Bracket Cap	$52.63
150070	3/4" #20 Standard Black/Blue w/o PR Mounting Bracket Cap	$52.83

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER ORDER

PART #	DESCRIPTION	PRICE ($) PER UNIT
150071	3/4" #10 Standard Blue/Clear w/ PR Mounting Bracket Cap	$39.30
150072	3/4" #10 Standard Blue/Clear w/o PR Mounting Bracket Cap	$39.37
150111	3/4" #20 Standard Red/Red High Temperature Housing w/o PR	$240.59
150132	3/4" #10 Standard All Natural w/Mounting Bracket Cap w/Double Cap Plugs	$90.59
150134	3/4" #12 Standard All Natural w/ Mounting Bracket Cap w/222 Cartridge Sealing Cap w/Double Cap Plugs, w/o V-bead w/Drain	$75.02
150135	3/4" #20 Standard All Natural w/Mounting Bracket Cap w/Double Cap Plugs and Sump Drain	$79.46
150141	3/4" #20 Standard All Natural w/Mounting Bracket Cap w/Extended 222 Cartridge Sealing Cap w/Double Cap Plugs and w/o V-bead	$132.86
150150	3/4" #10 Standard All Natural w/Mounting Bracket Cap w/o Cap Plugs	$60.13
150154	3/4" #12 Standard All Natural w/Mounting Bracket Cap w/222 Cartridge Sealing Cap w/o Cap Plugs and w/o V-bead	$58.72
150156	3/4" #20 Standard All Natural w/Mounting Bracket Cap w/o Cap Plugs	$59.53
150158	3/4" #20 Standard All Natural w/Mounting Bracket Cap w/Extended 222 Cartridge Sealing Cap w/o Cap Plugs and w/o V-bead	$83.95
150164	3/4" Valve-In-Head #10 Black/Blue w/PR	$56.00
150166	3/4" Valve-In-Head #20 Black/Blue w/PR	$78.11
150193	3/4" #10 Standard Black/Black High Temperature Housing w/o PR	$142.98
150233	1" #20 BB Black/Blue HFPP w/PR	$61.28
150234	1" #20 BB Black/Blue HFPP w/o PR	$60.17
150235	1-1/2" #20 BB Black/Blue HFPP w/PR	$65.04
150236	1-1/2" #20 BB Black/Blue HFPP w/o PR	$64.55
150237	1" #10 BB Black/Blue HFPP w/PR	$41.98
150238	1" #10 BB Black/Blue HFPP w/o PR	$40.11
150239	1-1/2" #10 BB Black/Blue HFPP w/PR	$45.67
150240	1-1/2" #10 BB Black/Blue HFPP w/o PR	$45.45
150295	SW-2 Wrench for Standard Housings	$4.29
150296	SW-3 Wrench Big Blue 10" Housings	$4.60
150326	3/4" #20 Standard Black/Black w/PR Mounting Bracket Cap	$52.14
150328	3/4" #10 Standard Black/Black w/PR Mounting Bracket Cap	$27.80
150329	3/4" Valve-In-Head #10 Black/Clear w/PR	$69.10
150337	PBH-420-1.5 Ind Boxed	$216.05
150338	PBH-410-1 - 1-1/2" #10 Big Blue Bag Filter Housing	$191.74
150360	PBH-410-1 - 1" #10 Big Blue Bag Filter Housing	$178.52
150367	PBH-420-1 - 1" #20 Big Blue Bag Filter Housing	$204.97
150383	1" #20 BB Black/Black HFPP w/PR	$68.74
150424	SW-5 Spanner Wrench	$4.00
150426	1" #10 BB Black/Black HFPP w/PR	$53.54
150435	3/4" #10 Standard Black/Clear w/PR Mounting Bracket Cap	$39.30

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART #	DESCRIPTION	PRICE ($) PER UNIT
150436	3/4" #10 Standard Black/Clear w/o PR Mounting Bracket Cap	$38.99
150437	3/4" Valve-In-Head #10 Blue/Clear w/PR	$66.82
150467	3/4" #20 BB Black/Blue HFPP w/PR	$62.41
150468	3/4" #20 BB Black/Blue HFPP w/o PR	$61.30
150469	3/4" #10 BB Black/Blue HFPP w/PR	$44.20
150470	3/4" #10 BB Black/Blue HFPP w/o PR	$43.56
150512	#12 Standard All Natural "White" w/Mounting Bracket Cap w/222 Cartridge Sealing Cap and Double Cap Plugs	$117.37
150514	#20 Standard All Natural "White" Mounting Bracket Cap w/222 Cartridge Sealing Cap and Double Cap Plugs	$141.85
150539	SW-1A Wrench for Slim Line Housings	$4.29
150542	3/4" #10 3G Standard Black/Blue Mounting Bracket Cap w/PR	$31.82
150544	3/4" #20 3G Standard Black/Blue Mounting Bracket Cap w/PR	$54.19
150546	3/4" #10 3G Standard Black/Blue Mounting Bracket Cap w/o PR	$31.19
150550	3/4" #10 3G Standard Black/Blue Integral Bracket Cap w/PR	$35.37
150552	3/4" #20 3G Standard Black/Blue Integral Bracket w/PR	$58.18
150558	3/4" #10 3G Standard Blue/Clear Mounting Bracket Cap w/PR	$40.29
150560	3/4" #20 3G Standard Blue/Clear Mounting Bracket Cap w/PR	$77.01
150564	3/4" #20 3G Standard Blue/Clear Mounting Bracket Cap w/o PR	$78.17
150566	3/4" #10 3G Standard Blue/Clear Integral Bracket Cap w/PR	$43.74
150568	3/4" #20 3G Standard Blue/Clear Integral Bracket w/PR	$81.30
150574	3/4" #10 3G Standard Black/Blue Integral Bracket Meter Mount Cap w/PR	$50.05
150578	MC-1A Kit - Zinc Plated Bracket for Standard Housing	$8.07
150580	Screw Kit, MicroGuard	$1.36
150587	3/4" #10 3G Standard Black/Clear Mounting Bracket Cap w/PR	$40.33
150671	1" #10 BB Black/Black HFPP w/o PR	$53.32
150672	1" #20 BB Black/Black HFPP w/o PR	$66.53
150689	3/4" #20 BB Black/Blue HFPP w/PR and 3/8" Sump Drain Valve	$78.58
150690	1" #20 BB Black/Blue w/PR and 3/8" Sump Drain Valve	$78.58
151011	UB-1 Kit - Zinc Plated Bracket for Valve-In-Head Housing (U-Shaped)	$8.29
151039	Pressure Relief Button Kit	$3.53
151117	#241 FKM O-ring for Standard Housings	$12.61
151118	#241 Silicone O-ring for Standard Housings	$11.52
151120	#241 EPDM O-ring for Standard Housings	$2.24
151121	#237 EPDM O-ring for #5, #10 and #20 Slim Line	$2.24
151122	Big Blue O-ring	$7.34
151231	#233 Buna-N O-ring for RO and US Systems	$9.70
151254	Square-cut O-ring for Big White Housings	$7.34
151362	O-RING, 20" BIG CL SAN, BUNA	$7.37
153001	#10 Blue Sump for Standard Housings	$26.21

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER ORDER

PART #	DESCRIPTION	PRICE ($) PER UNIT
153005	#10 Std Red High Temp Sump	$145.20
153013	#20 Blue Sump for Standard Housings	$47.97
153014	#5 Blue Sump for Slim Line	$15.48
153017	#10 Blue Sump for Slim Line	$17.16
153018	#10 Clear Sump for Slim Line	$25.89
153029	#10 Big Blue Sump	$39.61
153031	#20 Standard Red Nylon Sump	$165.07
153040	#20 All Natural Sump w/o Drain	$51.56
153042	#10 All Natural Standard Sump w/o Drain	$31.22
153046	#12 All Natural Sump w/o V-bead and w/o Drain	$38.97
153047	#10 All Natural Standard Sump w/o V-bead and w/o Drain	$34.71
153049	#10 White Sump for Slim Line	$17.65
153055	#20 All Natural Extended Sump w/o Drain	$77.88
153056	#5 Clear Sump for Slim Line	$25.60
153058	#20 Blue Sump for Slim Line	$43.25
153062	#10 Black Sump for Slim Line	$18.68
153064	#20 Std Black Nylon Sump	$224.38
153070	#20 Big Blue Sump	$70.09
153078	#5 White Sump for Slim Line	$14.56
153080	#20 Big Blue White Sump HFPP	$70.09
153081	#20 White Sump for Slim Line	$43.51
153084	#10 Black Sump for Standard Housings	$27.40
153093	#10 Slim Line Black Nylon Sump	$65.13
153097	#20 Big Blue Sump with 3/8" NPT Drain	$168.58
153098	#10 Big Blue Sump with 3/8" NPT Drain	$135.84
153102	#20 All Natural Sump w/Drain	$44.83
153106	#12 All Natural Sump w/o V-bead and w/Drain	$50.84
153107	#20 All Natural Extended Sump w/Drain	$89.73
153110	#20 Black Sump for Standard Housings	$47.53
153125	#20- Big Black Sump	$70.09
153126	#10 White Sump for RO-3000/RO-3500 RO	$9.73
153128	#10 Clear Sump for Standard Housings	$33.27
153129	#10- Big Black Sump	$20.92
153163	#10 Big White Sump	$29.25
153166	#20 Big Clear (SAN Material) Sump	$78.96
153167	#20 Big White Sump	$68.07
153186	#20 All Natural "White" Extended Sump w/Drain	$53.06
153188	#20 All Natural "White" Extended Sump w/o V-bead and w/Drain	$75.50
153194	3G #10 Standard Clear Sump	$32.37

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART #	DESCRIPTION	PRICE ($) PER UNIT
153195	3G #20 Standard Clear Sump	$82.24
153197	3G #10 Standard Blue Sump	$25.47
153200	3G #20 Standard Blue Sump	$46.66
153202	3G - #10 Blue Sump for Slim Line	$16.61
153203	3G - #10 Clear Sump for Slim Line	$25.17
153208	#10 Big Clear (Lexan Material) Sump	$129.44
153209	3G - #10 White Sump for Slim Line	$12.95
154001	3/4" Black Cap w/o PR for Standard Housings	$14.86
154003	3/4" Red High Temperature Cap w/o PR	$51.69
154006	3/8" Black Cap w/o PR for Slim Line	$9.49
154010	3/8" Blue Cap w/o PR for Slim Line	$9.49
154017	3/4" Black Mounting Bracket Cap w/o PR for Standard Housings	$14.09
154018	3/4" Blue Mounting Bracket Cap w/o PR for Standard Housings	$14.09
154025	3/4" All Natural Mounting Bracket Cap w/o Cap Plugs	$24.89
154040	3/8" White Cap w/o PR for Slim Line	$6.37
154049	1/4" Black Cap w/o PR for Slim Line	$9.49
154053	1/4" Blue Cap w/o PR for Slim Line	$9.49
154061	3/4" Black Nylon Cap w/o PR	$52.17
154062	1/4" White Cap w/o PR for Slim Line	$9.49
154075	1/4" Black Counter Top Cap w/o PR for Slim Line	$8.75
154077	1" Black HFPP Cap w/o PR for Big Blue Housings	$57.19
154078	1-1/2" Black HFPP Cap w/o PR for Big Blue Housings	$57.89
154082	1/4" White Counter Top Cap w/o PR for Slim Line	$11.44
154083	1/2" Black Cap w/o PR for Slim Line	$12.61
154088	1/2" Blue Cap w/o PR for Slim Line	$12.01
154101	3/4" Black Cap w/PR for Standard Housings	$14.86
154102	3/4" Blue Cap w/PR for #10 Clear Housings	$14.86
154108	3/8" Black Cap w/PR for Slim Line	$10.26
154111	3/8" Blue Cap w/PR for Slim Line	$10.26
154115	3/4" Black Mounting Bracket Cap w/PR for Standard Housings	$14.66
154116	3/4Ó Blue Mounting Bracket Cap w/PR for Standard Housings	$14.86
154134	3/4" Black VIH Cap w/PR for #10 and #20 VIH Blue Housings	$39.91
154135	3/4" All Natural Mounting Bracket Cap w/Double Cap Plugs	$41.77
154136	3/4" All Natural Mounting Bracket Cap w/222 Cartridge Sealing w/Double Cap Plugs	$97.17
154138	3/4" Blue VIH Cap w/PR for housing	$39.91
154143	1/4" Black Cap w/ PR for Slim Line	$9.78
154150	1/4" Blue Cap w/ PR for Slim Line	$11.09
154159	3/8" White Cap w/PR for Slim Line	$7.01
154166	1" Black HFPP Cap w/PR for Big Blue Housings	$57.19

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER ORDER

PART #	DESCRIPTION	PRICE ($) PER UNIT
154167	1-1/2" Black HFPP Cap w/PR for Big Blue Housings	$58.67
154171	1/2" Black Cap w/PR for Slim Line	$13.33
154175	1/2" Blue Cap w/PR for Slim Line	$13.33
154195	3/4" Black HFPP Cap w/PR for Big Blue Housings	$57.19
154196	3/4" Black HFPP Cap w/o PR for Big Blue Housings	$25.67
154284	3/4" Big White Cap w/PR	$41.64
154290	1" Big White Cap w/o PR	$38.52
154291	1" Blue Cap w/PR for Big Clear Housings	$45.68
154299	1" Big White Cap w/PR	$40.44
154302	1-1/2" Big White Cap w/PR	$40.44
154351	3/4" All Natural Mounting Bracket Cap w/222 Cartridge Sealing w/o Cap Plugs	$38.78
154419	3/4" Big White Cap w/o PR	$39.66
154503	1/2" Black Nylon Cap w/o PR	$39.91
154508	PBC 1-1/2" Bag Filter Cap - 1/4" Vent	$79.51
154515	PBC 1" Bag Filter Cap - 1/4" Vent	$75.35
154567	3/4" All Natural "White" Mounting Bracket Cap w/222 Cartridge Sealing w/Double Cap Plugs	$38.79
154584	3G 3/4" Black Mounting Bracket Cap w/o PR	$13.40
154585	3G 3/4" Blue Mounting Bracket Cap w/o PR	$13.40
154622	3G 3/4" Black Integral Bracket Cap Meter Mount PR	$48.41
154638	3G 3/4" Black Mounting Bracket Cap w/PR	$14.22
154639	3G 3/4" Blue Mounting Bracket Cap w/PR	$14.22
154646	3G 3/4" Black Integral Bracket Cap w/PR	$17.84
154647	3G 3/4" Blue Integral Bracket Cap w/PR	$17.84
154662	3G - 1/2" Mounting Bracket Black Cap w/o PR for Slim Line	$6.07
154665	3G - 3/8" Mounting Bracket Black Cap w/o PR for Slim Line	$12.64
154678	Black Cap (MGS-1/2)	$17.16
154679	3G - 1/4" Integral Bracket, Meter Mount Black Cap w/PR for Slim Line	$15.67
154733	3G - 1/2" Mounting Bracket Blue Cap w/o PR for Slim Line	$6.38
154737	3G - 3/8" Mounting Bracket Blue Cap w/o PR for Slim Line	$9.55
154741	3G - 1/4" Mounting Bracket Blue Cap w/PR for Slim Line	$11.15
154784	3G - 1/2" Mounting Bracket Black Cap w/PR for Slim Line	$11.53
154786	3G - 1/2" Mounting Bracket Blue Cap w/PR for Slim Line	$11.72
154792	3G - 1/4" Mounting Bracket Black Cap w/PR for Slim Line	$13.01
154794	3G - 1/2" Quick-Change Mounting Bracket Black Cap w/o PR for Slim Line	$30.87
154798	3G - 1/4" Quick-Change Mounting Bracket Black Cap w/PR for Slim Line	$22.99
154800	3G - 1/2" Integral Bracket Black Cap w/PR for Slim Line	$12.64
154802	3G - 1/2" Integral Bracket Blue Cap w/PR for Slim Line	$11.53
154804	3G - 3/8" Integral Bracket Black Cap w/PR for Slim Line	$12.20

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART #	DESCRIPTION	PRICE ($) PER UNIT
154806	3G - 3/8" Integral Bracket Blue Cap w/PR for Slim Line	$12.20
154809	3G - 1/4" Integral Bracket Blue Cap w/PR for Slim Line	$11.46
154810	"3G - 1/2"" Quick-Change Integral Bracket Black Cap w/PR for Slim Line"	$33.85
154814	3G - 1/4" Quick-Change Integral Bracket Black Cap w/PR for Slim Line	$20.69
154829	3G - 1/2" Quick-Change Integral Bracket, Meter Mount Black Cap w/PR for Slim Line	$35.08
154833	3G - 1/4" Mounting Bracket White Cap w/PR for Slim Line	$9.73
154851	3G - 1/4" Quick-Change Mounting Bracket White Cap w/o PR for Slim Line	$21.31
154852	3G - 1/4" Quick-Change Mounting Bracket White Cap w/PR for Slim Line	$17.54
154855	3G - 3/8" Quick-Change Mounting Bracket White Cap w/o PR for Slim Line	$23.49
154856	3G - 1/4" Integral Bracket White Cap w/PR for Slim Line	$11.72
154857	3G - 1/4" Quick-Change Integral Bracket White Cap w/PR for Slim Line	$26.16
154858	3G - 3/8" Integral Bracket White Cap w/PR for Slim Line	$11.64
154859	3G - 3/8" Quick-Change Integral Bracket White Cap w/PR for Slim Line	$25.41
154860	3G - 3/8" Quick-Change Mounting Bracket Black Cap w/o PR for Slim Line	$24.35
154951	3G - 3/8" Quick-Change Mounting Bracket Blue Cap w/o PR for Slim Line	$24.22
154954	3G - 1/4" Quick-Change Mounting Bracket Black Cap w/o PR for Slim Line	$24.17
154955	3G - 1/4" Quick-Change Mounting Bracket Blue Cap w/o PR for Slim Line	$24.05
155003	Cartridge Coupler for Standard Cartridges	$2.25
155164	GAC-10 Shell	$14.17
155165	GAC-20 Shell	$21.03
155255	GAC20-BB Shell	$43.53
156037	Mounting Bracket Kit for ST-1, ST-2, and ST-3	$25.22
156110	Aluminum filter bag housing, size 4, 1-1/4" NPT Inlet/outlet	$1,212.79
156111	Aluminum filter bag housing, size 1, 2" NPT Inlet/outlet	$1,729.75
156112	Aluminum filter bag housing, size 2, 2" NPT Inlet/outlet	$1,980.84
156113	Aluminum filter bag housing, size 2, 3" NPT Inlet/outlet	$2,265.47
157209	All Natural Sump Extension Adapter for #12 Housing	$9.37
158002	3/8" #5 Slim Line Black/Blue w/PR	$18.95
158003	3/8" #5 Slim Line Black/Blue w/o PR	$19.08
158005	3/8" #10 Slim Line Black/Blue w/PR	$13.51
158006	3/8" #10 Slim Line Black/Blue w/o PR	$13.06
158007	3/8" #10 Slim Line Blue/Clear w/PR	$20.17
158008	3/8" #10 Slim Line Blue/Clear w/o PR	$19.95
158095	FKM #237 O-ring for Slim Line Housings	$12.61
158096	Silicone #237 O-ring for Slim Line Housings	$11.52
158098	3/8" #10 Slim Line White/White w/o PR	$13.54
158110	3/8" #5 Slim Line Blue/Clear w/PR	$19.96
158111	3/8" #5 Slim Line Blue/Clear w/o PR	$19.45

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER ORDER

PART #	DESCRIPTION	PRICE ($) PER UNIT
158114	1/4" #10 Slim Line Black/Blue w/o PR	$13.00
158115	1/4" #10 Slim Line Black/Blue w/PR	$13.44
158116	1/4" #10 Slim Line Blue/Clear Housing w/o PR	$19.16
158117	1/4" #10 Slim Line Blue/Clear Housing w/PR	$19.28
158120	1/4" #10 Slim Line Black/Black Housing w/o PR	$13.13
158125	1/4" #10 Slim Line White/White Housing w/o PR	$10.32
158126	1/4" #10 Slim Line Black/White Housing w/o PR	$19.32
158129	3/8" #20 Slim Line Black/Blue w/o PR	$42.07
158131	1/4" #20 Slim Line Black/Blue w/o PR	$35.32
158133	1/4" #5 Slim Line Blue/Clear w/o PR	$24.68
158138	1/4" #5 Slim Line Black/Blue w/o PR	$18.28
158149	3/8" #10 Slim Line White/White w/PR	$14.06
158179	1/4" #10 Counter Top Slim Line White/White w/o PR	$21.04
158195	1/2" #10 Slim Line Black/Blue w/PR	$19.41
158196	1/2" #10 Slim Line Black/Blue w/o PR	$19.11
158203	1/2" #5 Slim Line Black/Blue w/PR	$19.79
158204	1/2" #20 Slim Line Black/Blue w/PR	$41.66
158205	1/2" #20 Slim Line Black/Blue w/o PR	$41.34
158214	1/2" #10 Slim Line Blue/Clear w/PR	$28.77
158215	1/2" #10 Slim Line Blue/Clear w/o PR	$28.74
158319	1/2" #10 Slim Line Black/Black High Temperature Housing w/o PR	$82.11
158326	1/4" #10 Slim Line White/Clear Housing w/o PR	$19.34
158598	1/4" #10 3G Slim Line Black/Blue Mounting Bracket Cap w/PR	$19.89
158601	1/4" #10 3G Slim Line White/White Mounting Bracket Cap w/o PR	$19.73
158608	3/8" #10 3G Slim Line Black/Blue Mounting Bracket Cap w/o PR	$19.17
158610	3/8" #10 3G Slim Line Blue/Clear Mounting Bracket Cap w/o PR	$28.38
158620	1/2" #10 3G Slim Line Black/Blue Mounting Bracket Cap w/o PR	$20.34
158621	1/2" #10 3G Slim Line Black/Blue Mounting Bracket Cap w/PR	$21.50
158622	1/2" #10 3G Slim Line Blue/Clear Mounting Bracket Cap w/o PR	$29.49
158623	1/2" #10 3G Slim Line Blue/Clear Mounting Bracket Cap w/PR	$30.39
158642	3/8" #10 3G Slim Line Black/Blue Integral Bracket Cap w/PR	$22.04
158643	3/8" #10 3G Slim Line Blue/Clear Integral Bracket w/PR	$31.17
158647	3/8" #10 3G Slim Line White/White Quick-Change Integral Bracket w/PR	$29.99
158648	1/2" #10 3G Slim Line Black/Blue Integral Bracket w/PR	$22.71
158649	1/2" #10 3G Slim Line Blue/Clear Integral Bracket w/PR	$32.58
158739	1/4" #10 Flat Cap Slim Line White/White w/o PR	$13.96
158753	3/4" #10 Flat Cap Slim Line Black/Clear w/PR	$28.14
158758	3/4" #10 Flat Cap Slim Line Black/Blue 3/4" w/o PR	$20.73
158759	3/4" #10 Flat Cap Slim Line White/White w/o PR	$19.75

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER ORDER

PART #	DESCRIPTION	PRICE ($) PER UNIT
158765	1/2" #10 Slim Line White/White w/o PR	$18.35
158784	1/4" #10 Flat Cap Slim Line White/Clear w/o PR	$26.02
158785	1/2" #10 Flat Cap Slim Line White/White w/o PR	$19.52
158794	1/2" #10 3G Quick-Change Slim Line Black/Clear Integral Bracket w/PR	$60.00
158799	3/4" #20 BB Black/White HFPP w/PR	$65.25
158837	F1000-DFB, Filter 1 Stage, CTO	$87.48
158838	F1000-B1B, Filter 1 Stage, Cyst and Lead	$91.80
158839	F2000-B2B, Filter 2 Stage VOC	$172.80
158840	F3000-B2B, Filter 3 Stage, SED, VOC	$210.60
158841	1/4" #20 Slim Line White/White w/o PR	$37.64
158842	3/8" #20 Slim Line White/white w/o PR	$37.64
158853	F2000-B2M, Filter 2 Stage VOC, Monitored	$189.00
158854	F3000-B2M, Filter 3 Stage, SED, VOC, Monitored	$237.60
158861	1/4" #10 Flat Cap Slim Line Black/Clear w/o PR	$13.79
158861	1/4" #10 Flat Cap Slim Line Black/Clear w/o PR	$13.79
158862	1/2" #10 Flat Cap Slim Line White/Clear w/o PR	$13.79
158862	1/2" #10 Flat Cap Slim Line White/Clear w/o PR	$13.79
160166	"BBFS-22 Consisting of: Two 20"" BB 1"" Housings On Unit Mounting Bracket - Assembled - Cartridges Not Included"	$263.88
160168	"BBFS-222 w/Three 1"" BB Housings - Cartridges Not Included"	$380.59
160196	BFS-201 Consisting of: Two 3/8" Slim Line Blue Housings, Unit Mounting Bracket	$88.51
160362	#20 3/4" STD Housings with WS-20 Cartridge	$197.51
160363	#20 1" BB Housing with WS-20BB Cartridge	$385.37
160364	#20 1" BB Housing with RFFE20 Cartridge	$500.96
160365	#10 1/2" SL Red Nylon Housing with PD5 Cartridge	$165.36
160367	#20 1-1/2" BB Housing with NCP-20BB Cartridge	$223.85
160405	"BBFS-1FX22 w/Triple, Piped System - Cartridges Not Included"	$593.45
161079	RO-2550 4 Stage, 50 GPD, RO System	$87.86
161110	GRO-350B, GRO 3, DF, 50 GPD, GAC	$353.70
161111	GRO-475B, RO 4, DF, 75 GPD, CAR, GAC	$472.50
161112	GRO-575B, RO 5, DF, 75 GPD, CAR (2), GAC	$567.00
161113	GRO-350BP, GRO 3 Stage, DF, 50 GPD, GAC, With Pump	$580.00
161114	GRO-475BP, GRO 4 Stage, DF, CMR, 75 GPD, GAC, With Pump	$687.50
161151	GRO-475M, RO 4, DF, 75 GPD, CAR, GAC, Mntrd	$513.00
161152	GRO-575M, RO 5, DF, 75 GPD, CAR (2), GAC Mntrd	$634.50
161154	GRO-2550 4 Stage, 50 GPD, GRO System	$120.00
165266	#10 White Sump for Slim Line	$17.66
166081	3/4" #10 BW White/White w/PR	$58.34

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER ORDER

PART #	DESCRIPTION	PRICE ($) PER UNIT
166083	1" #10 BW White/White w/PR	$70.03
166141	1" #20 BW White/White w/o PR	$81.63
166142	1" #20 BW White/White w/PR	$92.76
166144	1-1/2" #20 BW White/White w/PR	$84.07
166201	1" #20 BC (SAN) Blue/Clear w/PR	$147.05
166219	1" #10 BC (Lexan) Blue/Clear w/PR	$142.95
243301	ST Cap Nut Gasket, Silicone	$11.12
243302	ST Cap Nut Gasket, PTFE	$16.86
243303	ST Cap Nut Gasket, FKM	$22.26
243304	ST Housing Gasket, Silicone	$20.85
243305	ST Housing Gasket, PTFE	$34.08
243306	ST Housing Gasket, FKM	$37.56
243311	ST 20" Housing Only	$364.17
243313	ST 1/8" Drain Petcock	$19.62
243326	ST-BC Housing Head	$335.11
243327	ST-BC Top Plate, 4-Stack	$235.34
243328	ST-BC-20 Top Plate, 5-Stack	$235.34
243329	ST-BC Top Plate Bushing	$41.43
243330	ST-BC 3/8" Plate Knob 4-Stack	$41.43
243331	ST-BC-20 1/2" Plate Knob	$41.43
243332	ST-BC Top Plate Retaining Ring	$19.74
243333	ST-BC T-bolt W/handle for Clamp	$161.40
243334	ST-BC-4 Cartridge V-Post	$78.93
243335	ST-BC 8 Cartridge V-Post	$84.74
243337	ST-BC-20 Cartridge V-Post	$103.96
244009	All Natural "White" Drain Plug Kit (Includes Plug and O-ring)	$6.27
244043	MC-1A - Zinc Plated Bracket ONLY for Standard Housing	$3.62
244047	SL-ZP Kit - Zinc Plated Bracket for Slim Line Housing	$5.30
244435	Quick-Change Replacement Head 1/4" JG PF Ð Straight Across	$22.98
244454	INLINE CLIP, #COSW, 2"	$1.65
244686	Two-Housing Standard System Bracket	$32.07
244718	WB-ZP - Zinc Plated Bracket ONLY for Big Blue Housing	$37.51
244787	Auto Shut-off Valve - RO-2500/RO-2550	$8.47
244796	Drain Clamp - RO-2500/RO-2550	$1.39
244833	Storage Tank, 2.8 Gallon - RO-2550	$81.11
244835	Faucet Adapter, RO-2550	$4.20
244848	Tube, 3/8" OD Blue - Permeate	$2.51
244849	Tube, 3/8" OD Red - Faucet Drain	$2.51
244850	Tube, 1/4" OD Green	$0.96

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER ORDER

PART #	DESCRIPTION	PRICE ($) PER UNIT
244875	Tube, 1/4" OD Red	$1.29
244958	Vessel End Cap Assembly (1/2"ports)	$157.41
244960	Faucet	$43.79
244994	"WB-UB Kit - Zinc Plated Bracket ONLY for #10 Big Blue Housing w/Bypass (U-Shaped)"	$38.87
357639	WB-SS - Stainless Steel Bracket ONLY for Big Blue Housing	$48.52
357640	WB-SS Kit - Stainless Steel Bracket for Big Blue Housing	$53.54
357644	SL-SS Kit - Stainless Steel Bracket for Slim Line Housing	$31.67
357707	Vessel Assembly	$1,147.80
357716	Inlet Fitting Kit (4002697 End Cap)	$91.10
357719	Adapter Kit (357707/61595-03)	$43.88
655106	1" #10 BB White/White w/Bypass	$123.58
655107	1" #20 BB White/White w/Bypass	$140.48
4002573	GRO-36EN - GRO Membrane	$65.45
4002574	GRO-50EN - GRO Membrane	$66.71
4002575	GRO-75EN - GRO Membrane	$75.41
4002601	TIMER ASSY, UF, U440, 24V DC (SXT Based)	$700.84
4002607	1/2" NPT, NC, DC BLACK	$223.09
4002676	3/4" Turn and Lock Fittings	$29.67
4002677	1/2" Turn and Lock Fittings	$29.67
4002697	Vessel End Cap Assembly (1 cap w/ ½" ports; 1 cap w/ ¾" ports)	$360.73
4002786	Backflush Kit, Freshpoint, No Tank	$235.31
4002788	Inlet Flush Kit	$263.28
4002792	Outlet Fitting Kit (4002697 End Cap)	$52.11
4002793	Drain Fitting Kit (4002697 End Cap)	$52.71
4002815	U440 MULTI-UNIT SYSTEM KIT	$72.60
4002947	UF Adapter Kit (357707/357708)	$66.63
4003548	EPDM Lid O-ring for ES1 & ES2 housings	$14.57
4003549	EPDM basket O-ring for ES1 & ES2 housings	$3.64
4003550	EPDM lid O-ring for ES3 & ES4 housings	$7.28
4003581	EPDM lid O-ring for ESC3	$10.93
4003582	EPDM lid O-ring for ESC7	$18.21
4004423	GRO-36EN GRO Membranes W/ Drain Line Flow Control	$78.78
4004424	GRO-50EN GRO Membranes W/ Drain Line Flow Control	$79.25
4004425	GRO-75EN GRO Membranes W/ Drain Line Flow Control	$86.72
4004446	GRO-36EN adaptor kit	$17.07
4004447	GRO-50EN adaptor kit	$17.07
4004448	GRO-75EN adaptor kit	$17.07
4004786	ES1 & ES2 band clamp, 304 SS	$166.89

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER ORDER

PART #	DESCRIPTION	PRICE ($) PER UNIT
4004787	ES3 & ES4 band clamp, 304 SS	$194.71
4004788	ESC3 band clamp, 304 SS	$139.08
4004789	ESC4 & ESC5 band clamp, 304 SS	$166.89
4004790	ESC7 band clamp, 304 SS	$211.40
144012-00	UB-1 - Zinc Plated Bracket ONLY for Valve-In-Head Housing (U-Shaped)	$3.80
153197-06	Blue Housing (MGS-3/4)	$21.73
155001-43	S1 Pleated Cellulose	$5.15
155002-43	C1 Activated Carbon-Impregnated Cellulose	$8.67
155014-43	P5 Spun Polypropylene	$4.24
155015-43	P25 Spun Polypropylene	$4.14
155016-43	P5-20 Spun Polypropylene	$8.62
155017-43	R30 Pleated Polyester - Reusable	$10.43
155022-43	C2 Activated Carbon-Impregnated Cellulose	$7.85
155030-43	P5-478 Spun Polypropylene	$3.95
155031-43	R30-478 Pleated Polyester - Reusable	$9.80
155038-43	R50 Pleated Polyester - Reusable	$10.07
155053-43	R50-BB Pleated Polyester - Reusable	$16.91
155063-43	RFC-93 Radial-Flow Granular Activated Carbon	$31.22
155065-43	RFC-20 Radial-Flow Granular Activated Carbon	$45.77
155071-43	WP5 Polypropylene String-Wound	$7.87
155072-43	WP30 Polypropylene String-Wound	$7.72
155083-06	TS-101L Bulk - No Fittings w/4-Color Label w/Carbon and Crystals	$16.10
155100-43	PCC-1 Phosphate Crystal Cartridge (24 oz.)	$75.19
155101-43	R30-BB Pleated Polyester - Reusable	$21.33
155109-43	GAC-10 Granular Activated Carbon	$13.08
155110-43	GAC-5 Granular Activated Carbon	$11.70
155111-43	GAC-20 Granular Activated Carbon	$26.63
155120-43	PP30-BB Pleated Polypropylene	$19.47
155131-43	TSGAC-10 Combination Carbon/Phosphate	$28.52
155141-43	RFC-BB Radial-Flow Carbon	$49.31
155153-43	GAC-BB Granular Activated Carbon	$34.01
155155-43	CC-10 Coconut Granular Activated Carbon	$14.27
155162-43	CBC-10 Carbon Block	$18.36
155169-43	CBC-5 Carbon Block	$7.39
155170-43	CBC-BB Carbon Block	$66.10
155186-43	CW-F Polypropylene String-Wound	$4.95
155187-43	CW-MF Polypropylene String-Wound	$4.53
155214-43	CW-50 Polypropylene String-Wound	$5.80
155220-43	C8 Powdered Activated Carbon-Impregnated Polyester	$14.62

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER ORDER

PART #	DESCRIPTION	PRICE ($) PER UNIT
155224-43	P25-30 Spun Polypropylene	$12.41
155225-43	P1 Spun Polypropylene	$4.60
155226-43	P25-20 Spun Polypropylene	$8.37
155227-43	P1-30 Spun Polypropylene	$11.74
155228-43	P5-30 Spun Polypropylene	$11.03
155247-43	RFC20-BB Radial-Flow Granular Activated Carbon	$97.04
155248-43	PCC212 Phosphate Crystal Cartridge (12 oz.)	$30.95
155249-43	GAC20-BB Granular Activated Carbon	$73.93
155251-43	PCC218 Phosphate Crystal Cartridge (18 oz.)	$36.90
155254-43	SGAC-10 Silver-Impregnated Granular Activated Carbon	$50.13
155263-43	RFFE20-BB Radial-Flow Iron Reduction	$130.27
155268-43	CBR2-10 Carbon Block	$24.27
155273-43	PCF1-10MB D.I. Resin	$41.09
155274-43	PCF1-20MB D.I. Resin	$71.93
155281-43	BBF1-20MB D.I. Resin	$173.89
155303-43	S1-20 Pleated Cellulose	$11.74
155304-43	P1-20 Spun Polypropylene	$9.49
155305-43	S1-20BB Pleated Cellulose	$26.13
155309-43	CBC-20 Carbon Block	$35.56
155312-43	CBC20-BB Carbon Block	$124.53
155319-43	WS-10 Softening Resin Cartridge	$27.59
155320-43	WS-20 Softening Resin Cartridge	$38.50
155321-43	WS-20BB Softening Resin Cartridge	$69.33
155350-43	SCBC-10 Silver-Impregnated Carbon Block	$30.16
155355-43	DGD-7525 Dual-Gradient Polypropylene	$15.03
155356-43	DGD-7525-20 Dual-Gradient Polypropylene	$27.76
155357-43	DGD-5005 Dual-Gradient Polypropylene	$15.14
155358-43	DGD-5005-20 Dual-Gradient Polypropylene	$27.89
155359-43	DGD-2501 Dual-Gradient Polypropylene	$15.71
155360-43	DGD-2501-20 Dual-Gradient Polypropylene	$29.06
155367-43	NCP-10 Pleated Carbon-Impregnated Polyester	$11.93
155373-03	PBR-420-BK 20" Replacement Basket	$147.74
155374-03	PBR-410-BK 10" Replacement Basket	$90.73
155374-03	PBR-410-BK 10" Replacement Basket	$90.73
155382-43	NCP-20BB Pleated Carbon-Impregnated Polyester	$55.51
155383-03	BP-410-1	$4.98
155384-03	BP-420-1	$6.18
155385-03	BP-410-5	$4.80
155386-03	BP-420-5	$6.00

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART #	DESCRIPTION	PRICE ($) PER UNIT
155387-03	BP-410-10	$4.56
155388-03	BP-420-10	$5.76
155389-03	BP-410-25	$4.56
155390-03	BP-420-25	$5.76
155391-03	BP-410-50	$4.56
155392-03	BP-420-50	$5.76
155393-03	BP-410-100	$4.56
155394-03	BP-420-100	$5.76
155395-03	BP-410-200	$4.44
155396-03	BP-420-200	$5.64
155397-43	NCP-20 Pleated Carbon-Impregnated Polyester	$23.39
155398-43	NCP-BB Pleated Carbon-Impregnated Polyester	$28.46
155403-43	CBR2-10R Carbon Block w/Flow Control	$24.68
155405-43	S1-BB Pleated Cellulose	$14.63
155416-43	R30-20 Pleated Polyester - Reusable	$20.02
155422-43	P5-40 Spun Polypropylene	$16.77
155430-43	R30-20BB Pleated Polyester - Reusable	$42.40
155529-43	EP-20 Carbon Block	$20.89
155531-43	EP-10 Carbon Block	$10.41
155548-43	EP-BB Carbon Briquette	$40.86
155583-43	EP-20BB Carbon Block	$77.63
155584-44	P-250 Replacement Cartridge Kit for US-1500	$35.14
155597-43	C1-20 Activated Carbon-Impregnated Cellulose	$18.75
155632-22	PCC-106 Phosphate Cartridge Insert	$27.27
155634-43	EPM-10 Carbon Block	$8.12
155635-43	EPM-20 Carbon Block	$17.61
155651-43	C1-20BB Activated Carbon-Impregnated Cellulose	$51.20
155656-06	IC-101L Bulk - No Fittings w/4-Color Label	$11.94
155698-43	EP-30 Carbon Block	$70.41
155713-43	CCBC-10 Coconut Carbon Block	$23.04
155714-43	CEP-10E Thin Wall Coconut Carbon Block	$23.34
155748-43	PD-1-934 PolyDepth	$6.73
155749-43	PD-5-934 PolyDepth	$6.56
155750-43	PD-10-934 PolyDepth	$6.42
155751-43	PD-25-934 PolyDepth	$6.35
155752-43	PD-50-934 PolyDepth	$6.30
155755-43	PD-1-20 PolyDepth	$12.26
155756-43	PD-5-20 PolyDepth	$11.91
155757-43	PD-10-20 PolyDepth	$11.52

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER ORDER

PART #	DESCRIPTION	PRICE ($) PER UNIT
155758-43	PD-25-20 PolyDepth	$11.40
155759-43	PD-50-20 PolyDepth	$11.40
155762-43	PD-1-30 PolyDepth	$17.31
155763-43	PD-5-30 PolyDepth	$17.06
155764-43	PD-10-30 PolyDepth	$17.06
155765-43	PD-25-30 PolyDepth	$16.85
155769-43	PD-1-40 PolyDepth	$23.10
155770-43	PD-5-40 PolyDepth	$22.66
155771-03	PD-10-40 PolyDepth	$21.88
155772-43	PD-25-40 PolyDepth	$22.16
155782-43	EPM-BB Carbon Block	$38.36
155783-43	EPM-20BB Carbon Block	$70.45
155785-43	QC10-CBRR Replacement Cartridge	$35.22
155815-03	EP5-40 Carbon Block	$86.86
155832-44	P-250A Replacement Cartridge Kit for US-1000	$36.20
155855-43	RO Element for RO-3000/RO-3500	$133.02
155901-43	QC10-GACR Replacement Cartridge	$23.10
155923-43	RO Replacement Filter Cartridge Kit for RO-3000/3500	$48.57
155962-43	QC10-EPR Replacement Cartridge	$34.43
155967-43	CRFC-20BB Radial Flow Carbon	$217.25
156017-02	3/4" 10" ST-1 Housing (10" Cartridges)	$262.98
156018-02	3/4" 20" ST-2 Housing (20" Cartridges)	$466.01
156025-02	ST-BC-4 (Holds 4-10" Cartridges)	$1,393.42
156026-02	ST-BC-8 (Holds 8-10" or 4-20" Cartridges)	$1,508.13
156027-02	ST-BC-12 (Holds 12-10" or 4-30" Cartridges)	$1,640.88
156028-02	ST-BC-16 (Holds 16-10" or 4-40" Cartridges)	OBS
156032-02	ST-BC-20 (Holds 20-10" or 5-40" Cartridges)	$2,319.86
161080-06	Reverse Osmosis Membrane Housing - 90i Outlet	$12.33
244046-00	SL-ZP - Zinc Plated Bracket ONLY for Slim Line Housing	$2.29
244046-00	SL-ZP - Zinc Plated Bracket ONLY for Slim Line Housing	$2.22
244627-02	Two-Housing CCF and RO System Bracket	$17.36
244627-02	Two-Housing CCF and RO System Bracket	$17.36
255001-03	BPHE-410-1	$8.89
255003-03	BPHE-410-5	$6.52
255005-03	BPHE-410-25	$6.35
255006-03	BPHE-410-50	$7.67
255009-03	BN-410-100	$12.43
255011-03	BN-410-200	$12.32
255013-03	BN-410-300	$11.55

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER ORDER

PART #	DESCRIPTION	PRICE ($) PER UNIT
255014-03	BN-410-400	$12.17
255015-03	BN-410-600	$11.90
255016-03	BN-410-800	$12.05
255024-03	BPHE-420-1	$20.89
255026-03	BPHE-420-5	$21.73
255028-03	BPHE-420-25	$18.49
255029-03	BPHE-420-50	$15.06
255031-03	BPHE-420-100	$15.06
255032-03	BN-420-100	$16.18
255034-03	BN-420-200	$16.03
255035-03	BN-420-250	$15.01
255037-03	BN-420-400	$15.83
255038-03	BN-420-600	$15.47
255039-03	BN-420-800	$15.66
255254-03	BN-410-50	$15.72
255255-03	BN-420-50	$20.46
255382-43	CB1-10 Carbon Block	$12.39
255416-43	ChlorPlus 10 Carbon Block	$28.07
255417-43	ChlorPlus 20 Carbon Block	$55.81
255420-43	MG-10MCB Carbon Block/Membrane	$112.24
255424-03	EP-5 Carbon Block	$6.35
255481-43	ECP1-10 Pleated Cellulose-Polyester	$7.95
255482-43	ECP5-10 Pleated Cellulose-Polyester	$7.37
255483-43	ECP20-10 Pleated Cellulose-Polyester	$7.02
255484-43	ECP50-10 Pleated Cellulose-Polyester	$7.31
255485-43	ECP1-20 Pleated Cellulose-Polyester	$18.64
255486-43	ECP5-20 Pleated Cellulose-Polyester	$14.60
255487-43	ECP20-20 Pleated Cellulose-Polyester	$14.60
255489-43	ECP1-BB Pleated Cellulose-Polyester	$18.90
255490-43	ECP5-BB Pleated Cellulose-Polyester	$18.11
255491-43	ECP20-BB Pleated Cellulose-Polyester	$18.11
255492-43	ECP50-BB Pleated Cellulose-Polyester	$18.65
255493-43	ECP1-20BB Pleated Cellulose-Polyester	$37.42
255494-43	ECP5-20BB Pleated Cellulose-Polyester	$33.99
255495-43	ECP20-20BB Pleated Cellulose-Polyester	$33.99
255496-43	ECP50-20BB Pleated Cellulose-Polyester	$35.01
255503-43	GS-10-B-1/4" FPT 2" x 10"	$11.22
255505-43	GS-10-G-1/4" John Guest 2" x 10"	$15.15
255521-43	GS-10RO-B-1/4" FPT 2" x 10"	$11.52

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER ORDER

PART #	DESCRIPTION	PRICE ($) PER UNIT
255522-43	GS-10RO-C-3/8" FPT 2" x 10"	$11.85
255525-43	GS-10RO-G-1/4" John Guest 2" x 10"	$14.85
255526-43	GS-10RO-H-3/8" John Guest 2" x 10"	$15.53
255541-43	GS-10CAL/RO-B-1/4" FPT 2" x 10"	$13.24
255546-43	GS-10CAL/RO-H-3/8" John Guest 2" x 10"	$17.36
255553-43	GS-10EXTRA.5-B-1/4" FPT 2" x 6"	$19.94
255559-43	GS-210EXTRA1-B-1/4" FPT 2.5" x 11"	$33.89
255561-43	GS-210EXTRA1-G-1/4" John Guest 2.5" x 11"	$38.04
255576-43	GS-10SED/5-C-3/8" FPT 2" x 10"	$12.45
255579-43	GS-10SED/5-G-1/4" John Guest 2" x 10"	$15.77
255582-43	GS-210SED/5-C-3/8" FPT 2.5" x 11"	$20.06
255595-43	GS-10ALS-B-1/4" FPT 2" x 10"	$17.31
255596-43	GS-10ALS-C-3/8" FPT 2" x 10"	$17.23
255599-43	GS-10ALS-G-1/4" John Guest 2" x 10"	$20.54
255604-43	GS-10PH-G-1/4" John Guest 2" x 10"	$33.00
255631-43	GS-10CB-5-B-1/4" FPT 2" x 10"	$22.62
255632-43	GS-10CB-5-C-3/8" FPT 2" x 10"	$23.07
255635-43	GS-10CB-5-G-1/4" John Guest 2" x 10"	$26.15
255636-43	GS-10CB-5-H-3/8" John Guest 2" x 10"	$26.72
255655-43	GS-210DI-B-1/4" FPT 2.5" x 11"	$26.32
255668-43	ELPC-10 Electroplating Cartridge	$14.89
255669-43	ELPC-20 Electroplating Cartridge	$29.64
255670-43	ELPC-30 Electroplating Cartridge	$44.45
255671-43	CFB-10 Modified Carbon Block	$12.84
255672-43	CFB-20 Modified Carbon Block	$25.07
255673-43	CFB-30 Modified Carbon Block	$37.27
255674-43	CFB-Plus10 Modified Carbon Block	$14.08
255675-43	CFB-Plus20 Modified Carbon Block	$27.80
255676-43	CFB-Plus30 Modified Carbon Block	$40.86
255677-43	CFB-Plus10BB Modified Carbon Block	$40.94
255678-43	CFB-Plus20BB Modified Carbon Block	$71.88
255679-43	CFBC-10 Modified Carbon Block	$19.54
255681-43	CFB-PB10 Modified Carbon Block	$23.55
255705-43	QC10-CB1R Replacement Cartridge	$33.75
255706-43	QC10-TSGACR Replacement Cartridge	$26.41
255748-43	DBC-10EX2 Bacteriostatic KDF/GAC	$74.76
255800-43	UDS-10EX1 Bacteriostatic KDF/GAC	$42.07
257441-06	Bracketed Triple Quick-Change Replacement Head 3/8" JG PF Ð Straight Across	$157.36
257730-06	Bracketed Double Quick-Change Replacement Head 3/8" JG PF Ð Straight Across	$132.86

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER ORDER

PART #	DESCRIPTION	PRICE ($) PER UNIT
355056-43	CRFC-BB Radial Flow Carbon	$108.38
355212-43	WP.5BB97P Polypropylene String-Wound	$25.61
355213-43	WP1BB97P Polypropylene String-Wound	$24.90
355214-43	WP5BB97P Polypropylene String-Wound	$24.56
355215-43	WP10BB97P Polypropylene String-Wound	$23.76
355216-43	WP25BB97P Polypropylene String-Wound	$23.48
355217-43	WPX5BB97P Fibrillated Polypropylene String-Wound	$28.25
355218-43	WPX10BB97P Fibrillated Polypropylene String-Wound	$27.69
355219-43	WPX25BB97P Fibrillated Polypropylene String-Wound	$27.14
355220-43	WPX50BB97P Fibrillated Polypropylene String-Wound	$26.59
355221-43	WPX100BB97P Fibrillated Polypropylene String-Wound	$26.07
355222-43	WP1BB20P Polypropylene String-Wound	$60.59
355223-43	WP5BB20P Polypropylene String-Wound	$55.86
355225-43	WP25BB20P Polypropylene String-Wound	$55.09
355226-43	WPX100BB20P Fibrillated Polypropylene String-Wound	$52.15
355752-43	ChlorPlus-BB Carbon Block	$81.49
355753-43	ChlorPlus-20BB Carbon Block	$176.05
42047-01	HARNESS,SOLENIOD,U440,72" (Black Valve Only)	$25.49
455903-43	FloPlus¤ 10 Carbon Block	$23.84
455903-43	FloPlus 10 Carbon Block	$23.84
455904-43	FloPlus 20 Carbon Block	$46.39
455905-43	FloPlus 10BB Carbon Block	$70.86
455906-43	FloPlus 20BB Carbon Block	$118.52
555235-43	RO Element, 36 GPD, RO-2500	$40.72
555574-43	GAC Post Filter, RO-2550	$27.51
555583-43	RO Element, 50 GPD, RO-2550	$42.97
555585-96	Cartridge, GAC PW-C2500R, Violet	$16.29
555586-96	Cartridge, Carbon Block PW-C5000R, Blue	$22.11
555612-96	Cartridge, Sediment PW-S2500R, Yellow	$11.53
555676-96	Cartridge, RO Element, 75 GPD PW-RO75R, Green	$60.20
555693-00	TLC-75, 12" x 12' x 12', 15.4 lbs (7.0 Kg)	$41.26
555694-00	TLC-50, 12" x 12' x 12', 15.4 lbs (7.0 Kg)	$36.68
60699-70	DLFC, 3/4"F NPT, 7.0 gpm	$26.20
60700-10	DLFC, 3/4" F x 3/4" F NPT, 10 gpm	$39.98
61560-11	Assy, In-Line Meter, 3/4" NPT (7000)	$234.00
61592-01	TIMER ASSY, UF, U440, 120V (ET Based)	$693.91
61595-03	Membrane Element	$1,578.63
61667-11	Backflush Kit, Freshpoint, w/Tank	$788.07
655005-43	RFFE10-BB Radial-Flow Iron Reduction	$86.30

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER ORDER

PART #	DESCRIPTION	PRICE ($) PER UNIT
655006-00	TLC-24, 12" x 12' x 12', 15.4 lbs (7.0 Kg)	$32.34
655007-00	TLC-36, 12" x 12' x 12', 15.4 lbs (7.0 Kg)	$34.60
655045-00	TLC-100, 12" x 12' x 12', 15.4 lbs (7.0 Kg)	$47.09
655094-43	GS-210RO-MF-B	$69.89
655116-96	F1S5-RC, Cartridge, Sediment, PP, 5 Micron, 12/C	$22.03
655117-96	F1GC-RC, Cartridge, GAC, 12/C	$27.00
655120-96	F1B1-RC, Cartridge, Cyst and Lead, 12/C	$38.56
655121-96	GRO50-RC, Membrane, 50 GPD, 12/C	$91.80
655122-96	GRO75-RC, Membrane, 75 GPD, 12/C	$97.20
655123-96	FDF1-RC, Cartridge, Chlorine Taste and Odor, 12/C	$33.05
655126-96	F2B2-RC2, Cartridge, Twin Pack, VOC, 6/C	$77.11
655130-43	DFX-CB-10 Diamond Flow Polyspun/Carbon Block	$7.02
655139-03	OAC PLUS-20BB	$140.99
655148-43	DFX-CB-20 Diamond Flow Polyspun/Carbon Block	$14.03
655151-43	DFX-CB-BB Diamond Flow Polyspun/Carbon Block	$29.40
655152-43	DFX-CB-20BB Diamond Flow Polyspun/Carbon Block	$58.81
C-155X20T	Electroplating Cartridge, 20" length, 2.62" diameter	$32.57
C-155X30T	Electroplating Cartridge, 30" length, 2.62" diameter	$48.86
C-155X40T	Electroplating Cartridge, 40" length, 2.62" diameter	$65.13
C-155X9.8T	Electroplating Cartridge, 9.8" length, 2.62" diameter	$16.29
CH20676	Cation Resin STD Mesh 8% CL 1 Cu. Ft. Bag	$111.87
ES12NA410	ES1 bag housing, size 1, 2Ó NPT I/O, bottom outlet, 304 SS, 100 psi, polished finish	$987.45
ES22NA410	ES2 bag housing, size 2, 2Ó NPT I/O, bottom outlet, 304 SS, 100 psi, polished finish	$1,158.98
ES31NA410	ES3 bag housing, size 3, 1Ó NPT I/O, bottom outlet, 304 SS, 100 psi, polished finish	$727.83
ES41NA410	ES4 bag housing, size 4, 1Ó NPT I/O, bottom outlet, 304 SS, 100 psi, polished finish	$876.19
ESC3202NB410	ESC cartridge housing, holds 3- 20" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish	$344.39
ESC3302NB410	ESC cartridge housing, holds 3- 30" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish	$416.69
ESC3402NB410	ESC cartridge housing, holds 3- 40" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish	$471.95
ESC3402NB6L10	ESC cartridge housing, holds 3- 40" cartridges, 2" NPT I/O, side outlet, 316L SS, 100 psi, polished finish	$849.51
ESC4202NB410	ESC cartridge housing, holds 5- 20" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish	$416.69
ESC4302NB410	ESC cartridge housing, holds 5- 30" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish	$501.71
ESC5202NB410	ESC cartridge housing, holds 5- 20" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish	$416.69
ESC5302NB410	ESC cartridge housing, holds 5- 30" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish	$501.71

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER ORDER

PART #	DESCRIPTION	PRICE ($) PER UNIT
ESC5302NB6L10	ESC cartridge housing, holds 5- 30" cartridges, 2" NPT I/O, side outlet, 316L SS, 100 psi, polished finish	$903.09
ESC5402NB410	ESC cartridge housing, holds 5- 40" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish	$561.23
ESC5402NB6L10	ESC cartridge housing, holds 5- 40" cartridges, 2" NPT I/O, side outlet, 316L SS, 100 psi, polished finish	$1,010.22
ESC7202NB410	ESC cartridge housing, holds 7- 20" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish	$739.81
ESC7202NB6L10	ESC cartridge housing, holds 7- 20" cartridges, 2" NPT I/O, side outlet, 316L SS, 100 psi, polished finish	$1,331.66
ESC7302NB410	ESC cartridge housing, holds 7- 30" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish	$871.61
ESC7302NB6L10	ESC cartridge housing, holds 7- 30" cartridges, 2" NPT I/O, side outlet, 316L SS, 100 psi, polished finish	$1,568.91
ESC7402NB410	ESC cartridge housing, holds 7- 40" cartridges, 2" NPT I/O, side outlet, 304 SS, 100 psi, polished finish	$969.41
ESC7402NB6L10	ESC cartridge housing, holds 7- 40" cartridges, 2" NPT I/O, side outlet, 316L SS, 100 psi, polished finish	$1,744.93
KE100HE1	Polyester filter bag, 100 micron, glazed finish, high efficiency, size 1, carbon steel ring	$18.50
KE100K1S	Polyester filter bag, 100 micron, glazed finish, size 1, carbon steel ring	$3.68
KE100K2K	Polyester filter bag, 100 micron, glazed finish, size 2, FSI style flanged polyester ring	$7.17
KE100K2S	Polyester filter bag, 100 micron, glazed finish, size 2, carbon steel ring	$6.25
KE100K3S	Polyester filter bag, 100 micron, glazed finish, size 3, carbon steel ring	$2.32
KE100K4S	Polyester filter bag, 100 micron, glazed finish, size 4, carbon steel ring	$3.18
KE10K1S	Polyester filter bag, 10 micron, glazed finish, size 1, carbon steel ring	$3.68
KE10K2K	Polyester filter bag, 10 micron, glazed finish, size 2, FSI style flanged polyester ring	$7.17
KE10K2S	Polyester filter bag, 10 micron, glazed finish, size 2, carbon steel ring	$6.25
KE10K3S	Polyester filter bag, 10 micron, glazed finish, size 3, carbon steel ring	$2.32
KE10K4S	Polyester filter bag, 10 micron, glazed finish, size 4, carbon steel ring	$3.18
KE1HE2	Polyester filter bag, 100 micron, glazed finish, high efficiency, size 2, carbon steel ring	$36.59
KE1K1S	Polyester filter bag, 1 micron, glazed finish, size 1, carbon steel ring	$4.64
KE1K2S	Polyester filter bag, 1 micron, glazed finish, size 2, carbon steel ring	$8.10
KE200K2S	Polyester filter bag, 200 micron, glazed finish, size 2, carbon steel ring	$8.10
KE25HE2	Polyester filter bag, 25 micron, glazed finish, high efficiency, size 2, carbon steel ring	$34.72
KE25K1S	Polyester filter bag, 25 micron, glazed finish, size 1, carbon steel ring	$3.68
KE25K2S	Polyester filter bag, 25 micron, glazed finish, size 2, carbon steel ring	$6.25
KE25K3S	Polyester filter bag, 25 micron, glazed finish, size 3, carbon steel ring	$2.32
KE25K4S	Polyester filter bag, 25 micron, glazed finish, size 4, carbon steel ring	$3.18
KE50HE4	Polyester filter bag, 50 micron, glazed finish, high fficiency, size 4, carbon steel ring	$12.44
KE50K1S	Polyester filter bag, 50 micron, glazed finish, size 1, carbon steel ring	$3.68
KE50K2K	Polyester filter bag, 50 micron, glazed finish, size 2, FSI style flanged polyester ring	$7.17
KE50K2S	Polyester filter bag, 50 micron, glazed finish, size 2, carbon steel ring	$6.25

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER ORDER

PART #	DESCRIPTION	PRICE ($) PER UNIT
KE50K4S	Polyester filter bag, 50 micron, glazed finish, size 4, carbon steel ring	$3.18
KE5K1S	Polyester filter bag, 5 micron, glazed finish, size 1, carbon steel ring	$3.68
KE5K2K	Polyester filter bag, 5 micron, glazed finish, size 2, FSI style flanged polyester ring	$7.17
KE5K2S	Polyester filter bag, 5 micron, glazed finish, size 2, carbon steel ring	$6.25
KE5K2SS	Polyester filter bag, 5 micron, glazed finish, size 2, SS ring	$7.28
KE5K3S	Polyester filter bag, 5 micron, glazed finish, size 3, carbon steel ring	$2.32
KE5K4S	Polyester filter bag, 5 micron, glazed finish, size 4, carbon steel ring	$3.18
KEM100K2S	Polyester multifilament filter bag, 100 micron, size 2, carbon steel ring	$13.26
KEM150K1S	Polyester multifilament filter bag, 150 micron, size 1, carbon steel ring	$4.00
KEM200K1S	Polyester multifilament filter bag, 200 micron, size 1, carbon steel ring	$4.00
KEM200K2K	Polyester multifilament filter bag, 200 micron, size 2, FSI style flanged polyester ring	$7.00
KEM200K2S	Polyester multifilament filter bag, 200 micron, size 2, carbon steel ring	$6.08
KEM300K1S	Polyester multifilament filter bag, 300 micron, size 1, carbon steel ring	$4.00
KEM400K2K	Polyester multifilament filter bag, 400 micron, size 2, FSI style flanged polyester ring	$7.00
KEM600K1S	Polyester multifilament filter bag, 600 micron, size 1, carbon steel ring	$4.00
KO100K1S	Polypropylene filter bag, 100 micron, glazed finish, size 1, carbon steel ring	$4.19
KO100K2K	Polypropylene filter bag, 100 micron, glazed finish, size 2, FSI style flanged polyester ring	$8.63
KO100K2S	Polypropylene filter bag, 10 micron, glazed finish, size 2, carbon steel ring	$7.70
KO100K3S	Polypropylene filter bag, 100 micron, glazed finish, size 3, carbon steel ring	$3.29
KO100K4S	Polypropylene filter bag, 100 micron, glazed finish, size 4, carbon steel ring	$3.82
KO10K1S	Polypropylene filter bag, 10 micron, glazed finish, size 1, carbon steel ring	$4.19
KO10K2K	Polypropylene filter bag, 10 micron, glazed finish, size 2, FSI style flanged polyester ring	$8.63
KO10K2S	Polypropylene filter bag, 10 micron, glazed finish, size 2, carbon steel ring	$7.70
KO1HE2	Polypropylene filter bag, 1 micron, glazed finish, high efficiency, size 2, carbon steel ring	$38.06
KO1K2K	Polypropylene filter bag, 1 micron, glazed finish, size 2, FSI style flanged polyester ring	$10.49
KO1K2KO	Polypropylene filter bag, 1 micron, glazed finish, size 2, polypropylene ring	$9.60
KO1K2S	Polypropylene filter bag, 1 micron, glazed finish, size 2, carbon steel ring	$9.56
KO200K2K	Polypropylene filter bag, 200 micron, glazed finish, size 2, FSI style flanged polyester ring	$10.49
KO200K2S	Polypropylene filter bag, 200 micron, glazed finish, size 2, carbon steel ring	$9.56
KO25HE2	Polypropylene filter bag, 25 micron, glazed finish, high efficiency, size 2, carbon steel ring	$36.19
KO25K2K	Polypropylene filter bag, 25 micron, glazed finish, size 2, FSI style flanged polyester ring	$8.63
KO25K2S	Polypropylene filter bag, 25 micron, glazed finish, size 2, carbon steel ring	$7.70
KO25K3S	Polypropylene filter bag, 25 micron, glazed finish, size 3, carbon steel ring	$3.29
KO50K1S	Polypropylene filter bag, 50 micron, glazed finish, size 1, carbon steel ring	$4.19

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER ORDER

PART #	DESCRIPTION	PRICE ($) PER UNIT
KO50K2K	Polypropylene filter bag, 50 micron, glazed finish, size 2, FSI style flanged polyester ring	$8.63
KO50K2S	Polypropylene filter bag, 50 micron, glazed finish, size 2, carbon steel ring	$7.70
KO50K3S	Polypropylene filter bag, 50 micron, glazed finish, size 3, carbon steel ring	$3.29
KO50K4S	Polypropylene filter bag, 50 micron, glazed finish, size 4, carbon steel ring	$3.82
KO5K1S	Polypropylene filter bag, 5 micron, glazed finish, size 1, carbon steel ring	$4.19
KO5K2S	Polypropylene filter bag, 5 micron, glazed finish, size 2, carbon steel ring	$7.70
KO5K4S	Polypropylene filter bag, 5 micron, glazed finish, size 4, carbon steel ring	$3.82
MHP08ML2SS	Maximum high performance polypropylene filter bag, 8 micron, size 2, SS ring	$66.95
MHP15ML2SS	Maximum high performance polypropylene filter bag, 15 micron, size 2, SS ring	$66.95
MHP2.5ML2SS	Maximum high performance polypropylene filter bag, 2.5 micron, size 2, SS ring	$69.74
NMO100K1S	Nylon multifilament filter bag, 100 micron, size 1, carbon steel ring	$9.44
NMO100K2S	Nylon multifilament filter bag, 100 micron, size 2, carbon steel ring	$17.97
NMO100K3S	Nylon multifilament filter bag, 100 micron, size 3, carbon steel ring	$4.67
NMO150K2S	Nylon multifilament filter bag, 150 micron, size 2, carbon steel ring	$16.59
NMO150K4S	Nylon multifilament filter bag, 150 micron, size 4, carbon steel ring	$7.05
NMO200K2K	Nylon multifilament filter bag, 200 micron, size 2,FSI style flanged polyester ring	$15.57
NMO200K2S	Nylon multifilament filter bag, 200 micron, size 2, carbon steel ring	$14.61
NMO200K3S	Nylon multifilament filter bag, 200 micron, size 3, carbon steel ring	$4.01
NMO250K2S	Nylon multifilament filter bag, 250 micron, size 2, carbon steel ring	$13.94
NMO300K3S	Nylon multifilament filter bag, 300 micron, size 3, carbon steel ring	$3.65
NMO400K2K	Nylon multifilament filter bag, 400 micron, size 2,FSI style flanged polyester ring	$15.49
NMO400K2S	Nylon multifilament filter bag, 400 micron, size 2, carbon steel ring	$14.53
NMO400K3S	Nylon multifilament filter bag, 400 micron, size 3, carbon steel ring	$4.47
NMO600K4S	Nylon multifilament filter bag, 600 micron, size 4, carbon steel ring	$5.67
NMO800K1S	Nylon multifilament filter bag, 800 micron, size 1, carbon steel ring	$6.38
SH143330	Housing O-ring RO-3000/RO-3500	$0.41
SH143431	Water Supply Adapter	$15.11
SH144162	1/4" Vent Plug	$1.90
SH144165	Storage Tank, 3.2 Gallon RO-3000/RO-3500	$95.73
SH144229	Cartridge Coupler for Big Blue Cartridges	$3.21
SH144362	3/8" Drain Plug HDPE	$1.58
SH144368	SW-4 Wrench for Big Blue for 20" Housings	$4.60
SH144369	0-100 PSI Gauge	$24.93
SH144585	Diverter Valve - Double Barb	$52.96
SH144747	Cover, RO-3000/RP-3500	$4.65
SH144880	BW/BC Wrench for Big Clear, Big White Housings	$6.99
SH153114	#10 Big Blue White Sump HFPP	$37.03
SH154368	1/2" White Flat Cap w/o PR for Slim Line	$11.36

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

PART NUMBER ORDER

PART #	DESCRIPTION	PRICE ($) PER UNIT
SH154420	1/4" White Flat Cap w/o PR for Slim Line	$8.55
SH154421	3/4" White Flat Cap w/PR for Slim Line	$12.87
SH154423	3/4" White Flat Cap w/PR for Slim Line	$13.61
SH154428	3/4" Black Flat Cap w/PR for Slim Line	$13.27
SH154430	3/4" Black Flat Cap w/o PR for Slim Line	$13.38
SH154435	1/2" White Cap w/o PR for Slim Line	$12.50
SH154440	1/2" Black Flat Cap w/o PR for Slim Line	$11.64
SH157845	Circuit Board, RO-3500	$104.32
SH244538	1/4" X 36" White Vinyl Tubing	$1.54
SH244542	1/4" Chrome Elbow for SH244544	$9.68
SH244543	1/4" Chrome Elbow with 1/4" Barb Fitting	$5.46
SH244544	1/4" Chrome Spout	$9.48
SH244545	Diverter Valve - Single Barb	$17.79
SH244546	Diverter Valve Adapter Set 13/16"	$3.16
SH244547	Diverter Valve Adapter Set 15/16"	$3.16
SH244771	Faucet, Non-RO	$34.78
SH244818	Monitor Assembly for US-1500	$98.73
SH244820	Faucet, Model PP4RO-75	$59.85

Prices effective January 1, 2019 - Prices are subject to change without notice.

**This product or component conforms to one or more third-party certification standards for quality or performance. See the product's performance data sheet (PDS) for detailed certification claims.*

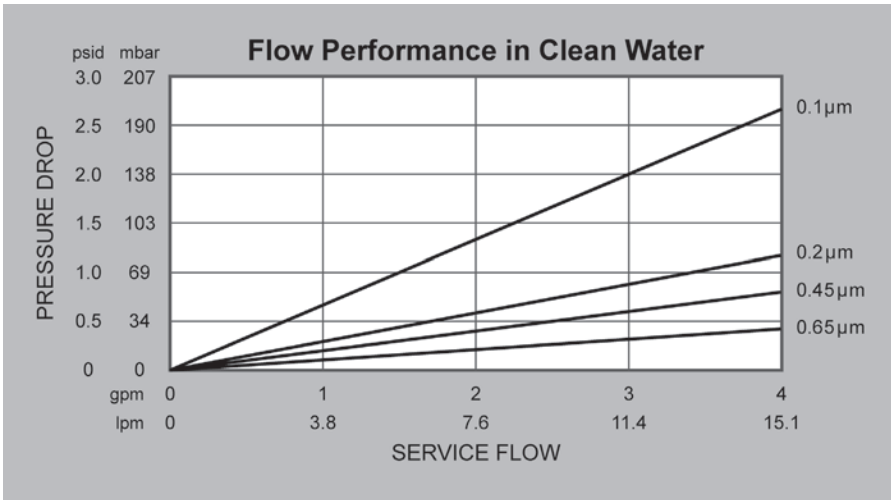
ABSOLUTE CARTRIDGES

XP SERIES PES MEMBRANE CARTRIDGES



Economy Pleated Polyethersulfone (PES) Membrane Cartridges

SWT's XP Series filter cartridges are economical pleated polyethersulfone membrane filters designed for general absolute filtration applications. The polyethersulfone construction ensures excellent chemical compatibility, high loading capacity, and high flow rates. Made in USA.



SPECIFICATIONS

Diameter
Outside: 2.75 inch (70 mm)
Inside: 1.25 inch (31 mm)

Effective Filtration Area
8.1 sq.ft. (0.75 sq.m)

Materials of Construction
Filter Media: Polyethersulfone membrane
Media Support: Polypropylene microfiber
Components: Polypropylene
Sealing: Thermal bonding

Max Operating Temperature (water)
180ºF (82ºC) @ 10 psid (0.69 bar)

Maximum Differential Pressure
Forward: 60 psid (4.14 bar)
Reverse: 30 psid (2.07 bar)

APPLICATIONS

- Solvent filtration
- Liquid clarification
- Recirculating liquids
- General water filtration
- Reagent grade chemicals
- Beverage/wine clarification
- RO/DI pre-filtration
- Waste water

ADVANTAGES

- All materials meet FDA requirements for food contact (21CFR)
- High flow rates/long on-stream life
- Broad chemical compatibility
- Meets USP Class VI-121ºC criteria
- Low differential pressures
- Thermally bonded
- Low extractables

PART NUMBER MATRIX

SO-XP-PES (MR) (A1) (A2) (NL) (SM)

(MR) Micron Rating
01 . . . . . 0.1 micron
02 . . . . . 0.2 micron
45 . . . . . 0.45 micron
65 . . . . . 0.65 micron

(A1) End Adapter #1
A. . . . . Flat end gasket
B . . . . . 120 internal o-ring
C. . . . . 213 internal o-ring
E . . . . . 222 o-ring
F . . . . . 226 o-ring

(A2) End Adapter #2
A. . . . . Flat end gasket
B . . . . . 120 internal o-ring
C. . . . . 213 internal o-ring
G . . . . . Closed end cap
H. . . . . Fin adapter

(NL) Nominal Length
10 . . . . . 10 inch (25.4 cm)
20 . . . . . 20 inch (50.8 cm)
30 . . . . . 30 inch (76.2 cm)
40 . . . . . 40 inch (101.6 cm)

(SM) Seal Material
B . . . . . Buna-N
E . . . . . EPDM
S . . . . . Silicone
V. . . . . Viton

Example: SO-XP-PES02AA30S is a 0.2 micron absolute rated filter cartridge, 30 inch nominal length, double open end (DOE) configuration with silicone seals.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1375
EFFECTIVE
NOVEMBER 2013

XP SERIES PES MEMBRANE CARTRIDGES

End Adapter Equivalent Codes



Without adapters



AA – Standard DOE
Code 1



JG – 020 int. o-ring / Closed end
Code 2 (M2)



EG – 222 o-ring / Closed end
Code 3 (M3)



FG – 226 o-ring / Closed end
Code 6 (M6)



FH – 226 o-ring / Fin adapter
Code 7 (M7)



EH – 222 o-ring / Fin adapter
Code 8 (M8)

Shipping Information

NOMINAL LENGTH			APPROX. SHIP. WT.	
INCH	CM	QUANTITY PER CARTON	LB	KG
10	25	6	5	2.3
20	51	6	8	3.8
30	76	6	13	5.9
40	102	6	17	7.7

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1375
EFFECTIVE
NOVEMBER 2013

ABSOLUTE CARTRIDGES

MP SERIES PES MEMBRANE CARTRIDGES



SPECIFICATIONS

Diameter
Outside: 2.75 inch (70 mm)
Inside: 1.25 inch (31 mm)

Effective Filtration Area
8.1 sq.ft. (0.75 sq.m)

Materials of Construction
Filter Media: Hydrophilic polyethersulfone membrane
Media Support: Polypropylene microfiber
Components: Polypropylene
Sealing: Thermal bonding

Max Operating Temperature (water)
180ºF (82ºC) @ 10 psid (0.7 bar)

Maximum Differential Pressure
Forward: 60 psi (4.1 bar) @ 70ºF (21ºC)
Reverse: 30 psi (2.1 bar) @ 70ºF (21ºC)

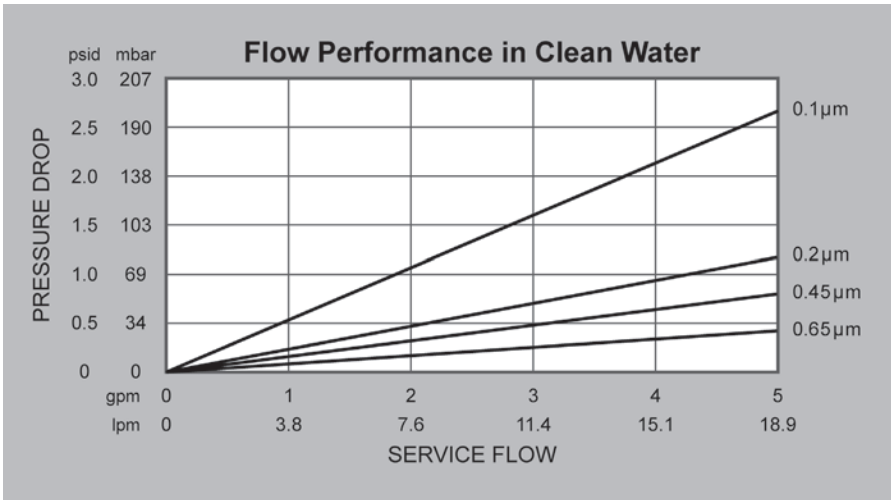
Integrity Testing
0.1 µm: ≤ 45 cc/min @ 50 psig (3.4 bar)
0.2 µm: ≤ 19 cc/min @ 30 psig (2.1 bar)
0.45 µm: ≤ 16 cc/min @ 20 psig (1.4 bar)
0.65 µm: ≤ 12 cc/min @ 13 psig (0.9 bar)

APPLICATIONS
- Beverage, pharmaceutical, and chemical industries
- Ink and dye filtration
- Acids, bases, and oxidants
- Process water
- Serums and tissue culture media

ADVANTAGES
- All materials meet FDA requirements for food contact (21CFR)
- High flow rates/long on-stream life
- Aqueous extracts contain less than 0.25 EU/ml
- Broad chemical & pH compatibility
- Meets USP Class VI-121ºC criteria
- Low protein binding
- Integrity tested
- Thermally bonded

Certified Pleated Polyethersulfone (PES) Membrane Cartridges

SWT's MP Series filter cartridges are shipped with Quality Assurance Certificates with a formal efficiency claim of >99.9% at the rated pore size. The polyethersulfone construction ensures excellent chemical compatibility, high loading capacity, and high flow rates. Made in USA.



PART NUMBER MATRIX

SO-MP-PES (MR) (A1) (A2) (NL) (SM)

(MR) Micron Rating
01 . . . . . 0.1 micron
02 . . . . . 0.2 micron
45 . . . . . 0.45 micron
65 . . . . . 0.65 micron

(A1) End Adapter #1
A. . . . . Flat end gasket
B . . . . . 120 internal o-ring
C. . . . . 213 internal o-ring
E . . . . . 222 o-ring
F . . . . . 226 o-ring
J . . . . . 020 internal o-ring
Q . . . . . 222 o-ring SS insert
Z . . . . . 226 o-ring SS insert

(A2) End Adapter #2
A. . . . . Flat end gasket
B . . . . . 120 internal o-ring
C. . . . . 213 internal o-ring
G . . . . . Closed end cap
H. . . . . Fin adapter

(NL) Nominal Length
10 . . . . . 10 inch (25.4 cm)
20 . . . . . 20 inch (50.8 cm)
30 . . . . . 30 inch (76.2 cm)
40 . . . . . 40 inch (101.6 cm)

(SM) Seal Material
B . . . . . Buna-N
E . . . . . EPDM
S . . . . . Silicone
T . . . . . Teflon Encapsulated (only 222 & 226)
V. . . . . Viton

Example: SO-MP-PES02AA30S is a 0.2 micron absolute rated filter cartridge, 30 inch nominal length, double open end (DOE) configuration with silicone seals.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1376
EFFECTIVE NOVEMBER 2013

ABSOLUTE CARTRIDGES

MP SERIES PES MEMBRANE CARTRIDGES

End Adapter Equivalent Codes



Without adapters



AA – Standard DOE
Code 1



JG – 020 int. o-ring / Closed end
Code 2 (M2)



EG – 222 o-ring / Closed end
Code 3 (M3)



FG – 226 o-ring / Closed end
Code 6 (M6)



FH – 226 o-ring / Fin adapter
Code 7 (M7)



EH – 222 o-ring / Fin adapter
Code 8 (M8)

Shipping Information

NOMINAL LENGTH			APPROX. SHIP. WT.	
INCH	CM	QUANTITY PER CARTON	LB	KG
10	25	18	15	6.8
20	51	16	24	10.9
30	76	6	13	5.9
40	102	6	17	7.7

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1376
EFFECTIVE
NOVEMBER 2013

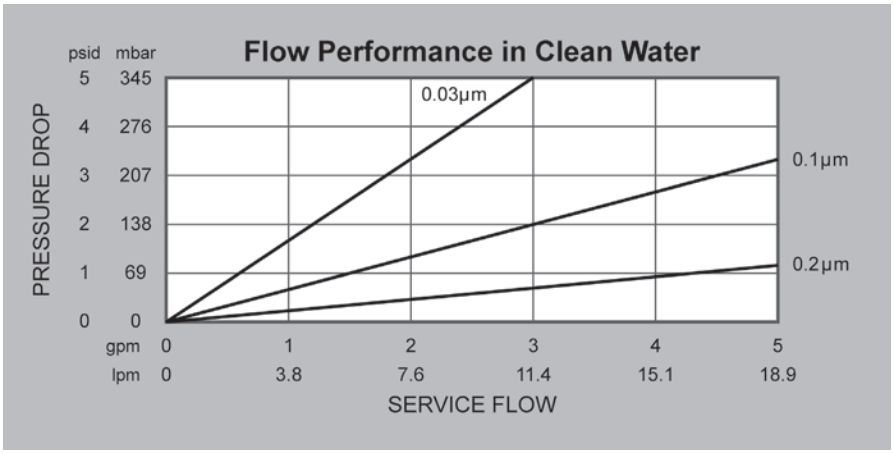
ABSOLUTE CARTRIDGES

MPE SERIES PES MEMBRANE CARTRIDGES



Certified Pleated Polyethersulfone (PES) Membrane Cartridges

SWT's MPE Series filter cartridges are shipped with Quality Assurance Certificates with a formal efficiency claim of >99.9% at the rated pore size. They incorporate a modified asymmetric polyethersulfone membrane with polypropylene supports and hardware for enhanced service life and cleanliness in UPDI water and other microelectronics applications. Made in USA.



SPECIFICATIONS

Diameter
Outside: 2.75 inch (70 mm)
Inside: 1.25 inch (31 mm)

Effective Filtration Area
8.1 sq.ft. (0.75 sq.m)

Materials of Construction
Filter Media: Hydrophilic polyethersulfone membrane
Media Support: Polypropylene microfiber
Components: Polypropylene

Max Operating Temperature (water)
180ºF (82ºC) @ 10 psid (0.7 bar)

Maximum Differential Pressure
Forward: 60 psi (4.1 bar) @ 70ºF (21ºC)
Reverse: 30 psi (2.1 bar) @ 70ºF (21ºC)

Integrity Testing
0.03 µm: ≤ 45 cc/min @ 50 psig (3.4 bar)
0.1 µm: ≤ 45 cc/min @ 50 psig (3.4 bar)
0.2 µm: ≤ 19 cc/min @ 30 psig (2.1 bar)

APPLICATIONS

- Ultrapure semiconductor water
- UPDI water pad
- High purity chemicals
- Point of use applications

ADVANTAGES

- Pre-rinsed cartridge
- Sterilizable by steam or autoclave
- All materials meet FDA requirements for food contact (21CFR)
- Aqueous extracts contain less than 0.25 EU/ml
- Broad chemical compatibility
- Meets USP24 Class VI-121°C criteria
- Passes MEM Elution Cytotoxicity Test
- The filters rinse to less than 5 ppb TOC and less than 5 ppb trace metals in 25 min at 2.5 gpm per 10 inch module in UPDI water.
- 100% Integrity tested

PART NUMBER MATRIX

SO-MPE-PES (MR) (A1) (A2) (NL) (SM)

(MR) Micron Rating
00 . . . . . 0.03 micron
01 . . . . . 0.1 micron
02 . . . . . 0.2 micron

(A1) End Adapter #1
A. . . . . Flat end gasket
B . . . . . 120 internal o-ring
C. . . . . 213 internal o-ring
E . . . . . 222 o-ring
F . . . . . 226 o-ring
J . . . . . 020 internal o-ring
Q . . . . . 222 o-ring SS insert
Z . . . . . 226 o-ring SS insert

(A2) End Adapter #2
A. . . . . Flat end gasket
B . . . . . 120 internal o-ring
C. . . . . 213 internal o-ring
G . . . . . Closed end cap
H. . . . . Fin adapter

(NL) Nominal Length
10 . . . . . 10 inch (25.4 cm)
20 . . . . . 20 inch (50.8 cm)
30 . . . . . 30 inch (76.2 cm)
40 . . . . . 40 inch (101.6 cm)

(SM) Seal Material
B . . . . . Buna-N
E . . . . . EPDM
S . . . . . Silicone
T . . . . . Teflon Encapsulated (only 222 & 226)
V. . . . . Viton

Example: SO-MPE-PES02AA30S is a 0.2 micron absolute rated filter cartridge, 30 inch nominal length, double open end (DOE) configuration with silicone seals.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1378
EFFECTIVE
JUNE 2014

MPE SERIES PES MEMBRANE CARTRIDGES

End Adapter Equivalent Codes



Without adapters



AA – Standard DOE
Code 1



JG – 020 int. o-ring / Closed end
Code 2 (M2)



EG – 222 o-ring / Closed end
Code 3 (M3)



FG – 226 o-ring / Closed end
Code 6 (M6)



FH – 226 o-ring / Fin adapter
Code 7 (M7)



EH – 222 o-ring / Fin adapter
Code 8 (M8)

Shipping Information

NOMINAL LENGTH			APPROX. SHIP. WT.	
INCH	CM	QUANTITY PER CARTON	LB	KG
10	25	18	15	6.8
20	51	16	24	10.9
30	76	6	13	5.9
40	102	6	17	7.7

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1378
EFFECTIVE
JUNE 2014

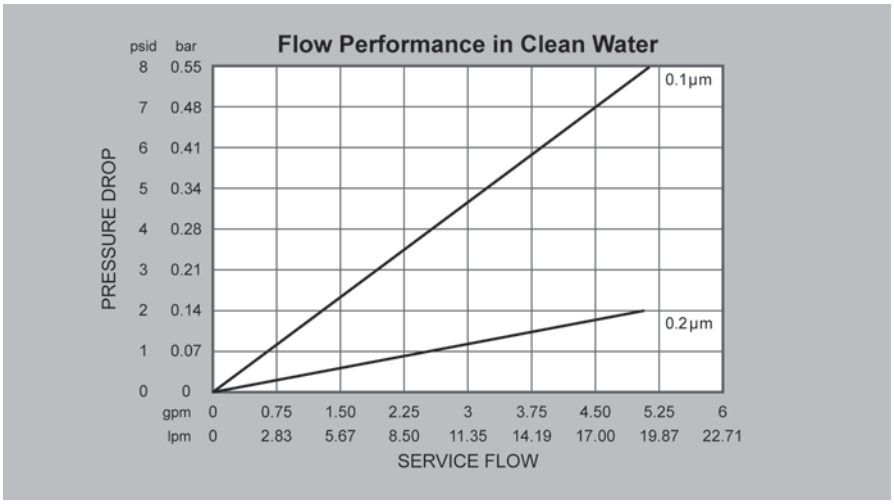
ABSOLUTE CARTRIDGES

PM SERIES PP MEMBRANE CARTRIDGES



Pleated Polypropylene (PP) Membrane Cartridges

SWT's PM Series filter cartridges purify high-purity solvents and chemicals for semiconductor and microelectronics applications. The 100% PP construction offers low extractables, long service life, and broad chemical compatibility. They are an economical alternative to PTFE membrane filters. Made in USA.



SPECIFICATIONS

Diameter
Outside: 2.75 inch (70 mm)
Inside: 1.25 inch (31 mm)

Effective Filtration Area
7.2 sq.ft. (0.67 sq.m)

Materials of Construction
Filter Media: Polypropylene membrane
Media Support: Polypropylene microfiber
Components: Polypropylene
Sealing: Thermal bonding

Max Operating Temperature (water)
140°F (60°C) @ 10 psid (0.7 bar)

Maximum Differential Pressure
Forward: 60 psi (4.1 bar) @ 70°F (21°C)
Reverse: 30 psi (2.1 bar) @ 70°F (21°C)

Integrity Testing
0.1 µm: ≤ 5 cc/min @ 40 psig (2.76 bar)
0.2 µm: ≤ 5 cc/min @ 30 psig (2.07 bar)

APPLICATIONS

- Etchants, photoresists, developers
- Ultrapure chemicals
- Solvents, acids, and bases
- Vent and process air

ADVANTAGES

- All materials meet FDA requirements for food contact (21CFR)
- Long service life
- Aqueous extracts contain less than 0.25 EU/ml
- Broad chemical compatibility
- Meets USP Class VI-121°C criteria
- Economical solution to PTFE
- Integrity testable
- Thermally bonded
- Sterilizable by steam or autoclave
- Low levels of non-volatile residues

PART NUMBER MATRIX

SO-PM-PP (MR) (A1) (A2) (NL) (SM)

(MR) Micron Rating
01 . . . . . 0.1 micron
02 . . . . . 0.2 micron

(A1) End Adapter #1
A. . . . . Flat end gasket
B . . . . . 120 internal o-ring
C. . . . . 213 internal o-ring
E . . . . . 222 o-ring
F . . . . . 226 o-ring
J . . . . . 020 internal o-ring
Q . . . . . 222 o-ring SS insert
Z . . . . . 226 o-ring SS insert

(A2) End Adapter #2
A. . . . . Flat end gasket
B . . . . . 120 internal o-ring
C. . . . . 213 internal o-ring
G . . . . . Closed end cap
H. . . . . Fin adapter

(NL) Nominal Length
10 . . . . . 10 inch (25.4 cm)
20 . . . . . 20 inch (50.8 cm)
30 . . . . . 30 inch (76.2 cm)
40 . . . . . 40 inch (101.6 cm)

(SM) Seal Material
B . . . . . Buna-N
E . . . . . EPDM
S . . . . . Silicone
T . . . . . Teflon Encapsulated (only 222 & 226)
V. . . . . Viton

Example: SO-PM-PP02AA30S is a 0.2 micron absolute rated filter cartridge, 30 inch nominal length, double open end (DOE) configuration with silicone seals.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1377
EFFECTIVE
NOVEMBER 2013

ABSOLUTE CARTRIDGES

PM SERIES PP MEMBRANE CARTRIDGES

End Adapter Equivalent Codes



Without adapters



AA – Standard DOE
Code 1



JG – 020 int. o-ring / Closed end
Code 2 (M2)



EG – 222 o-ring / Closed end
Code 3 (M3)



FG – 226 o-ring / Closed end
Code 6 (M6)



FH – 226 o-ring / Fin adapter
Code 7 (M7)



EH – 222 o-ring / Fin adapter
Code 8 (M8)

Shipping Information

NOMINAL LENGTH			APPROX. SHIP. WT.	
INCH	CM	QUANTITY PER CARTON	LB	KG
10	25	18	15	6.8
20	51	16	24	10.9
30	76	6	13	5.9
40	102	6	17	7.7

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

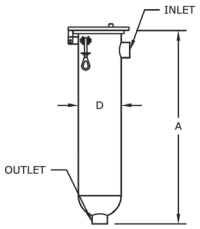
FORM 1377
EFFECTIVE
NOVEMBER 2013

BAG FILTERS

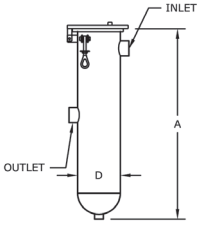
SINGLE BAG FILTER HOUSINGS

Single Bag Filter Housings *are built in standard sizes or can be custom engineered and fabricated to customer specifications. These bag filter housings are available in carbon steel, stainless steel 304, or stainless steel 316. Covers are easy to remove without any special tooling and the bags are easy to replace.*

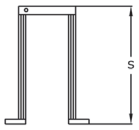




STYLE A



STYLE B



STAND

STANDARD FEATURES

- Carbon Steel Materials
- 165 psi @ 185°F Maximum
- 100 gpm Typical Flow Rate
- Micron Rated from 1 to 800
- 1/4 inch FNPT Vent Port
- 1 inch FNPT Drain Port
- 1/4 inch FNPT Gauge Port
- SS304 Perforated Basket
- Powder Coated
- Adjustable Stand
- Swing Bolt Lid
- Buna-N O-rings

OPTIONAL FEATURES

- Stainless Steel 304 or 316 Materials
- Maximum Design Pressure of 1440 psi and Higher
- Additional Connection Styles and Sizes
- Mesh Lined Basket
- Additional Coatings
- Davit Arm for Higher Pressure Unit
- ASME Code: All units will be designed, manufactured, tested, and stamped (upon request) in accordance with the ASME BPV Code, Sect. VIII Div. I using the latest edition and addenda.

Model	Flow Rate GPM	Inlet/Outlet Connections Inches	Basket Length Inches	Vessel Height Inches (A)	Vessel Dia. Inches (D)	Stand Height Inches (S)	Surface Area Sq. Ft.	Bag Size Number
FR-SBF-50-6-*	50	1" FNPT	6	18	4.5	14	0.5	3
FR-SBF-50-12-*	50	1" FNPT	12	24	4.5	14	1.0	4
FR-SBF-200-15-*	200	2" FNPT	15	30	8.6	22	2.2	1
FR-SBF-200-30-*	200	2" FNPT	30	45	8.6	22	4.4	2

* Housings are available in the following materials:
`CE'= Carbon Steel / Epoxy Coating; `SSEP'= #304 Stainless Steel Electropolished

Note: Continuous product improvements may change data and dimensions without notice.

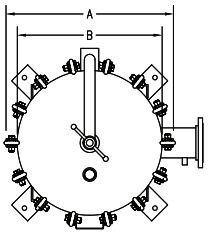
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

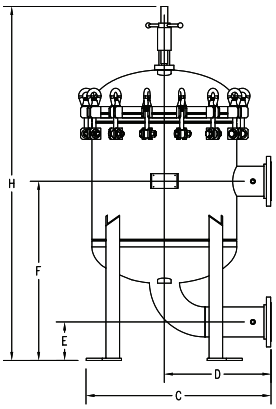
FORM 1244
EFFECTIVE
JUNE 2014

Bag Filters

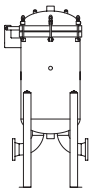
MULTIPLE BAG FILTER HOUSINGS



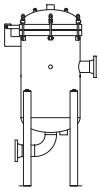
TOP VIEW



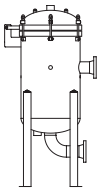
FRONT VIEW



STYLE A



STYLE B



STYLE C

Multiple Bag Filter Housings *are designed to contain several individual filter bags in a single steel vessel. These units handle high flow rates while occupying minimal floor space. They are manufactured in many sizes and configurations and serve as basket strainers or bag filters. In all cases, covers are easily removed and the baskets or bags are easily cleaned or replaced. The standard pressure rating for all models is 150 psi @ 150°F.*

STANDARD FEATURES

- Carbon Steel Materials
- Flanged In and Out Connections
- (2) 1/4 inch FNPT Gauge Ports
- 1/4 inch FNPT Vent Port
- 1 inch FNPT Drain Port
- SS304 Perforated Baskets
- Buna-N O-rings
- Powder Coated
- Fixed Legs

OPTIONAL FEATURES

- Stainless Steel 304 or 316 Materials
- Maximum Pressure of 1440 psi and Higher
- Additional Connection Styles and Sizes
- Mesh Lined Baskets
- Hydraulic, Hinged, or Hand Crank Lifting Mechanism
- Additional Coatings
- ASME Code: All units will be designed, manufactured, tested, and stamped (by request) in accordance with the ASME BPV Code, Sect. VIII Div. I using the latest edition and addenda.

Part Number	Number of Baskets	Typical Flow Rate GPM	Inlet/Outlet Diameter Inches	Dimensions, Inches							Surface Area Per Vessel Sq. Ft.	Bag Size Number
				A	B	C	D	E	F	H		
FR-MBF-3-*	3	300	3, 4	25	20	30.0	17.5	7.5	35.0	56.5	13.2	2
FR-MBF-4-*	4	400	3, 4	27	22	32.0	18.5	7.5	35.5	57.5	17.6	2
FR-MBF-5-*	5	500	3, 4, 6	29	24	34.0	19.5	8.5	40.0	73.5	22.0	2
FR-MBF-6-*	6	600	3, 4, 6	31	26	36.0	20.5	8.5	40.5	74.5	26.4	2
FR-MBF-7-*	7	700	4, 6, 8	33	28	38.5	22.0	10.0	45.0	79.5	30.8	2
FR-MBF-8-*	8	800	4, 6, 8	37	32	42.5	24.0	10.0	46.0	81.5	35.2	2
FR-MBF-9-*	9	900	6, 8	39	34	44.5	25.0	10.0	46.5	82.5	39.6	2
FR-MBF-10-*	10	1,000	8, 10	41	36	46.5	26.0	11.0	51.5	88.0	44.0	2
FR-MBF-11-*	11	1,100	8, 10	41	36	46.5	26.0	11.0	51.5	88.0	48.4	2
FR-MBF-12-*	12	1,200	8, 10	43	38	48.5	27.0	11.0	52.0	89.0	52.8	2
FR-MBF-14-*	14	1,400	8, 10	45	40	50.5	28.0	11.0	52.5	90.0	61.6	2
FR-MBF-16-*	16	1,600	8, 10, 12	47	42	52.5	29.0	12.5	57.5	95.5	70.4	2
FR-MBF-18-*	18	1,800	8, 10, 12	50	44	54.5	30.0	12.5	58.0	96.0	79.2	2
FR-MBF-21-*	21	2,100	10, 12	52	46	56.5	31.0	12.5	58.5	97.0	92.4	2
FR-MBF-22-*	22	2,200	10, 12	54	48	58.5	32.0	12.5	59.0	98.0	96.8	2
FR-MBF-24-*	24	2,400	10, 12	56	50	60.5	33.0	12.5	59.5	99.0	105.6	2
FR-MBF-32-*	32	3,200	12, 14	64	58	69.0	37.5	13.5	65.5	107.0	140.8	2

* Housings are available in the following materials:
'C'= Carbon Steel; 'CE'= Carbon Steel / Epoxy Coating; 'SS'= #304 Stainless Steel; 'SSEP'= #304 Stainless Steel Electropolished

Note: Continuous product improvements may change data and dimensions without notice.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1244
EFFECTIVE
JUNE 2014

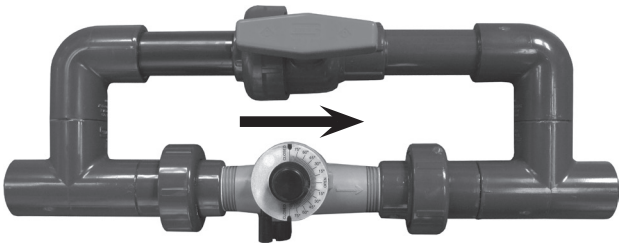
Section 10

Chemicals & Equipment

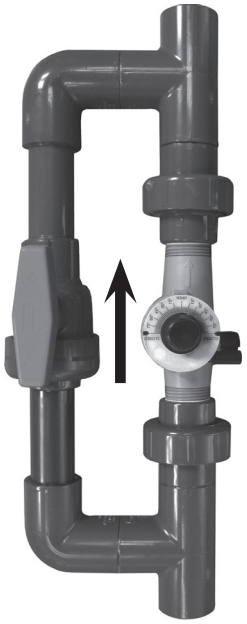
SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

AIR INJECTORS

MICRONIZER WITH BYPASS LOOP



HORIZONTAL INSTALLATION



VERTICAL INSTALLATION

SWT's Air Injector Assemblies *combine a Micronizer venturi air injector with a PVC bypass loop to save time and energy in the field. Air injection is the chemical-free way to oxidize dissolved iron and sulfide in the water. These non-corrosive assemblies are designed for well water applications and can be used in combination with Filterease™, Carbon, and Metalease™ Filter Systems to greatly enhance their performance.*

These assemblies are normally installed inline between the pump and the well tank, and draw air into the system as the pump cycles. The Micronizer features easy disassembly using true union connectors for scheduled cleaning.

- Designed for residential well applications
- 3/4 inch or 1 inch socket connections
- Great companion piece for SWT MetalEase™ Filters or Magnum Accelerators™
- Easy to clean PVC Micronizer venturi air injector
- Simple installation and operation
- Fully adjustable settings by hand
- No moving parts to wear out

Part Number	Description	Operating Pressure	Flow Range	Connection
MICRO-34	Air Injector Assembly, PVC	10 to 60 PSI	5 to 15 GPM	3/4 inch Socket
MICRO-1	Air Injector Assembly, PVC	10 to 60 PSI	5 to 15 GPM	1 inch Socket
IM-SSF1	Micronizer Venturi Air Injector, PVC	10 to 60 PSI	5 to 15 GPM	1 inch MNPT
WH-AV125-SO	Automatic Air Vent (optional)	—	—	1/8 inch MNPT

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1215
EFFECTIVE
JUNE 2016

AIR INJECTORS

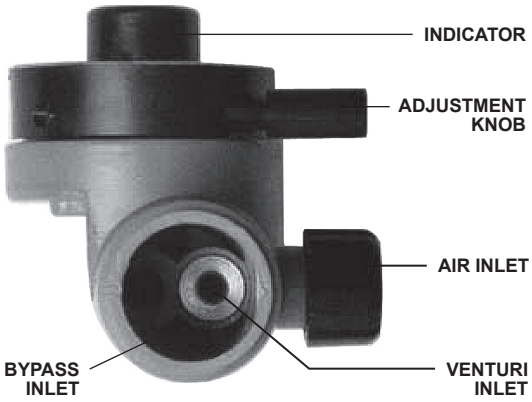
MICRONIZER VENTURI AIR INJECTOR

Micronizer is designed to be installed in the water line just prior to the inlet of the hydropneumatic tank it serves. This mechanism is a venturi that draws air into the water line through the air inlet/check valve combination to continually charge the water with air. Excess air in the tank is relieved through an AVC assembly or an optional air vent installed in the tank.

Micronizer is shipped with the indicator arrow set at 15 degrees on the dial. This slightly closes the larger of the two open holes inside to create a pressure differential that allows air to be drawn into the water line. The amount of air drawn in and draw time is adjusted with the adjustment knob.

Do not assume a 30 degree setting means a 30% suction time.

Properly installed and adjusted, Micronizer will draw air for 30 to 50% of the pump run time. For example, if the pump run time is one minute, a suction can be felt at the air inlet hole for 20 to 30 seconds.



Part Number: IM-SSF1
Pressure Range: 10 to 60 psi
Flow Range: 5 to 15 gpm
Connection Size: 1 inch MNPT
Height: 3.25 inch
Width: 3 inch
Length: 5.5 inch

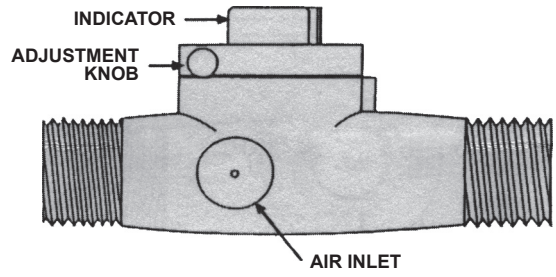
INSTALLATION

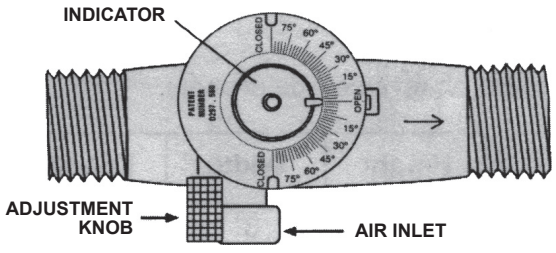
Location: Install in the water line just before going into the hydropneumatic tank.

Note: Prior to installation, be sure the pump delivers a minimum of 5 gpm.

1. Install Micronizer in the water line between the pump and the tank, or just ahead of the tank.
2. Turn on the pump and let the pump cycle several times.
3. Place a finger over the air inlet hole and time the length of suction. The goal is to achieve suction for 30 to 50% of the pump run time.

   Example: If the pump run time is one minute, suction through the air inlet hole should be felt for 20 to 30 seconds. Adjust upwards to increase, downwards to decrease.
4. Following installation and adjustment, several days may be required for sufficient air to enter the tank and operate most efficiently.





SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1215
EFFECTIVE
JUNE 2013

AIR INJECTORS

MACHINED PVC AIR INJECTORS



SWT Machined PVC Air Injectors *are easily installed inline before filter systems when the percentage of dissolved oxygen content may be too low for effective oxidation.*

These injectors operate with service flow as low as 1½ gpm. They draw air by a venturi effect and inject it into the water system. Rated working flows up to 15 gpm.

Machined from solid PVC, this injector is durable and resistant to chemicals, rust, and corrosion. The air injector has an adjustable bypass for fine adjustment of the air/volume ratio. The venturi and all other components are easily disassembled for cleaning.

Part Number: SM-EDUC-1-PVC
Connection Size: 1 inch FNPT

Part Number: SM-EDUC-1BSPT-PVC
Connection Size: 1 inch BSPT

Materials of Contruction: *PVC, Brass, SS316, Talc-filled PP with Buna Seals and Teflon Tape*

Flow Range: *0 to 15 gpm*

INSTALLATION

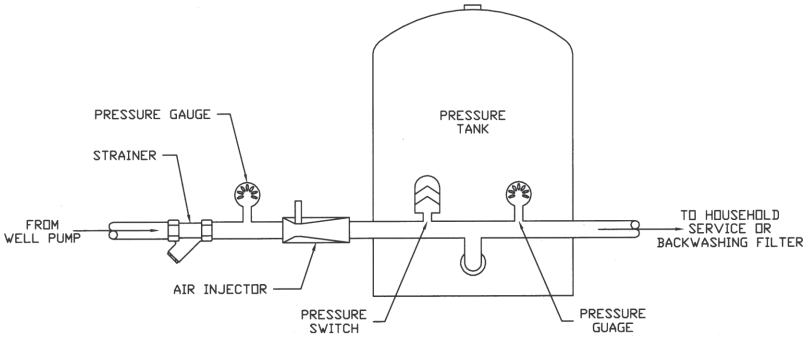


Table 1

Bypass Screw Position	Continuous Flow Pressure Range		
	40 to 20 psi	50 to 30 psi	60 to 40 psi
Approximate Flow Rate in US Gallons per Minute			
Closed (0 turns out)	2	2	2
1/4 Open (2.5 turns out)	4	4	4
1/2 Open (5 turns out)	8	9	9
3/4 Open (7.5 turns out)	11	12	12
Full Open (10 turns out)	15	16	16

1. Be sure the well pump has the capacity necessary for proper operation. 3 gpm, 60 psi are the minimum requirements for a draw of 1 cu.ft. of air per hour with a holding tank pressure of 30 psi.
2. Be sure to place the air injector before the pressure tank, (between the well pump and the pressure tank).
3. Set the pressure switch for at least a 20 psi differential between pump start and pump stop.
4. Adjust the bypass screw so that the unit draws air for the first one third of the pump cycle. Refer to Table 1.
5. Install a strainer ahead of the unit to prevent particles from lodging in the nozzle.
6. Install pressure gauges before and after air injector for adjusting and maintaining necessary pressures.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION
FORM 1215
EFFECTIVE JANUARY 2018

CHEMICAL AND STATIC MIXERS

INLINE STATIC MIXERS

SWT's Inline Static Mixers are designed for residential and commercial water treatment applications that are required to treat water with any type of chemical feed, including air and ozone.



BENEFITS

- Each unit is compact for easy installation.
- The static mixing design has **no moving parts** for increased durability.
- In most cases, costly retention tanks are not necessary. If retention tanks are used, the static mixer insures an effective application.
- Will immediately and thoroughly mix any combination of gas or liquid.
- Eliminates costly supplemental equipment in most applications.
- Cost effective way to improve any existing application.
- Durable PVC construction with polypropylene internal component.

APPLICATIONS

Chemical and water mixing for treatment of:

- Iron and manganese
- Hydrogen sulfide
- Corrosion control
- Tannin
- pH control
- Polymers and flocculants

These inline static mixers have completely revolutionized the chemical feed portion of the water treatment industry. These mixers will enhance any type of chemical feed, including air injection and ozone. The PVC units mix the chemicals in several stages to insure proper mixing while only using energy from the water flow. They also allow for the gases (oxygen) already in solution to help during the process. After the chemical feed enters the inline static mixer, it becomes extremely turbulent as it passes through the mixing chamber, allowing the chemicals to become thoroughly mixed with the water. As a result, the use of a contact tank is reduced or eliminated.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1195
EFFECTIVE
OCTOBER 2021

CHEMICAL AND STATIC MIXERS

INLINE STATIC MIXERS



PICTURED LEFT TO RIGHT:
NE-MA-4CLR, NE-MA-6, NE-MA-1, NE-MA-7

These economical, easy-to-install, Inline Static Mixers are built for a long, maintenance-free life with a PVC outer construction and a polypropylene baffle. The static mixing design with NO moving parts insures an immediate and thorough mix of any combination of gas or liquid. These chemical mixers can eliminate the need for retention tanks in many applications.

APPLICATIONS

- Boilers
- Laundries
- Car washes
- Cooling towers
- Blending
- Agriculture
- Disinfection
- Waste water treatment
- Pools, spas, and fountains
- Pre- and post- reverse osmosis treatment
- Chemical and water mixing for treatment of:
  Iron and manganese, tannin, hydrogen sulfide, pH control, corrosion control, polymers and flocculants

Part Number	Tube Color	Recommended Flow Rate GPM	Inlet / Outlet Pipe Size	Injection Port	Max. Temp./ Pressure	Dimensions Inches
Residential Sized, High Efficiency Inline Mixers						
NE-MA-1	Gray	2 to 20	3/4" FNPT	1/2" FNPT *	110°F / 100 PSI	2 x 12.5
NE-MA-1CLR	Clear	2 to 20	3/4" FNPT	1/2" FNPT *	110°F / 100 PSI	2 x 12.5
NE-MA-4	Gray	3 to 25	1" FNPT	1/2" FNPT *	110°F / 100 PSI	2 x 12.5
NE-MA-4CLR	Clear	3 to 25	1" FNPT	1/2" FNPT *	110°F / 100 PSI	2 x 12.5
NE-MA-6C	Gray	5 to 30	1-1/4" Socket	1/2" FNPT *	110°F / 100 PSI	2 x 11

* Assembled with 1/2 inch FNPT injection port and a 1/2 x 1/4 inch NPT reducer is included.

Inline Static Mixers — Low Pressure Drop (No Injector Port)						
NE-MA-6	Gray	5 to 30	1-1/4" Socket	N/A	110°F / 100 PSI	2 x 11
NE-MA-6-U40 *	Gray	5 to 30	1-1/4" Socket	N/A	110°F / 100 PSI	2 x 11
NE-MA-6-U80 **	Gray	5 to 30	1-1/4" Socket	N/A	110°F / 100 PSI	2 x 11
NE-MA-7	Clear	20 to 85	2" Union Socket Weld	N/A	110°F / 100 PSI	4.125 x 14

* With Sch. 40 PVC Unions added.
** With Sch. 80 PVC Unions added.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1195
EFFECTIVE
OCTOBER 2021

Chemical Feed Pumps

SINGLE HEAD FIXED OUTPUT PUMPS



SWT's single head fixed output metering pump is built with two detachable components; the motor and the pump head. The fixed rate pump does not have an output adjustment. The output is determined by the rpm of the motor gears and the size of the pump tube. The motor's output shaft rotates at a fixed rpm which drives the roller assembly within the pump head.

SPECIFICATIONS

Max Operating Temperature:
125°F (52°C)
Max Suction Lift:
25 ft (7.6 m) vertical lift, based on water
Motor Type:
1/30 HP, shaded pole, class B
Duty Cycle:
Continuous
Motor Voltage (Amp Draw):
120V 60Hz 1PH (1.7)
220V 60Hz 1PH (0.9)
230V 50Hz 1PH (0.9)
250V 50Hz 1PH (0.9)
Power Cord Type:
SJTOW
Power Cord Plug End:
120V 60Hz NEMA 5/15
220V 60Hz NEMA 6/15
230V 50Hz CEE 7/VII
250V 50Hz CEE 7/VII

Part Number	Tube Size	Output		Connection Size
		GPD @ 60 Hz	LPD @ 50 Hz	
Single Head Fixed — 26 rpm — Low Pressure: 0 to 25 psi (1.7 bar)				
TS45MP1	#1	3	9.1	1/4 inch
TS45MP2	#2	10	30.3	1/4 inch
TS45MP3	#3	22	66.6	1/4 inch
TS45MP4	#4	35	106.0	1/4 inch
TS45MP5	#5	50	151.4	1/4 inch
TS45MP1-3	#1	3	9.1	3/8 inch
TS45MP2-3	#2	10	30.3	3/8 inch
TS45MP3-3	#3	22	66.6	3/8 inch
TS45MP4-3	#4	35	106.0	3/8 inch
TS45MP5-3	#5	50	151.4	3/8 inch
Single Head Fixed — 26 rpm — High Pressure: 0 to 100 psi (6.9 bar)				
TS45MPHP2	#1	3	9.1	1/4 inch
TS45MPHP10	#2	10	30.3	1/4 inch
TS45MPHP22	#7	22	66.6	1/4 inch
TS45MPHP2-3	#1	3	9.1	3/8 inch
TS45MPHP10-3	#2	10	30.3	3/8 inch
TS45MPHP22-3	#7	22	66.6	3/8 inch
Single Head Fixed — 44 rpm — Low Pressure: 0 to 25 psi (1.7 bar)				
TS85MP1	#1	5	15.1	1/4 inch
TS85MP2	#2	17	51.5	1/4 inch
TS85MP3	#3	40	121.1	1/4 inch
TS85MP4	#4	60	181.7	1/4 inch
TS85MP5	#5	85	257.4	1/4 inch
TS85MP1-3	#1	5	15.1	3/8 inch
TS85MP2-3	#2	17	51.5	3/8 inch
TS85MP3-3	#3	40	121.1	3/8 inch
TS85MP4-3	#4	60	181.7	3/8 inch
TS85MP5-3	#5	85	257.4	3/8 inch
Single Head Fixed — 44 rpm — High Pressure: 0 to 100 psi (6.9 bar)				
TS85MPHP5	#1	5	15.1	1/4 inch
TS85MPHP17	#2	17	51.5	1/4 inch
TS85MPHP40	#7	40	121.1	1/4 inch
TS85MPHP5-3	#1	5	15.1	3/8 inch
TS85MPHP17-3	#2	17	51.5	3/8 inch
TS85MPHP40-3	#7	40	121.1	3/8 inch

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1154
EFFECTIVE
OCTOBER 2014

Chemical Feed Pumps

DOUBLE HEAD FIXED OUTPUT PUMPS



SWT's double head fixed output metering pump is built with three detachable components; the motor and two pump heads. The fixed rate pump does not have an output adjustment. The output is determined by the rpm of the motor gears and the size of the pump tubes in both heads. The motor's output shaft rotates at a fixed rpm which drives the roller assembly within the pump head.

SPECIFICATIONS

Max Operating Temperature:
125°F (52°C)
Max Suction Lift:
25 ft (7.6 m) vertical lift, based on water
Motor Type:
1/30 HP, shaded pole, class B
Duty Cycle:
Continuous
Motor Voltage (Amp Draw):
120V 60Hz 1PH (1.7)
220V 60Hz 1PH (0.9)
230V 50Hz 1PH (0.9)
250V 50Hz 1PH (0.9)
Power Cord Type:
SJTOW
Power Cord Plug End:
120V 60Hz NEMA 5/15
220V 60Hz NEMA 6/15
230V 50Hz CEE 7/VII
250V 50Hz CEE 7/VII

Part Number	Tube Size	Output		Connection Size
		GPD @ 60 Hz	LPD @ 50 Hz	
Double Head Fixed — 26 rpm — Low Pressure: 0 to 25 psi (1.7 bar)				
TS100DMP1	#1	6	18.2	1/4 inch
TS100DMP2	#2	20	60.6	1/4 inch
TS100DMP3	#3	44	133.2	1/4 inch
TS100DMP4	#4	70	212.0	1/4 inch
TS100DMP5	#5	100	302.8	1/4 inch
TS100DMP1-3	#1	6	18.2	3/8 inch
TS100DMP2-3	#2	20	60.6	3/8 inch
TS100DMP3-3	#3	44	133.2	3/8 inch
TS100DMP4-3	#4	70	212.0	3/8 inch
TS100DMP5-3	#5	100	302.8	3/8 inch
Double Head Fixed — 26 rpm — High Pressure: 0 to 100 psi (6.9 bar)				
TS100DMPHP5	#1	6	18.2	1/4 inch
TS100DMPHP20	#2	20	60.6	1/4 inch
TS100DMPHP5-3	#1	6	18.2	3/8 inch
TS100DMPHP20-3	#2	20	60.6	3/8 inch
Double Head Fixed — 44 rpm — Low Pressure: 0 to 25 psi (1.7 bar)				
TS170DMP1	#1	10	30.3	1/4 inch
TS170DMP2	#2	34	102.6	1/4 inch
TS170DMP3	#3	80	242.2	1/4 inch
TS170DMP4	#4	120	363.4	1/4 inch
TS170DMP5	#5	170	514.8	1/4 inch
TS170DMP1-3	#1	10	30.3	3/8 inch
TS170DMP2-3	#2	34	102.6	3/8 inch
TS170DMP3-3	#3	80	242.2	3/8 inch
TS170DMP4-3	#4	120	363.4	3/8 inch
TS170DMP5-3	#5	170	514.8	3/8 inch
Double Head Fixed — 44 rpm — High Pressure: 0 to 100 psi (6.9 bar)				
TS170DMPHP9	#1	10	30.3	1/4 inch
TS170DMPHP34	#2	34	102.6	1/4 inch
TS170DMPHP9-3	#1	10	30.3	3/8 inch
TS170DMPHP34-3	#2	34	102.6	3/8 inch

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1154
EFFECTIVE
OCTOBER 2014

Chemical Feed Pumps

SINGLE HEAD ADJUSTABLE OUTPUT PUMPS



SWT's single head adjustable metering pump is built with three detachable components; the motor, feed rate control, and pump head. The output is determined by three factors; the rpm of the motor gears, the percentage setting on the feed rate control, and the size of the pump tube. The motor shaft rotates at a fixed rpm, which drives the feed rate control to intermittently engage the roller assembly within the pump head according to the setting on the external dial ring. The dial ring is labeled L to 10 and has a 20:1 turndown. **See Tube Output Tables on the flip side of this page.**

SPECIFICATIONS

Max Operating Temperature:
125°F (52°C)
Max Suction Lift:
25 ft (7.6 m) vertical lift, based on water
Motor Type:
1/30 HP, shaded pole, class B
Duty Cycle:
Continuous
Motor Voltage (Amp Draw):
120V 60Hz 1PH (1.7)
220V 60Hz 1PH (0.9)
230V 50Hz 1PH (0.9)
250V 50Hz 1PH (0.9)
Power Cord Type:
SJTOW
Power Cord Plug End:
120V 60Hz NEMA 5/15
220V 60Hz NEMA 6/15
230V 50Hz CEE 7/VII
250V 50Hz CEE 7/VII

Part Number	Tube Size	Output		Connection Size
		GPD @ 60 Hz	LPD @ 50 Hz	
Single Head Adjustable — 26 rpm — Low Pressure: 0 to 25 psi (1.7 bar)				
TS45M1	#1	0.2 to 3	0.6 to 9.1	1/4 inch
TS45M2	#2	0.5 to 10	1.5 to 30.3	1/4 inch
TS45M3	#3	1.1 to 22	3.3 to 66.6	1/4 inch
TS45M4	#4	1.7 to 35	5.1 to 106.0	1/4 inch
TS45M5	#5	2.5 to 50	7.6 to 151.4	1/4 inch
TS45M1-3	#1	0.2 to 3	0.6 to 9.1	3/8 inch
TS45M2-3	#2	0.5 to 10	1.5 to 30.3	3/8 inch
TS45M3-3	#3	1.1 to 22	3.3 to 66.6	3/8 inch
TS45M4-3	#4	1.7 to 35	5.1 to 106.0	3/8 inch
TS45M5-3	#5	2.5 to 50	7.6 to 151.4	3/8 inch
Single Head Adjustable — 26 rpm — High Pressure: 0 to 100 psi (6.9 bar)				
TS45MHP2	#1	0.2 to 3	0.6 to 9.1	1/4 inch
TS45MHP10	#2	0.5 to 10	1.5 to 30.3	1/4 inch
TS45MHP22	#7	1.1 to 22	3.3 to 66.6	1/4 inch
TS45MHP2-3	#1	0.2 to 3	0.6 to 9.1	3/8 inch
TS45MHP10-3	#2	0.5 to 10	1.5 to 30.3	3/8 inch
TS45MHP22-3	#7	1.1 to 22	3.3 to 66.6	3/8 inch
Single Head Adjustable — 44 rpm — Low Pressure: 0 to 25 psi (1.7 bar)				
TS85M1	#1	0.3 to 5	0.9 to 15.1	1/4 inch
TS85M2	#2	0.8 to 17	2.4 to 51.5	1/4 inch
TS85M3	#3	2.0 to 40	6.1 to 121.1	1/4 inch
TS85M4	#4	3.0 to 60	9.1 to 181.7	1/4 inch
TS85M5	#5	4.3 to 85	13.0 to 257.4	1/4 inch
TS85M1-3	#1	0.3 to 5	0.9 to 15.1	3/8 inch
TS85M2-3	#2	0.8 to 17	2.4 to 51.5	3/8 inch
TS85M3-3	#3	2.0 to 40	6.1 to 121.1	3/8 inch
TS85M4-3	#4	3.0 to 60	9.1 to 181.7	3/8 inch
TS85M5-3	#5	4.3 to 85	13.0 to 257.4	3/8 inch
Single Head Adjustable — 44 rpm — High Pressure: 0 to 100 psi (6.9 bar)				
TS85MHP5	#1	0.3 to 5	0.9 to 15.1	1/4 inch
TS85MHP17	#2	0.8 to 17	2.4 to 51.5	1/4 inch
TS85MHP40	#7	2.0 to 40	6.1 to 121.1	1/4 inch
TS85MHP5-3	#1	0.3 to 5	0.9 to 15.1	3/8 inch
TS85MHP17-3	#2	0.8 to 17	2.4 to 51.5	3/8 inch
TS85MHP40-3	#7	2.0 to 40	6.1 to 121.1	3/8 inch

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1153
EFFECTIVE
OCTOBER 2014

CHEMICAL FEED PUMPS

SINGLE HEAD ADJUSTABLE OUTPUT PUMPS

Tube Output — 26 rpm Models — Gallons per Day @ 60 Hz

Model	Tube Size	Approximate Output In Gallons Per Day (24 Hours) @ 60 Hz										
		L	1	2	3	4	5	6	7	8	9	10
TS45	#1	0.2	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0
	#2	0.5	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
	#3 #7	1.1	2.2	4.4	6.6	8.8	11.0	13.2	15.4	17.6	19.8	22.0
	#4	1.7	3.5	7.0	10.5	14.0	17.5	21.0	24.5	28.0	31.5	35.0
	#5	2.5	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0

Tube Output — 26 rpm Models — Liters per Day @ 50 Hz

Model	Tube Size	Approximate Output In Liters Per Day (24 Hours) @ 50 Hz										
		L	1	2	3	4	5	6	7	8	9	10
TS45	#1	0.6	0.9`	1.8	2.7	3.6	4.5	5.5	6.4	7.3	8.2	9.1
	#2	1.5	3.0	6.1	9.1	12.1	15.1	18.2	21.2	24.2	27.3	30.3
	#3 #7	3.3	6.6	13.3	20.0	26.6	33.3	40.0	46.6	53.3	60.0	66.6
	#4	5.1	10.6	21.2	31.8	42.4	53.0	63.6	74.2	84.8	95.4	106.0
	#5	7.6	15.1	30.3	45.4	60.6	75.7	90.8	106.0	121.1	136.3	151.4

Tube Output — 44 rpm Models — Gallons per Day @ 60 Hz

Model	Tube Size	Approximate Output In Gallons Per Day (24 Hours) @ 60 Hz										
		L	1	2	3	4	5	6	7	8	9	10
TS85	#1	0.3	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
	#2	0.8	1.7	3.4	5.1	6.8	8.5	10.2	11.9	13.6	15.3	17.0
	#3 #7	2.0	4.0	8.0	12.0	16.0	20.0	24.0	28.0	32.0	36.0	40.0
	#4	3.0	6.0	12.0	18.0	24.0	30.0	36.0	42.0	48.0	54.0	60.0
	#5	4.3	8.5	17.0	25.5	34.0	42.5	51.0	59.5	68.0	76.5	85.0

Tube Output — 44 rpm Models — Liters per Day @ 50 Hz

Model	Tube Size	Approximate Output In Liters Per Day (24 Hours) @ 50 Hz										
		L	1	2	3	4	5	6	7	8	9	10
TS85	#1	0.9	1.5	3.0	4.5	6.1	7.6	9.1	10.6	12.1	13.6	15.1
	#2	2.4	5.1	10.3	15.4	20.6	25.7	30.9	36.0	41.2	46.3	51.5
	#3 #7	6.1	12.1	24.2	36.3	48.5	60.6	76.7	84.8	96.9	109.0	121.1
	#4	9.1	18.2	36.3	54.5	76.7	90.8	109.0	127.2	145.3	163.5	181.7
	#5	13.0	25.7	51.5	77.2	103.0	128.7	154.4	180.0	205.9	231.6	257.4

NOTE: The above information is solely intended for use as a guide. The output data is an approximation based on pumping water under a controlled testing environment. Many variables can affect the output of the pump. The manufacturer recommends that all metering pumps undergo field calibration by means of analytical testing to confirm their outputs.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1153
EFFECTIVE
OCTOBER 2014

Chemical Feed Pumps

DOUBLE HEAD ADJUSTABLE OUTPUT PUMPS



SWT's double head adjustable metering pump is built with four detachable components; the motor, feed rate control, and two pump heads. The output is determined by three factors; the rpm of the motor gears, the percentage setting on the feed rate control, and the size of the pump tubes in both heads. The motor shaft rotates at a fixed rpm, which drives the feed rate control to intermittently engage the roller assembly within the pump head according to the setting on the external dial ring. The dial ring is labeled L to 10 and has a 20:1 turndown.

SPECIFICATIONS

Max Operating Temperature:
125°F (52°C)
Max Suction Lift:
25 ft (7.6 m) vertical lift, based on water
Motor Type:
1/30 HP, shaded pole, class B
Duty Cycle:
Continuous
Motor Voltage (Amp Draw):
120V 60Hz 1PH (1.7)
220V 60Hz 1PH (0.9)
230V 50Hz 1PH (0.9)
250V 50Hz 1PH (0.9)
Power Cord Type:
SJTOW
Power Cord Plug End:
120V 60Hz NEMA 5/15
220V 60Hz NEMA 6/15
230V 50Hz CEE 7/VII
250V 50Hz CEE 7/VII

Part Number	Tube Size	Output		Connection Size
		GPD @ 60 Hz	LPD @ 50 Hz	
Double Head Adjustable — 26 rpm — Low Pressure: 0 to 25 psi (1.7 bar)				
TS100DM1	#1	0.3 to 6	0.9 to 18.2	1/4 inch
TS100DM2	#2	1.0 to 20	3.0 to 60.6	1/4 inch
TS100DM3	#3	2.2 to 44	6.7 to 133.2	1/4 inch
TS100DM4	#4	3.5 to 70	10.6 to 212.0	1/4 inch
TS100DM5	#5	5.0 to 100	15.1 to 302.8	1/4 inch
TS100DM1-3	#1	0.3 to 6	0.9 to 18.2	3/8 inch
TS100DM2-3	#2	1.0 to 20	3.0 to 60.6	3/8 inch
TS100DM3-3	#3	2.2 to 44	6.7 to 133.2	3/8 inch
TS100DM4-3	#4	3.5 to 70	10.6 to 212.0	3/8 inch
TS100DM5-3	#5	5.0 to 100	15.1 to 302.8	3/8 inch
Double Head Adjustable — 26 rpm — High Pressure: 0 to 100 psi (6.9 bar)				
TS100DMHP5	#1	0.3 to 6	0.9 to 18.2	1/4 inch
TS100DMHP20	#2	1.0 to 20	3.0 to 60.6	1/4 inch
TS100DMHP5-3	#1	0.3 to 6	0.9 to 18.2	3/8 inch
TS100DMHP20-3	#2	1.0 to 20	3.0 to 60.6	3/8 inch
Double Head Adjustable — 44 rpm — Low Pressure: 0 to 25 psi (1.7 bar)				
TS170DM1	#1	0.5 to 10	1.5 to 30.3	1/4 inch
TS170DM2	#2	1.7 to 34	5.1 to 102.6	1/4 inch
TS170DM3	#3	4.0 to 80	12.1 to 242.2	1/4 inch
TS170DM4	#4	6.0 to 120	18.2 to 363.4	1/4 inch
TS170DM5	#5	8.5 to 170	25.7 to 514.8	1/4 inch
TS170DM1-3	#1	0.5 to 10	1.5 to 30.3	3/8 inch
TS170DM2-3	#2	1.7 to 34	5.1 to 102.6	3/8 inch
TS170DM3-3	#3	4.0 to 80	12.1 to 242.2	3/8 inch
TS170DM4-3	#4	6.0 to 120	18.2 to 363.4	3/8 inch
TS170DM5-3	#5	8.5 to 170	25.7 to 514.8	3/8 inch
Double Head Adjustable — 44 rpm — High Pressure: 0 to 100 psi (6.9 bar)				
TS170DMHP9	#1	0.5 to 10	1.5 to 30.3	1/4 inch
TS170DMHP34	#2	1.7 to 34	5.1 to 102.6	1/4 inch
TS170DMHP9-3	#1	0.5 to 10	1.5 to 30.3	3/8 inch
TS170DMHP34-3	#2	1.7 to 34	5.1 to 102.6	3/8 inch

Refer to Tube Output Tables on the flip side of this page to match the required gallon-per-day metering pump output with the appropriate model. System output is determined by the motor RPM, pump tube, and feed rate control setting.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1153
EFFECTIVE
OCTOBER 2014

CHEMICAL FEED PUMPS

DOUBLE HEAD ADJUSTABLE OUTPUT PUMPS

Tube Output — 26 rpm Models — Gallons per Day @ 60 Hz

Model	Tube Size	Approximate Output In Gallons Per Day (24 Hours) @ 60 Hz										
		L	1	2	3	4	5	6	7	8	9	10
TS100	#1	0.3	0.6	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0
	#2	1.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0
	#3	2.2	4.4	8.8	13.2	17.6	22.0	26.4	30.8	35.2	39.6	44.0
	#4	3.5	7.0	14.0	21.0	28.0	35.0	42.0	49.0	56.0	63.0	70.0
	#5	5.0	10.0	20.0	30.0	40.0	50.0	60.0	70.0	80.0	90.0	100.0

Tube Output — 26 rpm Models — Liters per Day @ 50 Hz

Model	Tube Size	Approximate Output In Liters Per Day (24 Hours) @ 50 Hz										
		L	1	2	3	4	5	6	7	8	9	10
TS100	#1	0.9	1.8	3.6	5.5	7.3	9.1	10.9	12.7	14.5	16.4	18.2
	#2	3.0	6.1	12.1	18.2	24.2	30.3	36.4	42.4	48.5	54.5	60.6
	#3	6.7	13.3	26.7	40.0	53.3	66.6	79.9	93.3	106.6	119.9	133.2
	#4	10.6	21.2	42.4	63.6	84.8	106.0	127.2	148.4	169.6	190.8	212.0
	#5	15.1	30.3	60.6	90.8	121.1	151.4	181.7	212.0	242.2	272.5	302.8

Tube Output — 44 rpm Models — Gallons per Day @ 60 Hz

Model	Tube Size	Approximate Output In Gallons Per Day (24 Hours) @ 60 Hz										
		L	1	2	3	4	5	6	7	8	9	10
TS170	#1	0.5	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
	#2	1.7	3.4	6.8	10.2	13.6	17.0	20.4	23.8	27.2	30.6	34.0
	#3	4.0	8.0	16.0	24.0	32.0	40.0	48.0	56.0	64.0	72.0	80.0
	#4	6.0	12.0	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0
	#5	8.5	17.0	34.0	51.0	68.0	85.0	102.0	119.0	136.0	153.0	170.0

Tube Output — 44 rpm Models — Liters per Day @ 50 Hz

Model	Tube Size	Approximate Output In Liters Per Day (24 Hours) @ 50 Hz										
		L	1	2	3	4	5	6	7	8	9	10
TS170	#1	1.5	3.0	6.1	9.1	12.1	15.1	18.2	21.2	24.2	27.3	30.3
	#2	5.1	10.3	18.2	28.8	39.1	51.5	61.8	72.1	82.4	92.7	102.6
	#3	12.1	24.2	48.5	72.7	96.9	121.1	145.4	169.6	193.8	218.0	242.2
	#4	18.2	36.3	72.7	109.0	145.3	181.7	218.0	254.4	290.7	327.0	363.4
	#5	25.7	51.5	86.0	154.4	205.9	257.4	308.9	360.4	411.8	463.3	514.8

NOTE: The above information is solely intended for use as a guide. The output data is an approximation based on pumping water under a controlled testing environment. Many variables can affect the output of the pump. The manufacturer recommends that all metering pumps undergo field calibration by means of analytical testing to confirm their outputs.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1153
EFFECTIVE
OCTOBER 2014

CHEMICAL FEED PUMPS

DUAL HEAD DUAL CONTROL ADJUSTABLE OUTPUT PUMPS



SWT's dual head dual control adjustable metering pump is built with five detachable components; the motor, two feed rate controls, and two pump heads. The outside head operates on a percentage of the inside head (close to motor). The output of the two heads is equal only on setting #10. Use the Tube Output Tables (see flip side) to select the desired output for the inside head. This will be the primary output. The outside head's output will be a percentage of this amount.

CAUTION: Do not use with chemicals that are dangerous when combined to avoid possible disastrous result.

SPECIFICATIONS

Max Operating Temperature:
125°F (52°C)
Max Suction Lift:
25 ft (7.6 m) vertical lift, based on water
Motor Type:
1/30 HP, shaded pole, class B
Duty Cycle:
Continuous
Motor Voltage (Amp Draw):
120V 60Hz 1PH (1.7)
220V 60Hz 1PH (0.9)
230V 50Hz 1PH (0.9)
250V 50Hz 1PH (0.9)
Power Cord Type:
SJTOW
Power Cord Plug End:
120V 60Hz NEMA 5/15
220V 60Hz NEMA 6/15
230V 50Hz CEE 7/VII
250V 50Hz CEE 7/VII

Part Number	Tube Size	Output		Connection Size
		GPD @ 60 Hz	LPD @ 50 Hz	
Dual Head Dual Control — 26 rpm — Low Pressure: 0 to 25 psi (1.7 bar)				
TS100MDC1	#1	0.2 to 3	0.6 to 9.1	1/4 inch
TS100MDC2	#2	0.5 to 10	1.5 to 30.3	1/4 inch
TS100MDC3	#3	1.1 to 22	3.3 to 66.6	1/4 inch
TS100MDC4	#4	1.7 to 35	5.1 to 106.0	1/4 inch
TS100MDC5	#5	2.5 to 50	7.6 to 151.4	1/4 inch
TS100MDC1-3	#1	0.2 to 3	0.6 to 9.1	3/8 inch
TS100MDC2-3	#2	0.5 to 10	1.5 to 30.3	3/8 inch
TS100MDC3-3	#3	1.1 to 22	3.3 to 66.6	3/8 inch
TS100MDC4-3	#4	1.7 to 35	5.1 to 106.0	3/8 inch
TS100MDC5-3	#5	2.5 to 50	7.6 to 151.4	3/8 inch
Dual Head Dual Control — 26 rpm — High Pressure: 0 to 100 psi (6.9 bar)				
TS100MDCHP5	#1	0.2 to 3	0.6 to 9.1	1/4 inch
TS100MDCHP20	#2	0.5 to 10	1.5 to 30.3	1/4 inch
TS100MDCHP5-3	#1	0.2 to 3	0.6 to 9.1	3/8 inch
TS100MDCHP20-3	#2	0.5 to 10	1.5 to 30.3	3/8 inch
Dual Head Dual Control — 44 rpm — Low Pressure: 0 to 25 psi (1.7 bar)				
TS170MDC1	#1	0.3 to 5	0.9 to 15.1	1/4 inch
TS170MDC2	#2	0.8 to 17	2.4 to 51.5	1/4 inch
TS170MDC3	#3	2.0 to 40	6.1 to 121.1	1/4 inch
TS170MDC4	#4	3.0 to 60	9.1 to 181.7	1/4 inch
TS170MDC5	#5	4.3 to 85	13.0 to 257.4	1/4 inch
TS170MDC1-3	#1	0.3 to 5	0.9 to 15.1	3/8 inch
TS170MDC2-3	#2	0.8 to 17	2.4 to 51.5	3/8 inch
TS170MDC3-3	#3	2.0 to 40	6.1 to 121.1	3/8 inch
TS170MDC4-3	#4	3.0 to 60	9.1 to 181.7	3/8 inch
TS170MDC5-3	#5	4.3 to 85	13.0 to 257.4	3/8 inch
Dual Head Dual Control — 44 rpm — High Pressure: 0 to 100 psi (6.9 bar)				
TS170MDCHP9	#1	0.3 to 5	0.9 to 15.1	1/4 inch
TS170MDCHP34	#2	0.8 to 17	2.4 to 51.5	1/4 inch
TS170MDCHP9-3	#1	0.3 to 5	0.9 to 15.1	3/8 inch
TS170MDCHP34-3	#2	0.8 to 17	2.4 to 51.5	3/8 inch

Refer to Tube Output Tables on the flip side of this page to match the required gallon-per-day metering pump output with the appropriate model. System output is determined by the motor RPM, pump tube, and feed rate control setting.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1155
EFFECTIVE
OCTOBER 2014

CHEMICAL FEED PUMPS

DUAL HEAD DUAL CONTROL ADJUSTABLE OUTPUT PUMPS

Tube Output — 26 rpm Models — Gallons per Day @ 60 Hz

Model	Tube Size	Approximate Output In Gallons Per Day (24 Hours) @ 60 Hz										
		L	1	2	3	4	5	6	7	8	9	10
TS100	#1	0.2	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0
	#2	0.5	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
	#3	1.1	2.2	4.4	6.6	8.8	11.0	13.2	15.4	17.6	19.8	22.0
	#4	1.7	3.5	7.0	10.5	14.0	17.5	21.0	24.5	28.0	31.5	35.0
	#5	2.5	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0

Tube Output — 26 rpm Models — Liters per Day @ 50 Hz

Model	Tube Size	Approximate Output In Liters Per Day (24 Hours) @ 50 Hz										
		L	1	2	3	4	5	6	7	8	9	10
TS100	#1	0.6	0.9`	1.8	2.7	3.6	4.5	5.5	6.4	7.3	8.2	9.1
	#2	1.5	3.0	6.1	9.1	12.1	15.1	18.2	21.2	24.2	27.3	30.3
	#3	3.3	6.6	13.3	20.0	26.6	33.3	40.0	46.6	53.3	60.0	66.6
	#4	5.1	10.6	21.2	31.8	42.4	53.0	63.6	74.2	84.8	95.4	106.0
	#5	7.6	15.1	30.3	45.4	60.6	75.7	90.8	106.0	121.1	136.3	151.4

Tube Output — 44 rpm Models — Gallons per Day @ 60 Hz

Model	Tube Size	Approximate Output In Gallons Per Day (24 Hours) @ 60 Hz										
		L	1	2	3	4	5	6	7	8	9	10
TS170	#1	0.3	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
	#2	0.8	1.7	3.4	5.1	6.8	8.5	10.2	11.9	13.6	15.3	17.0
	#3	2.0	4.0	8.0	12.0	16.0	20.0	24.0	28.0	32.0	36.0	40.0
	#4	3.0	6.0	12.0	18.0	24.0	30.0	36.0	42.0	48.0	54.0	60.0
	#5	4.3	8.5	17.0	25.5	34.0	42.5	51.0	59.5	68.0	76.5	85.0

Tube Output — 44 rpm Models — Liters per Day @ 50 Hz

Model	Tube Size	Approximate Output In Liters Per Day (24 Hours) @ 50 Hz										
		L	1	2	3	4	5	6	7	8	9	10
TS170	#1	0.9	1.5	3.0	4.5	6.1	7.6	9.1	10.6	12.1	13.6	15.1
	#2	2.4	5.1	10.3	15.4	20.6	25.7	30.9	36.0	41.2	46.3	51.5
	#3	6.1	12.1	24.2	36.3	48.5	60.6	76.7	84.8	96.9	109.0	121.1
	#4	9.1	18.2	36.3	54.5	76.7	90.8	109.0	127.2	145.3	163.5	181.7
	#5	13.0	25.7	51.5	77.2	103.0	128.7	154.4	180.0	205.9	231.6	257.4

NOTE: The above information is solely intended for use as a guide. The output data is an approximation based on pumping water under a controlled testing environment. Many variables can affect the output of the pump. The manufacturer recommends that all metering pumps undergo field calibration by means of analytical testing to confirm their outputs.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1155
EFFECTIVE
OCTOBER 2014

CHEMICAL SOLUTION TANKS

POLYETHYLENE STORAGE TANKS



MK-CT1621 and MK-CT1515



MK-PF2377

SWT's Chemical Solution Tanks *are designed for the storage of chemical and oxidation solutions in chemical feed systems (chlorine, hydrogen peroxide, etc.). These tanks are commonly used as companion equipment along with Stenner feed pumps, Magnum static mixers & accelerators, and contact tanks.*

SWT Storage Tanks are made from chemical and UV resistant high density polyethylene for years of unsurpassed service. Plus, these tanks meet FDA requirements. Polyethylene, color, and ultraviolet inhibitors comply with Federal Food, Drug, and Cosmetic Act Section 121.2501 dated February 19, 1966.

SWT's Potassium Permanganate Feeders *come fully assembled for use with residential greensand filters. The units include safety float, elbow connections, and safety overflow fittings—all made from special non-corrosive materials.*

Part Number	Description	Dimensions Inches (W x D x H)	Gallon Capacity	Elbow Connection Size Inches	KMnO4 Dosage
SWT Chemical Solution Tanks					
MK-CT1621	Chemical Solution Tank	16.0 dia x 20.5	16	N/A	N/A
MK-CT1515	Chemical Solution Tank	15.0 x 15.0 x 15.0	13	N/A	N/A
SWT Potassium Permanganate Feeders					
MK-PF2377-1	KMnO4 Feeder Assembly	10.5 x 10.5 x 16.5	5.5	0.25 Compression	2 oz.
MK-PF2377-2	KMnO4 Feeder Assembly	10.5 x 10.5 x 16.5	5.5	0.375 Compression	2 oz.
MK-PF2377-3	KMnO4 Feeder Assembly	10.5 x 10.5 x 16.5	5.5	0.25 Compression	4 oz.
MK-PF2377-4	KMnO4 Feeder Assembly	10.5 x 10.5 x 16.5	5.5	0.375 Compression	4 oz.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1217
EFFECTIVE
MAY 2002

WATER TREATMENT CHEMICALS

WATER TREATMENT CHEMICALS

Part Number	Description	Case Qty.
Rust Out (Ban-Iron)		
PP-RO100S	4 oz. Bottle	100
PP-RO12N	1.5 lb. Bottle	12
PP-RO65N	5 lb. Bottle	6
PP-RO50N	50 lb. Pail	1
Pot Perm (Potassium Permanganate)		
PP-KF55N *	55 lb. Pail (Hazardous — Cannot Ship UPS)	1
PP-KF33N *	330 lb. Pail (Hazardous — Cannot Ship UPS)	1
Coarse Pot Perm (Potassium Permanganate)		
PP-KC02N	2 lb. Bottle (Shipping Class O-RMD)	6
PP-KC65N	5 lb. Bottle (Hazardous)	6
PP-KC55N *	55 lb. Pail (Hazardous — Cannot Ship UPS)	1
Ban-T (Citric Acid)		
PP-RU15N	1.5 lb. Bottle	12
PP-RU64N	4 lb. Bottle	6
PP-RU45N	45 lb. Pail	1
Pro Soda Ash (Soda Ash Blends)		
PP-SA64N *	Neutra-5 No Phosphate — 4 lb. Bottle	4
PP-SA40L *	Neutra-5 No Phosphate — 40 lb. Pail	1
PP-SP47N *	Neutra-7 No Phosphate — 7 lb. Bottle	4
PP-SP25N *	Neutra-7 No Phosphate — 25 lb. Pail	1
PP-SP40N *	Neutra-7 No Phosphate — 40 lb. Pail	1
Res-Up (Resin Cleaner)		
LC-6001-04	1 qt. Bottle	12
LC-6002-04	1 gal. Bottle	1
LC-6004	55 gal. Drum	1
LC-6304	0.5 oz./Day Feeder (Yellow Wick)	1
LC-6305	1.0 oz./Day Feeder (Clear Wick)	1
Res Care (Resin-Mate)		
PP-RK50N *	4 oz. Bottle	50
PP-RK32N *	1 qt. Bottle	12
PP-RK41N *	1 gal. Bottle	4

* Certified to NSF/ANSI Standard 60.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

FORM 1090
EFFECTIVE
AUGUST 2018

WATER TREATMENT CHEMICALS

Part Number	Description	Case Qty.
Chlorine Mini-Pellets		
PP-CP2022B	2.2 lb. Bag — approx. 0.035 ounce (1 gram) per pellet	20
PP-CP65N	5 lb. Bottle (Hazardous) — approx. 0.035 ounce (1 gram) per pellet	6
Poly-Guard (Polyphosphate Powder)		
PP-GA65N *	5 lb. Bottle	6
PP-GA50N *	50 lb. Pail	1
Poly-Guard (Polyphosphate Crystals)		
PP-GP63N *	3 lb. Bottle	6
PP-GP50N *	50 lb. Pail	1
PP-GP10C *	1.5 lb. #10 Cartridge	6
Poly-Guard (Polyphosphate Liquid)		
PP-GL41N *	1 gal. Bottle	4
PP-GL05N *	5 gal. Bottle	1
PP-GL55N *	55 gal. Drum	1
Still Clean (Distiller Cleaner)		
PP-ST32N	20 oz. Bottle	12
Hydrogen Peroxide		
PP-HP41N *	1 gal. Bottle (7%)	4
PP-HP22N *	2.5 gal. Bottle (7%)	2
PP-HP05N *	5 gal. Bottle (7%)	1
HYDROPEROX1508	15 gal. Carboy/Closed Top PE Drum (8%) — For Pick Up Only	1
Iodine Bead/Prills (US Pharmaceutical Grade)		
WD-IODBEAD2	2 lb. Jar	1
WD-IODBEAD4	4 lb. Jar	1
WD-IODBEAD25	25 lb. Drum	1

* Certified to NSF/ANSI Standard 60.

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality Association

FORM 1090
EFFECTIVE
AUGUST 2018

WATER TREATMENT CHEMICALS

ACID WATER NEUTRALIZERS





Benefits

- Compatible with all major brands of chemical feed pumps
- Neutralizes acid water with a pH of less than 7.0
- Eliminates staining of plumbing fixtures and clothing
- Certified to NSF/ANSI Standard 60 for drinking water additives
- Neutra-7 keeps injection point clean of buildup

Technical

- Appearance: White granular powder
- Store in a cool, dry area, away from acids and lime. When dissolving in water, add water slowly and cautiously while stirring—as solution can sometimes get hot. Read relevant MSDS before handling product.
- Do not mix with other chemicals

Neutra-5 and Neutra-7

Neutra is a highly alkaline compound which neutralizes the acid found in some water systems. This helps to eliminate corrosion from piping, pressure tanks, water heaters, and fixtures, giving your system longer life. Neutra can also be used to remove tannins from a tannin-type water softener, and may be used in a potable water system.

The primary difference between Neutra-5 and Neutra-7 is that Neutra-7 is a blended alkaline compound with proprietary additives that help the product go into solution easier and faster. The additives also help to keep the injection points on the pump clean. In applications where the soda ash injection causes the injector to scale with minerals/iron the additives in the Neutra-7 reduce plugging of the injector nozzle.

Made in USA.

Applications

Acid Water Neutralization: The feed rate depends on the acidity of water. Proper dosage is reached when the pH of the treated water is between 7.0 and 8.0. Follow procedure for injecting soda ash into your water system by the chemical feed pump manufacturer or supplier.

Tannin Water Softener Cleaning: Mix 1 cup of Neutra with 1 quart of water and pour into salt storage tank on a weekly basis.

Order Information

Part Number	Description	Case Qty.
PP-SA64N	Neutra-5, No Phosphate — 4 lb Bottle	4
PP-SA40L	Neutra-5, No Phosphate — 40 lb Pail	1
PP-SP47N	Neutra-7, No Phosphate — 7 lb Bottle	4
PP-SP25N	Neutra-7, No Phosphate — 25 lb Pail	1
PP-SP40N	Neutra-7, No Phosphate — 40 lb Pail	1

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1470
EFFECTIVE
OCTOBER 2018

TEST KITS

TEST KITS AND STRIPS



PS-2501



PS-23053



PS-23052



PS-2401



PS-2412



TI-48008

Part Number	Description	Tests per Bottle	Bottles per Case
BactaPURE™			
EN00001	Home Bacteria Test Kit (1 test per kit)	1	12
Consumer Test Kits (in-home use)			
PS-2501	Chlorine Test Kit, 0 to 2.0 ppm	—	18
PS-23053	pH Test Kit, Wide Range	—	18
PS-23052	Hardness (Soap) Test Kit	—	18
Professional Field Analysis Test Kits (with carrying case)			
PS-2403	BASIC KIT—Plastic Case, Hardness Test (Refills Available—See Next Page)	—	1
PS-2401	STANDARD KIT—Plastic Case, Hardness Test, Iron Test, pH Test (Refills Available—See Next Page)	—	1
PS-2404	DELUXE KIT—Plastic Case, Hardness Test, Iron Test, pH Test, Chlorine Test, TDS Meter (Refills Available—See Next Page)	—	1
Salesman's Demonstration Water Test Kits (with carrying case)			
PS-2412	STANDARD KIT—Demonstration Case, Mini-Softener, Hardness Test, Soap Test, Precipitation Test, pH Test, Iron Test, Nitrate Test (Refills Available—See Next Page)	—	1
PS-2413	DELUXE KIT—Demonstration Case, Mini-Softener, Hardness Test, Soap Test, Precipitation Test, pH Test, Iron Test, Nitrate Test, Chlorine Test, TDS Meter, Conductivity Light, Mini Pump (Refills Available—See Next Page)	—	1
Test Strips			
TI-48008	Total Hardness, (Ca^{+2}) 0 to 58 grains per gallon (0 to 1000 ppm), 3 seconds Test Time, Colorimetric Test Strips	50	—

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1089
EFFECTIVE
JANUARY 2013

Test Kits

REPLACEMENT SOLUTIONS

Replacement Solutions (For Field Test Kits and Demonstration Test Kits)

Part Number	Description	Units per Case
Hardness Solution #1		
PS-2525	0.5 oz. Bottle	1
PS-2025	1 oz. Bottle	1
PS-2001	2 oz. Bottle	1
PS-2003	16 oz. Bottle	1
Hardness Solution #2		
PS-2527	0.5 oz. Bottle	1
PS-2027	1 oz. Bottle	1
PS-2004	2 oz. Bottle	1
PS-2006	16 oz. Bottle	1
Hardness Solution #3		
PS-2529	0.5 oz. Bottle	1
PS-2029	1 oz. Bottle	1
PS-2007	2 oz. Bottle	1
PS-2009	16 oz. Bottle	1
Precipitation Solution #1		
PS-2010	2 oz. Bottle	1
PS-2012	16 oz. Bottle	1
Precipitation Solution #2		
PS-2013	2 oz. Bottle	1
PS-2015	16 oz. Bottle	1
Hardness Soap Solution		
PS-2016	2 oz. Bottle	1
PS-2018	16 oz. Bottle	1
pH Solution (Wide Range, 3.0 to 10.0)		
PS-2531	0.5 oz. Bottle	1
PS-2031	1 oz. Bottle	1
PS-2019	2 oz. Bottle	1
PS-2021	16 oz. Bottle	1
Chlorine Indicator Solution		
PS-2034	OTO Solution, 0.5 oz. Bottle	1
PS-2035	OTO Solution, 16 oz. Bottle	1
Iron Reagent Powder Packs		
PS-2105	Foil Packets, 5 ml	50
Nitrate Powder Pillows		
PS-2120	Nitrate Powder Pillows	50
Chlorine DPD Reagent Packs		
PS-3130	Chlorine DPD Reagent Packets	50

SAFE WATER TECHNOLOGIES, INC.
996 BLUFF CITY BOULEVARD, ELGIN, IL 60120 USA
TELEPHONE 847 888 6900 • FACSIMILE 847 888 6924
E MAIL: info@swtwater.com • WEB SITE: www.swtwater.com

MEMBER Water Quality ASSOCIATION

FORM 1089
EFFECTIVE
JANUARY 2013

Section 10

The Last Section