

The ASEPCO Weirless Radial-Diaphragm™ Process Valve

ASEPCO

ADVANCED ASEPTIC
PROCESSING EQUIPMENT

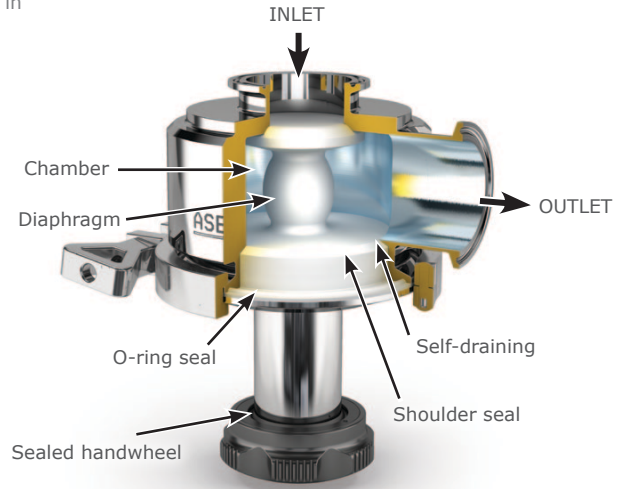
Designed for Critical Aseptic Processing Applications

ASEPCO radial-diaphragm valves are specifically designed for applications where leakage, dead legs, or cross-contamination are unacceptable. ASEPCO valves provide added security in all high-purity processing.

The ASEPCO 90° Process Valve is used in process lines at the point where the flow path changes 90°. These flow changes are commonly found in the WFI system loops and the food, dairy, and beverage industries.

Features

- Radial-diaphragm
- Flush mount design
- Drains completely in three mounting positions including upside down
- Can be CIP/SIP to eliminate caking
- Fits into tight piping areas
- Simple clamp assembly
- Change diaphragms in seconds
- Integral travel stops



Specifications

Valves

Material	316L, AL6XN, Hastelloy, Alloy C-22 and C276, Polypropylene Machined from solid, hot-rolled, bar stock
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, 1 inch, 1.5 inch, 2 inches, 3 inches, 4 inches
Outlet Connections	End: Sanitary flange and buttweld; Optional Port: Per customer specification
Maximum Pressure	[Valve body pressure only] ASME vessels: 250 psi (17 bar), PED vessels: 175 psi (12 bar)
Maximum Temperature	Varies from 135°C/275°F to 260°C/500°F depending on diaphragm material
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 compact pneumatic Fail open or closed
Material	304 stainless steel housing; can be made in 316L
Sizes	0.5 inch through 4 inches
Operating Air Pressure	100 psi max. for pneumatic actuators
Seals	Teflon 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

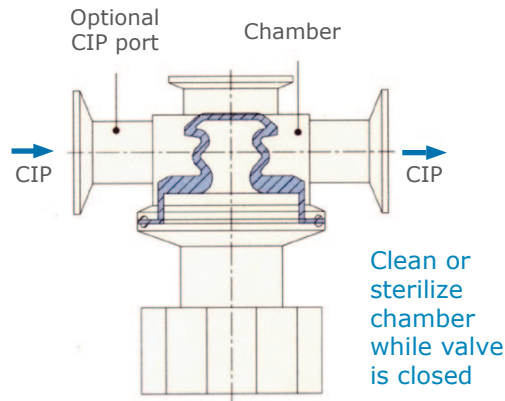
Diaphragms

Materials	Silicone	Silicone Plus	EPDM	EPDM Plus	Viton*	PTFE*
Temperature Range	-60 to 275°F	-60 to 275°F	-30 to 275°F	-30 to 275°F	5 to 400°F	39 to 500°F
Pressure Range	100-150psi	100-150psi	100-150psi	100-150psi	100-150psi	40-60psi
Parylene Treatment	-	√	-	√	-	-
Class	All materials: USP Class VI, 21 CFR 177.2600					

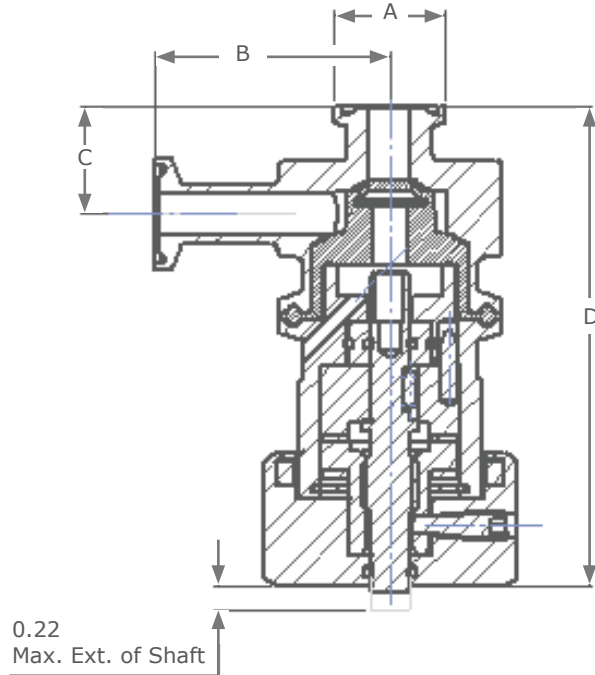
* Not available in all valve sizes

Please contact our Customer Service Department for any non-standard valve requirement (800) 882-3886 or info@asepc.com

Process Valve Dimensions, Flow Rates, and Weights Specifications



Optional valve design with CIP port for behind-the-seat cleaning



PCXX-100-X Process Valve Dimensions

Size*	A	B	C	D - with Manual Actuator	D - with Pneumatic Actuator
inches	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
0.50	0.98 (24.89)	2.08 (52.83)	0.96 (24.38)	4.25 (107.95)	5.07 (128.78)
1.00	1.98 (50.29)	2.53 (64.26)	1.26 (32.00)	5.25 (133.35)	6.85 (173.99)
1.50	1.98 (50.29)	3.35 (85.09)	2.01 (51.05)	7.34 (186.44)	8.13 (206.50)
2.00	2.52 (64.01)	3.25 (82.55)	1.76 (44.70)	7.34 (186.44)	8.13 (206.50)
3.00	3.58 (90.93)	3.76 (95.50)	2.26 (57.40)	8.34 (211.84)	10.66 (270.76)
4.00	4.68 (118.87)	4.62 (117.35)	3.55 (90.17)	11.17 (283.72)	15.04 (382.02)

* - Note that Inlet and Outlet are the same size; for reducing sizes call ASEPCO.

Process Valve Flow Rates

Size	Cv at 1 psi (0.07 bar)
inches	GPM (LPM)
0.50	2.7 (10.2)
1.00	15.8 (59.8)
1.50	48 (180)
2.00	72 (272)
3.00	170 (643)
4.00	302 (1143)

Weights

Size	Valve Body	Total Weight with Manual Actuator	Total Weight with Pneumatic Actuator
inches	lb (kg)	lb (kg)	lb (kg)
0.50	1.45 (0.66)	3.50 (1.59)	3.20 (1.45)
1.00	2.95 (1.34)	7.15 (3.25)	8.00 (3.64)
1.50	5.90 (2.68)	12.45 (5.66)	14.25 (6.48)
2.00	6.18 (2.81)	12.73 (5.79)	14.53 (6.60)
3.00	10.95 (4.98)	17.95 (8.16)	34.70 (15.77)
4.00	18.14 (8.25)	36.64 (16.65)	73.54 (33.43)