

AQUAMATIC[®] K53 SERIES CONTROL VALVES

CORROSION-RESISTANT CONSTRUCTION WITHSTANDS HARSH MEDIA





FEATURES/BENEFITS

Unique Y-pattern design with large seat opening and high lift disc permits higher flow rates at lower pressure loss than other comparable valves

All components can be serviced while the valve is in-line

Separate flow and control chambers permit positive closing without springs; and only nominal cost for spring assist opening for low-pressure and selfdraining applications

Pre-formed, stress-relieved diaphragm minimizes fatigue, maximizes valve responsiveness and diaphragm lifetime

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 environment

Available in sizes from 1"-3"

A variety of end connectors are available to make the valve compatible in pipe sizes from 3/4"-3"

Adaptable to a wide variety of control devices

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 $^{\rm t}$

TYPICAL APPLICATIONS

Chemical Injection	Level Control Systems			
Deionizers	Metal Recovery Systems			
Desalinization				
Detergent and	Mining Wastes			
Bleach Handling	Process Water Systems			
Electronic Industry	Water Treatment Systems			
Evaporation	Water meatiment Systems			
Fertilizer Spray Equipment				

* Normally closed valve configurations are NOT recommended when used with corrosive fluids.

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



NSF/ANSI 372 for lead free compliance.

Certified by IAPMO R&T to NSF/ANSI 61 and

AQUAMATIC CONTROL VALVES

DIMENSIONS

MODEL #	PIPE SIZE	Cv⁺	WEIGHT (STANDARD VALVE)	WEIGHT (FAIL SAFE VALVE)	DIMENSIONS (APPROXIMATE)					
					A**	AW	В	B1	с	D
K531	0.75", 1.00"	18.0	1.7 lbs	3.0 lbs	5.75"	8.12"	6.00"	8.62"	2.04"	1.38"
	(20,25mm)	(15.6 Kv)	(0.8 kg)	(1.4 kg)	(146 mm)	(206 mm)	(152 mm)	(220 mm)	(52 mm)	(35 mm)
K534	1.5"	46.0	4.0 lbs	7.5 lbs	8.38"	11.00"	8.07"	13.46"	2.62"	1.96"
	(40 mm)	(39.8 Kv)	(1.8 kg)	(3.4 kg)	(213 mm)	(279 mm)	(205 mm)	(342 mm)	(67 mm)	(50 mm)
K535	2.0"	84.0	8.0 lbs	15.0 lbs	9.88"	12.88"	9.12"	14.28"	3.18"	2.18"
	(50 mm)	(72.6 Kv)	(3.6 kg)	(6.8 kg)	(251 mm)	(333 mm)	(232 mm)	(363 mm)	(81 mm)	(51 mm)
K537	3.0"	2000	11.5 lbs	27.0 lbs	11.13"	15.25"	11.41"	17.06"	3.79"	2.68"
	(75 mm)	(173.0 Kv)	(5.2 kg)	(12.3 kg)	(283 mm)	(387 mm)	(290 mm)	(433 mm)	(96 mm)	(68 mm)

*Cv is the flowrate in gallons per minute of water at 60°F at 1 psi pressure drop or (Kv) (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.

(Models K531 - K537)

OPERATING SPECIFICATIONS

MaxPressure MaxTemperature[†] 125 psi (8.6 bar) 140°F (60°C)

[†]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).

PERFORMANCE DATA

22.71 19.17 13.63 11.36 9.08 69.14 90.85 45.4 сл СЛ 6.8 2.27 2.04 1.82 1.59 1.36 1.17 1.17 136 227 i2 .6 . A 20 1.38 .69 .62 .55 .48 .41 10 9 8 PRESSURE DROP (bar. PRESSUREDROP(psi) 7 6 .35 õ 5 (2:35) K5:37 (5:3> .28 4 3 .21 2 .14 Cv1 .07 30 7 8 9 <u>-</u> 20 40 50 **80** 10 200 300 40 60 800 FLOW RATE (qpm) Lpm = gpm x 3.38 Maximum Intermittent Flow Maximum Continuous Flow

FLOW RATE (m³/hr)

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