

The ASEPCO Radial-Diaphragm™ Tangential Valve



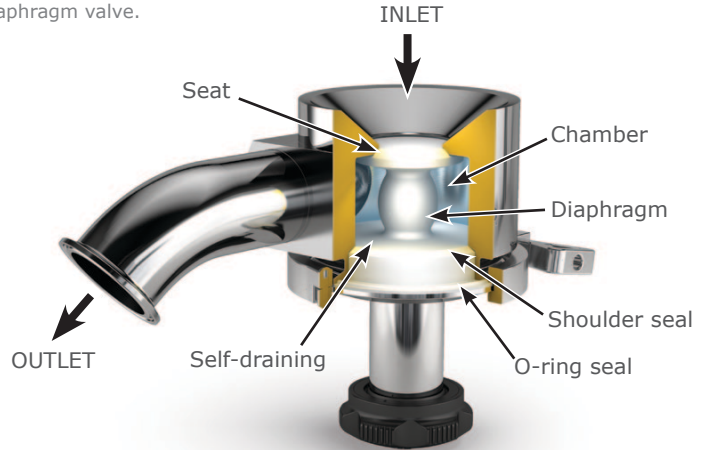
Designed for Critical Aseptic Processing Applications

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.

ASEPCO developed the Tangential Radial-Diaphragm valve specifically for situations where a valve needs to be mounted off-center on the vessel head. This design is completely drainable in an off-set position and it retains all these standard benefits of an ASEPCO Radial-Diaphragm valve.

Features

- Radial-diaphragm
- Flush mount design
- Self-draining, cleanable
- Simple clamp assembly
- Change diaphragms in seconds
- Integral travel stops
- Flush or CIP/SIP while valve is closed



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 inch through 3 inches
Outlet Connections	Standard: Hygienic clamp, tube end, (others available)
Maximum Pressure	ASME vessels: 250 psi (17 bar) PED vessels: 175 psi (12 bar)
Maximum Temperature	Varies from 135°C/275°F to 200°C/400°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

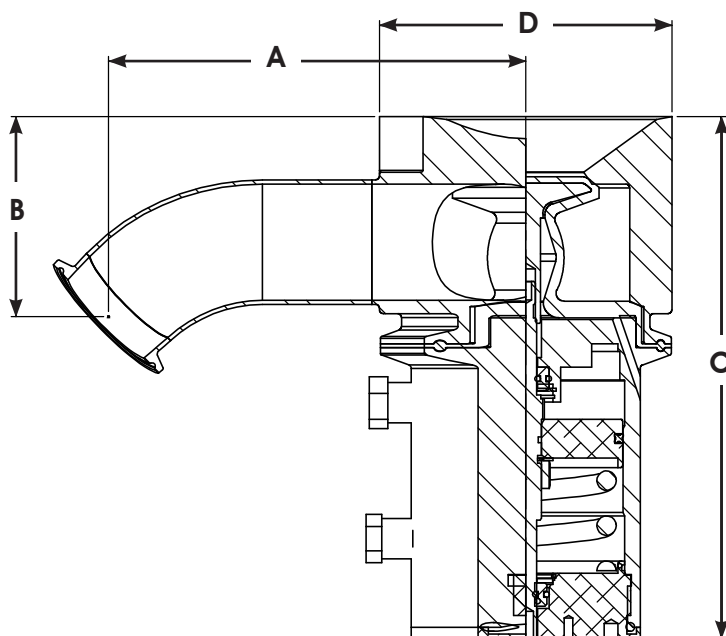
Actuators

Types	Manual or compact pneumatic Fail open or closed
Material	304 stainless steel housing, can be made in 316L
Sizes	1 inch through 3 inches
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	PTFE
Temperature Range	-60 to 275°F	-60 to 275°F	-30 to 275°F	-30 to 275°F	5 to 400°F	32 to 350°F
Parylene Treatment	-	√	-	√	-	-
Class	all materials: USP Class VI, 21 CFR 177.2600					

Tangential Valve Dimensions, Flow Rates, and Weights Specifications



TR/TLXX-100-X: Flush-Mounted Tangential Valve

Size inches	A in (mm)	B in (mm)	C - with Pneumatic Actuator in (mm)	C - with Manual Actuator in (mm)	D in (mm)
1.00	4.37 (111)	2.04 (52)	6.82 (173)	5.26 (134)	2.98 (76)
1.50 (True)	5.19 (132)	2.60 (66)	7.42 (189)	5.65 (144)	2.60 (66)
1.50	6.00 (152)	3.25 (83)	8.40 (213)	7.59 (193)	4.71 (120)
2.00	6.72 (171)	3.22 (82)	8.40 (213)	7.59 (193)	4.71 (120)
2.50	7.54 (192)	4.00 (102)	10.77 (274)	8.43 (214)	4.91 (125)
3.00	6.75 (171)	3.97 (101)	10.77 (274)	8.42 (214)	4.91 (125)

Tangential Valve Flow Rates

Size inches	Cv at 1 psi (0.07 bar) GPM (LPM)
1.00	15.8 (59.8)
1.50 (True)	48 (180)
1.50	56 (212)
2.00	72 (272)
2.50	90 (340)
3.00	170 (643)

Weights

Size inches	Valve Body lb (Kg)	Total Weight with Manual Actuator lb (Kg)	Total Weight with Pneumatic Actuator lb (Kg)
1.00	3.60 (1.63)	7.80 (3.5)	8.65 (3.92)
1.50 (True)	4.75 (2.15)	8.35 (3.78)	9.80 (4.44)
1.50	10.50 (4.76)	17.05 (7.73)	18.85 (8.55)
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)