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

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AUGUST 2019

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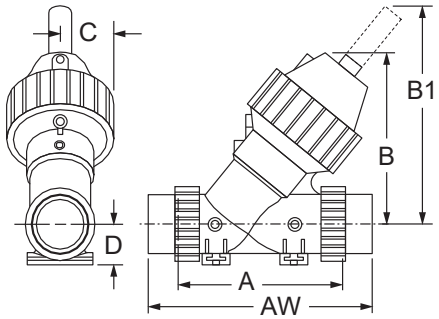
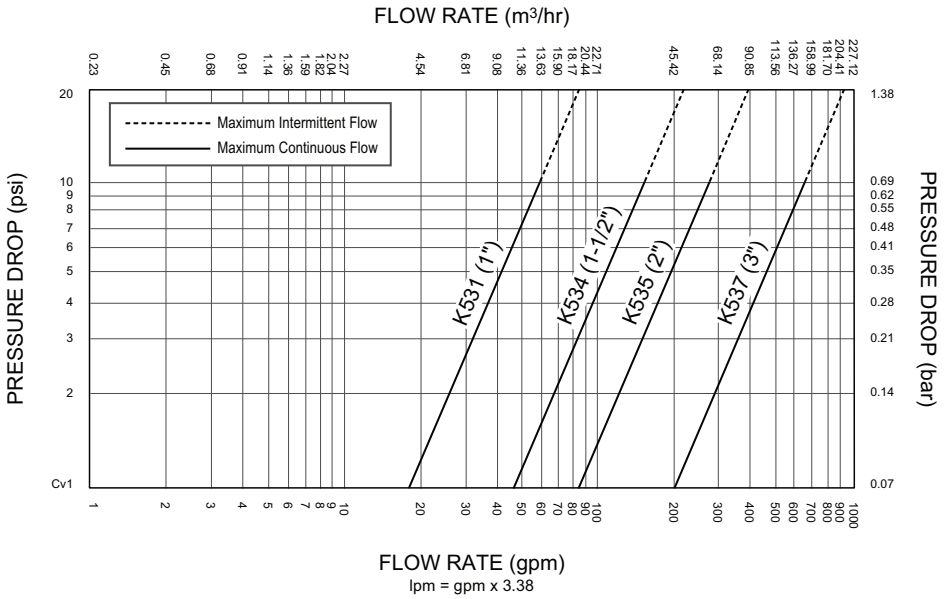


Dimensions and Weights

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.



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