

The ASEPCO Radial-Diaphragm™ Tank-Bottom Valve

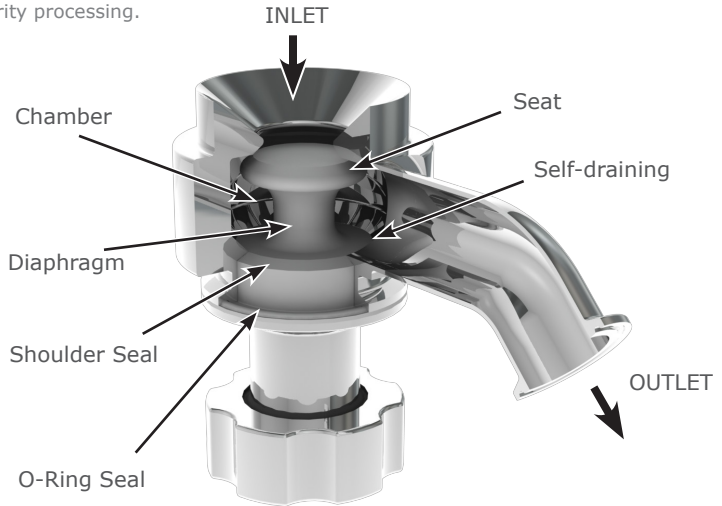


Designed for Critical Aseptic Processing Applications

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.

Features

- Radial-diaphragm
- Flush mount design
- Self-draining, cleanable
- Simple clamp assembly
- Change diaphragms in seconds
- Integral travel stops
- Weep hole under diaphragm
- Patented shoulder seal
- Behind the seat flow path
- Multiple ports, locations, and configurations available



Specifications

Valves

Material	316L, AL6XN, Hastelloy 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	1/2" through 4"
Outlet Connections	Standard: Hygienic clamp, tube end, (others available)
Maximum Pressure	250 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

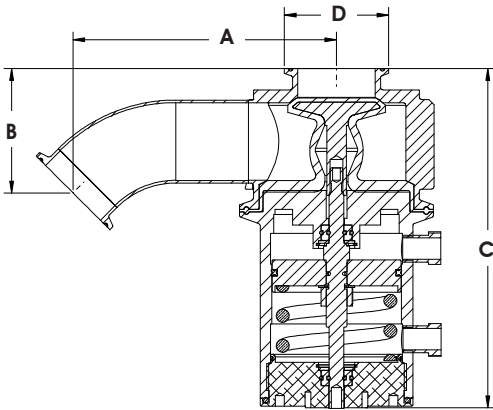
Types	Manual or compact pneumatic Fail open or closed
Material	304 stainless steel housing, can be made in 316L
Sizes	1/2" through 4"
Operating Air Pressure	100psi max for Pneumatic Actuators
Seals	Teflon bushings and o-rings
Fitting	1/8" NPT air connection (for pneumatic)
Possible Instrumentation	Switched With or without solenoids With or without DeviceNet cards

Diaphragms

Materials	Silicone	Silicone Plus	EPDM	EPDM Plus	Viton
Temperature Range	-60 to 275°F	-60 to 275°F	-30 to 275°F	-30 to 275°F	-4 to 400°F
Class	USP Class VI, 21 CFR 177.2600	USP Class VI, 21 CFR 177.2600	USP Class VI, 21 CFR 177.2600	USP Class VI, 21 CFR 177.2600	USP Class VI, 21 CFR 177.2600
Parylene Treatment	-	√	-	√	-

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

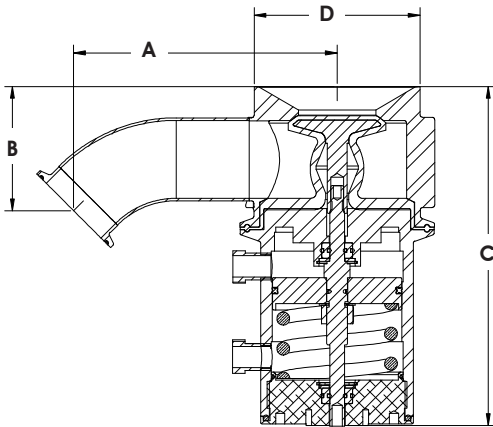
Valve Dimensions



TCXX-100-X: Clamp-Mounted Tank Valve

Size	A	B	C - with Pneumatic Actuator	C - with Manual Actuator	D
0.50	3.44 (87)	2.19 (56)	5.08 (129)	4.26 (108)	0.98 (25)
1.00	4.44 (113)	2.06 (52)	6.82 (173)	5.81 (148)	1.98 (50)
1.50	5.74 (146)	3.03 (77)	8.19 (208)	7.34 (186)	1.98 (50)
2.00	6.36 (162)	3.00 (76)	8.18 (208)	7.34 (186)	2.52 (64)
2.50	N/A	N/A	N/A	N/A	N/A
3.00	7.89 (200)	3.94 (100)	10.66 (271)	8.34 (212)	3.58 (91)
4.00	9.56 (243)	5.74 (146)	15.00 (381)	11.17 (284)	4.68 (119)

Dimensions are in inches (mm).



TFFX-100-X: Flush-Mounted Tank Valve

Size	A	B	C - with Pneumatic Actuator	C - with Manual Actuator	D
0.50	3.44 (87)	2.19 (56)	5.08 (129)	4.26 (108)	1.98 (50)
1.00	4.44 (113)	2.06 (52)	6.82 (173)	5.81 (148)	2.98 (76)
1.50	5.74 (146)	3.03 (77)	8.19 (208)	7.34 (186)	4.00 (102)
2.00	6.36 (162)	3.00 (76)	8.18 (208)	7.34 (186)	4.00 (102)
2.50	7.54 (192)	3.97 (101)	10.66 (271)	8.34 (212)	4.91 (125)
3.00	7.89 (200)	3.94 (100)	10.66 (271)	8.34 (212)	4.91 (125)
4.00	9.56 (243)	5.74 (146)	15.00 (381)	11.17 (284)	7.00 (178)

Dimensions are in inches (mm).

Tank 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	0.64 (0.29)	2.69 (1.2)	2.39 (1.08)
1.00	3.60 (1.63)	7.80 (3.5)	8.65 (3.92)
1.50	7.26 (3.29)	13.81 (6.3)	15.61 (7.08)
2.00	16.38 (7.43)	22.93 (10)	24.73 (11.22)
2.50	38.59 (17.50)	45.59 (21)	62.34 (28.28)
3.00	38.59 (17.50)	45.58 (21)	62.33 (28.27)
4.00	68.58 (31.11)	84.08 (38)	120.98 (54.88)