

Osmonics®

AquaMatic® K530 Series Product Specifications Corrosive Application Valves



The rugged AquaMatic® series K530 composite valves are designed to handle deionized water as well as acids, caustic and harsh chemicals or gases that would rapidly corrode metal valves. These valves, constructed of corrosion resistant materials have all advantages of the AquaMatic® K520 series composite body valves. In addition, the K530 series valves boast a number of additional added features. The valve body and cap are molded from glass filled Noryl* thermoplastic.

■ K530 Series Features

- Dual Shaft SealsK530 series valves feature two dynamic “O” rings on the shaft, with a vent in between the “O” rings to prevent damage to the diaphragm.
- Union End ConnectorsFemale socket weld connectors for easy installation and the ability to remove the valve without disrupting the service piping.
- Position Indicator and Limit StopFully adjustable limit stop from full-open to full-closed, with a position indicator to show the valve position.
- New Cap Retaining DesignCap held by a retaining ring, eliminating screws and nuts. No external metal parts to corrode in aggressive atmosphere.
- Mounting PadsValve bodies provided with molded pads that can be used to support the piping manifold.

Standard Diaphragm Valve Feature

- Low Pressure LossThe unique AquaMatic® Y-pattern diaphragm valve design, with large seat opening and high lift disc permits higher flow rates at lower pressure loss than other comparable valves.
- Positive ControlSeparate flow and control chambers permit positive closing without springs; and only nominal cost for spring assist opening for low-pressure and self-draining applications.
- Cost-Effective DesignThe AquaMatic® diaphragm valve is a cost-effective solution in initial purchase price as well as in lifetime maintenance. All components can be serviced while the valve is in-line.
- Long Diaphragm Life.....Pre-formed, stress relieved diaphragm minimizes fatigue, maximizes valve responsiveness and diaphragm lifetime.
- Corrosion Resistant.....All internal parts in contact with media are made of composite materials. Seals are ethylene propylene for better chemical resistance.**
- Pipe SizesSeries K530 valves are available in four different sizes, from 1-inch to 3-inch. A variety of end connectors are available to make the valve compatible in pipe sizes from 3/4-inch to 3-inch.
- Design/Application Services
- Optional Adjustable Flow Control
- Optional Position Indicators
- Optional Seals and Diaphragm Materials for Special Applications
- Optional Spring Assist
- Adaptable to a Wide Variety of Control Devices

■ Operating Specifications

- Maximum Pressure.....125 PSI (8.6 bars)
- Maximum Temperature140°F (60°C)
- Operation.....The K530 series valve is closed by introducing either hydraulic or pneumatic pressure to the upper diaphragm chamber. The control pressure must be equal to or greater than the line pressure. The valve is opened by relieving the pressure from the upper diaphragm chamber. The line pressure under the seat will then open the valve. The unique AquaMatic® Y-pattern design minimizes pressure loss in the valve.

■ Available Valve Options

- Normally Open (Standard)
- Spring Assist Closed
- Limit Stop Flow Control
- Externally Normally Closed
- Spring Assist Open
- Position Indicator and Limit Stop
- Optional Seals Material

* Noryl is a trademark of General Electric Company.

Valves are **NOT recommended for use with any aromatic hydrocarbon based media.

Ordering Information

- To order the K530 series valve, please specify.....
- Valve Size
- Valve Options
- Working Pressure and Temperature
- Type of End Connections

Typical Applications

- Water Treatment Systems
- Desalination
- Process Water Systems
- Fertilizer Spray Equipments
- Deionizers
- Evaporation
- Mining Wastes
- Electronic Industry
- Chemical Injection
- Metal Recovery Systems
- Level Control Systems
- Detergent and Bleach Handling

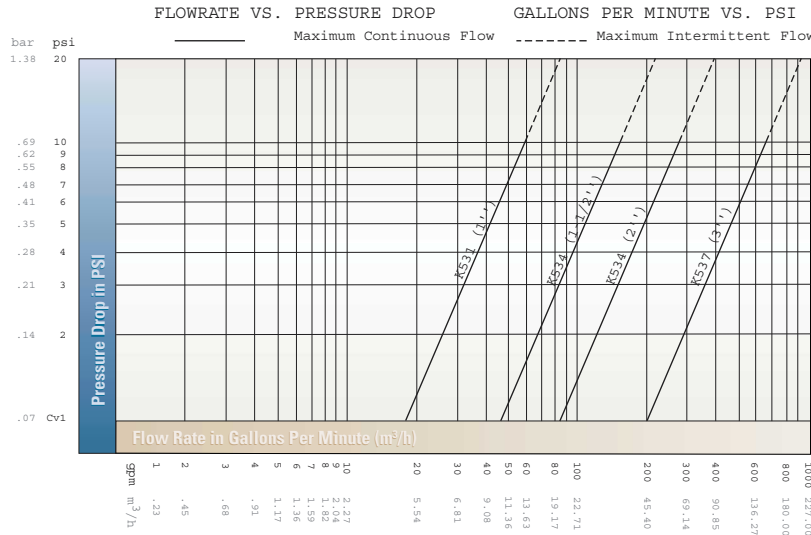
Dimensions for K530 Series Valves

Pipe Size	Valve Model	Cv ¹	Weight Standard Valve	Weight Fail Safe Valve	Dimensions (Approximate)						
					Unit	A ²	AW	B	B1	C	D
0.75", 1.0" 20, 25mm	K531	18.0 (15.6)	1.7 lbs 0.8 kg	3.0 lbs. 1.4 kg	inches	5.75	8.12	6.00	8.62	2.04	1.38
					mm	146	206	152	220	52	35
1.5" 40mm	K534	48.0 (41.5)	4.0 lbs 1.8 kg	7.5 lbs. 3.4 kg	inches	8.38	11.00	8.07	13.46	2.62	1.96
					mm	213	279	205	342	67	50
2.0" 50mm	K535	84.0 (73.5)	8.0 lbs 3.6 kg	15.0 lbs. 6.8 kg	inches	9.88	12.88	9.12	14.28	3.18	2.18
					mm	251	333	232	363	81	55
3.0" 75mm	K537	200.0 (173.0)	11.5 lbs 5.2 kg	27.0 lbs. 12.3 kg	inches	11.13	15.25	11.41	17.06	3.79	2.68
					mm	283	387	290	433	96	68

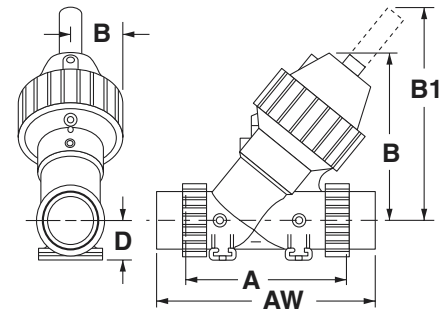
¹ Cv is the flowrate in gallons per minute of water at 60°F at 1 pound pressure drop or (flowrate in cubic meters per hour of water at (15.5°C) at 1 bar pressure drop.)

² The "A" dimension is the distance between face to face seal surfaces.

Flow Capabilities of K530 Series Plastic Diaphragm Valves



Standard Valves (Models K531-K537)



For More Information:

Call **Osmonics** at **(815) 964-9421** or **(800) 245-9421**, or visit **www.osmonics.com**



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