# 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: 140°F CPVC: 150°F PVDF: 150°F Cont. Max. Pressure ..... PVC: 150 psi @ 105°F CPVC: 150 psi @ 105°F PVDF: 150 psi @ 150°F

#### 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.

### **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







SOCKET MODELS TEE SOC X SOC X SOC

# For 1-1/2 inch MNPT models...

PART NO.	DESCRIPTION	PART NO.
802-015	PVC Tee for 1.5 inch pipe	801-015
802-251	PVC Tee for 2 inch pipe	801-251
802-291	PVC Tee for 2.5 inch pipe	801-291
802-337	PVC Tee for 3 inch pipe	801-337
802-419	PVC Tee for 4 inch pipe	801-419

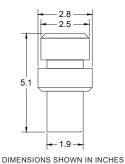
For 1-1/2 inch Socket models... DESCRIPTION

PVC Tee for 1.5 inch pipe PVC Tee for 2 inch pipe PVC Tee for 2.5 inch pipe PVC Tee for 3 inch pipe PVC Tee for 4 inch pipe

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

NOTE: Add "C" to end of Part No. for CPVC Tee.





**Technical Specifications:** Maximum Operating Temperature ...... 180°F (82°C)

is 29-inches of mercury.

Maximum Operating Pressure ...... 100 psi @ 75°F (6.9 bar @ 24° C)

#### Materials of Construction:

Molded glass-filled polypropylene body, FKM seals



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#### **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 accommodate vertical expansion between side, top, and bottom openings. Either flexibility in piping or flex connectors, as shown here, are recommended.

