

The ASEPCO Weirless Radial-Diaphragm™ Inline Valve

Designed for Critical Aseptic Processing Applications

ASEPCO weirless diaphragm valves are specifically designed for applications where leakage, dead legs, and cross-contamination are unacceptable. We've applied our contamination-free, radial-diaphragm technology and easy-to-use clamp assembly to an inline valve configuration, creating a reliable valve that is easy to assemble and inspect.

Features

- Contamination-free, radial-diaphragm technology
- Clean, self-draining design
- Simple clamp assembly—no additional tools needed
- Integral travel stops
- Patented shoulder seal
- Isolates process fluids absolutely
- Drains fully in multiple orientations
- Easy to seal and inspect
- Up to 80% reduction in maintenance costs
- Reduced down-time when changing diaphragms
- Never needs re-tightening or adjustment
- Color code with any of 7 valve handle colors

Specifications

Valves

Material	316L, AL6XN, Hastelloy Machined from solid, hot-rolled, bar stock or forgings
Surface Finish	Max. 20 micro-inch Ra (0.5 µm Ra), electropolished Max. 15 micro-inch Ra (0.375 µm Ra), electropolished Max. 10 micro-inch Ra (0.25 µm Ra), electropolished
Sizes	0.5-inch compact, 0.5 inch, 0.75 inch, 1 inch, and 1.5 inches
Available Connections	Hygienic clamp, tube-end
Handle Colors	Standard: 1/2, 3/4, 1, and 1.5 inch black On request: blue, red, yellow, amber, green, purple
Maximum Pressure	150 psi
Maximum Temperature	135°C/275°F
Marking	Each valve is serialized and marked for full material traceability
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, CE-PED, ASME

Actuators

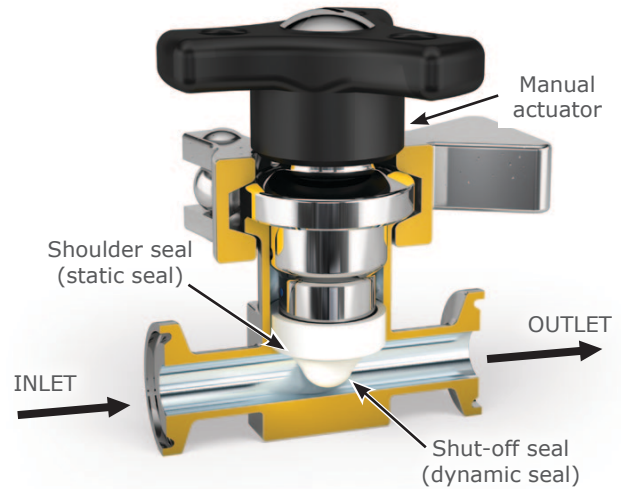
Types	Manual or pneumatic Fail open or closed
Material	Base is 304 stainless, manual handle is PES, pneumatic housing is PPS
Size	0.5 inch, 0.75 inch, 1 inch, and 1.5 inches
Operating Air Pressure	100 psi max for pneumatic actuators
Seals	PTFE bushings and O-rings
Fitting	1/8-inch NPT air connection (for pneumatic)
Possible Instrumentation	• Switched • With or without solenoids • With or without DeviceNet cards

Diaphragms

Materials	Silicone	Silicone Plus	EPDM	EPDM Plus
Temperature Range	-60 to 275°F	-60 to 275°F	-30 to 275°F	-30 to 275°F
Pressure Range	100-150psi	100-150psi	100-150psi	100-150psi
Parylene Treatment	-	√	-	√
Class	All materials: USP Class VI, 21 CFR 177.2600			

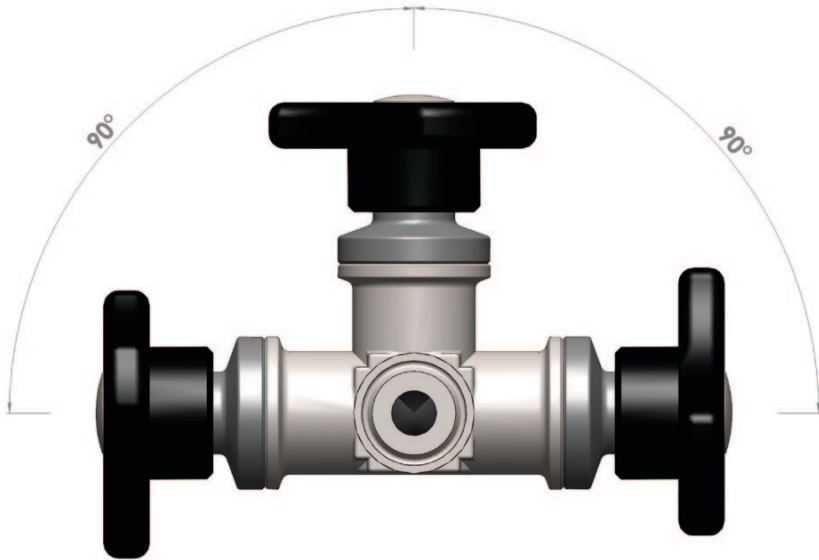


ADVANCED ASEPTIC
PROCESSING EQUIPMENT

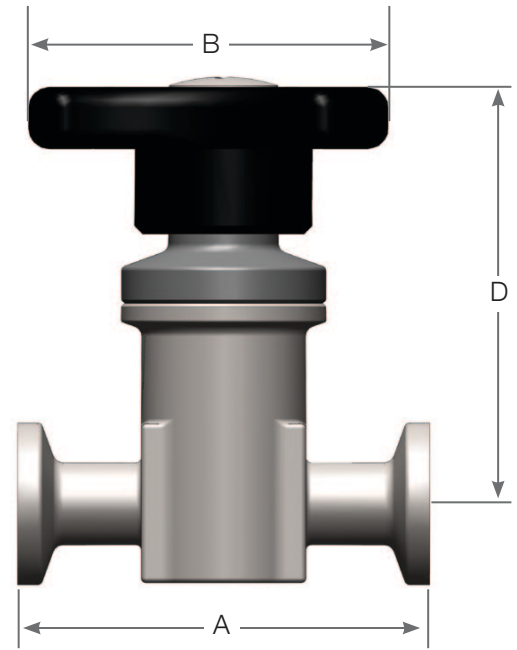


Please contact our Customer Service Department for any non-standard valve requirement (800) 882-3886.

Inline Valve Dimensions, Flow Rates, and Weights Specifications



Fully drainable at multiple installation angles



Inline Valve Flow Rates

Size inches	Cv at 1 psi (0.07 bar) GPM (LPM)
0.50 Compact	4.70 (17.8)
0.50	4.70 (17.8)
0.75	9.51 (36)
1.00	18.49 (70)
1.50	27.47 (104)

Weights

Size inches	Valve Body lb (kg)	Total Weight with Manual Actuator lb (kg)	Total Weight with Pneumatic Actuator lb (kg)
0.50 Compact	0.29 (0.13)	0.94 (0.43)	1.49 (0.67)
0.50	0.38 (0.17)	1.55 (0.70)	2.10 (0.95)
0.75	0.51 (0.23)	1.77 (0.80)	3.30 (1.50)
1.00	1.39 (0.63)	3.86 (1.75)	6.66 (3.02)
1.50	2.90 (1.32)	7.07 (3.20)	11.47 (5.20)

Note: actuator weights include clamp and standard EPDM diaphragm

Inline Valve Dimensions

Size inches	A in (mm)	B - with Manual Actuator in (mm)	B - with Pneumatic Actuator in (mm)	D - with Manual Actuator in (mm)	D - with Pneumatic Actuator in (mm)
0.50 Compact	2.50 (63.50)	2.40 (60.96)	2.08 (52.83)	2.53 (64.26)	5.27 (133.88)
0.50	3.50 (88.90)	2.40 (60.96)	2.08 (52.83)	2.53 (64.26)	5.27 (133.88)
0.75	3.00 (76.20)	2.40 (60.96)	3.10 (78.74)	2.90 (73.66)	6.70 (170.18)
1.00	4.50 (114.30)	2.60 (66.04)	3.10 (78.74)	4.10 (104.14)	7.50 (190.50)
1.50	5.50 (139.70)	2.60 (66.04)	6.20 (157.48)	4.10 (104.14)	12.90 (327.66)