

# AQUAMATIC® V46 SERIES

## STAINLESS STEEL VALVES

HIGH-FLOW VALVES FOR CORROSION-RESISTANT APPLICATIONS



### 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

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

Durable stainless steel [CF8M] corrosion-resistant alloy, all metal internal parts machined from 316 stainless steel alloy

Diaphragm acts as an actuator, eliminating the need for electric or pneumatic actuators

Adaptable to a wide variety of control devices

### OPTIONS

Spring-assist closed

Spring-assist open

Limit stop for flow control

Position indicator

Seal and diaphragm materials for special applications

Available in threaded or flanged end configurations

### TYPICAL APPLICATIONS

Bottling Plants

Chemical Injection

Condensate Polishers

Corrosive Liquid Handling

Deionizers

Laundry Equipment

Ozone Generators

Paper and Pulp

Process Water Systems

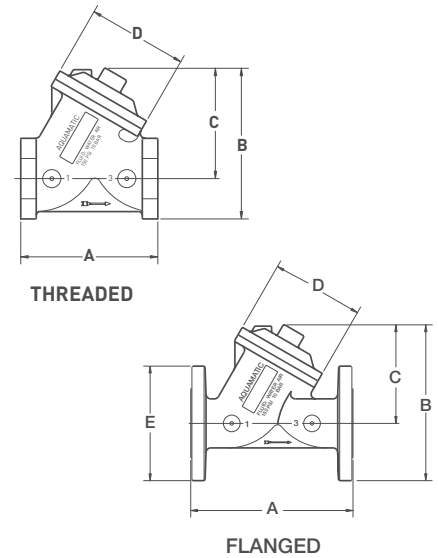
Reverse Osmosis Equipment

Steam Sterilization

## DIMENSIONS

MODEL #	ENDS	PIPE SIZE	Cv*	DIMENSIONS (APPROXIMATE)				
				A	B	C	D	E
V46C	Threaded	1"	14	3.75" (95 mm)	4.45" (113 mm)	3.21" (82 mm)	2.75" (70 mm)	-
V46E	Threaded	1-1/2"	33	4.75" (121 mm)	5.00" (127 mm)	3.50" (89 mm)	3.50" (89 mm)	-
V46F	Threaded	2"	54	6.62" (168 mm)	7.28" (185 mm)	5.34" (136 mm)	4.84" (123 mm)	-
V46C	Flanged	1"	14	5.50" (140 mm)	5.49" (139 mm)	3.36" (85 mm)	2.75" (70 mm)	4.25" (108 mm)
V46E	Flanged	1-1/2"	33	6.50" (165 mm)	6.45" (164 mm)	3.95" (100 mm)	3.50" (89 mm)	5.00" (127 mm)
V46F	Flanged	2"	54	8.50" (216 mm)	8.16" (207 mm)	5.16" (131 mm)	4.84" (123 mm)	6.00" (152 mm)

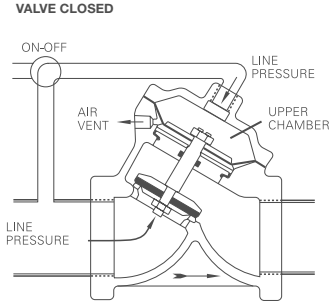
\*Cv is the flow rate in gallons per minute of water at 60°F at 1 pound pressure drop. Liters per minute = Gal/Min x 3.78



## PRINCIPLES OF OPERATION

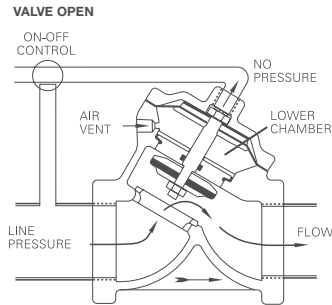
### DRIP-TIGHT CLOSING

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.



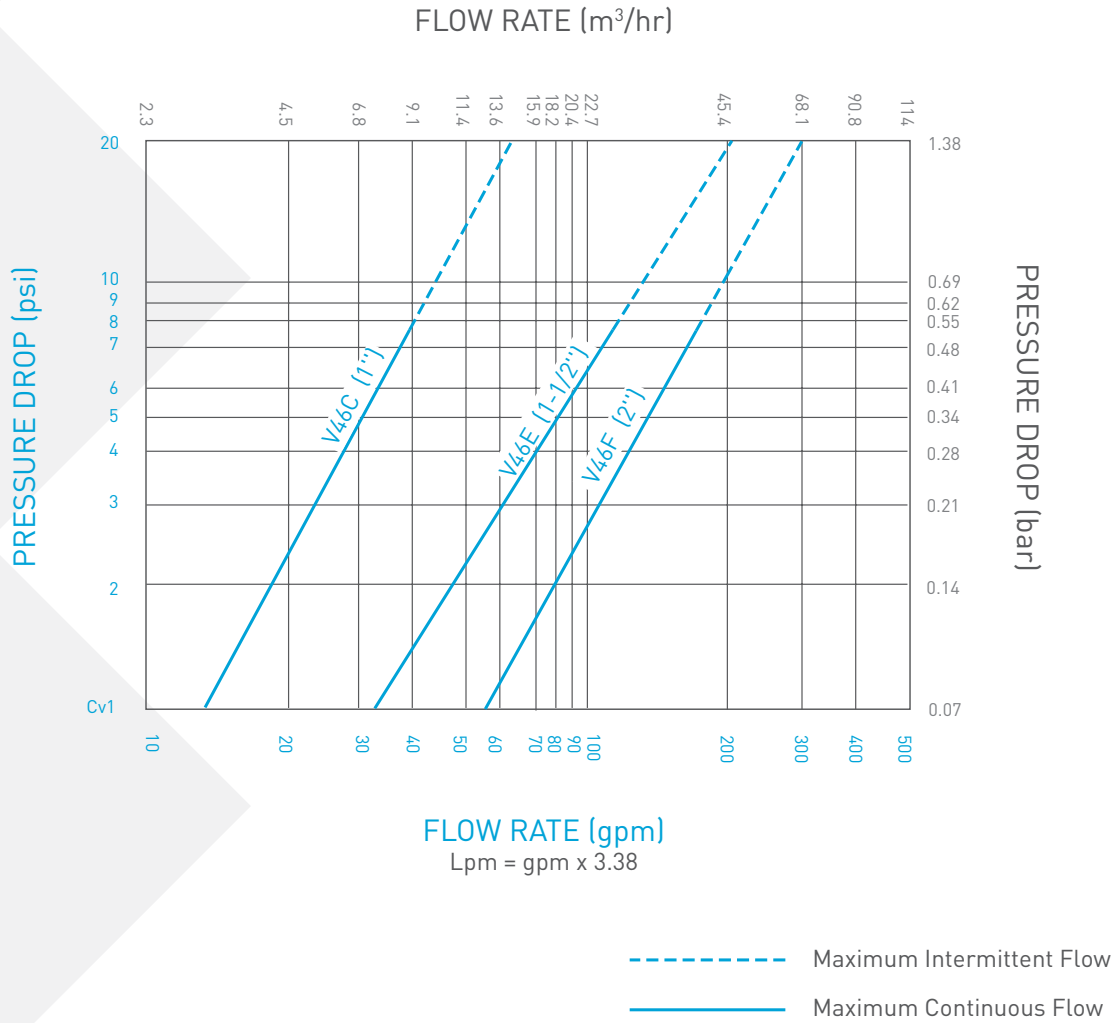
### FULL OPEN OPERATION

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.



OPERATING SPECIFICATIONS	THREADED VALVE	FLANGED VALVES
Maximum Working Pressure	250 psi (17 bar)	150 psi (10.3 bar)
Temperature	Standard: 150°F (65°C) Maximum: 250°F (120°C)	Standard: 150°F (65°C) Maximum: 250°F (120°C)
Pipe Sizes	1", 1½", and 2" threaded (NPT, BSPP, JIS)	1", 1½", and 2" flanged (U.S. or ISO)

**PERFORMANCE DATA**





**FILTRATION & PROCESS**

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