

## The ASEPCO Weirless Radial-Diaphragm™ Zero Dead Leg Valve

# ASEPCO

ADVANCED ASEPTIC  
PROCESSING EQUIPMENT

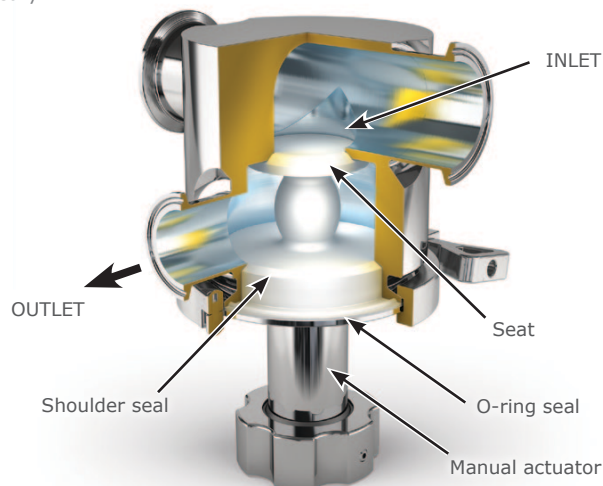
### Designed for Critical Aseptic Processing Applications

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 Zero Dead Leg Valve is used in situations where sampling, draining, transferring, or diverting process fluid from a line is necessary.

### 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



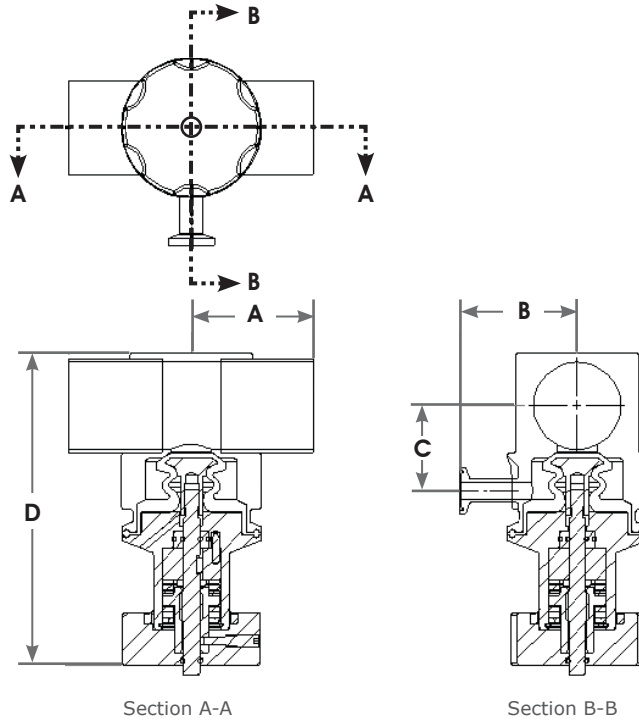
### Specifications

Valves						
Material	316L, AL6XN, Hastelloy, Alloy C-22 and C276 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					
Line Sizes	0.5 inch, 0.75 inch, 1 inch, 1.5 inch, 2 inches, 3 inches, 4 inches					
Outlet Connections	End: Sanitary flange and butt weld; 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@asepco.com

# Zero Dead Leg Valve Dimensions, Flow Rates, and Weights Specifications



## KWXX-100-X Zero Dead Leg Valve Dimensions

Line 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	1.86 (47.2)	2.07 (52.5)	0.53 (13.5)	4.21 (106.9)	5.03 (127.8)
0.75	1.99 (50.4)	1.96 (49.8)	0.78 (19.8)	4.71 (119.6)	5.53 (140.5)
1.00	4.40 (111.8)	2.53 (64.3)	1.06 (26.9)	5.76 (146.3)	7.38 (187.5)
1.50	3.35 (85.1)	2.53 (64.3)	2.06 (52.3)	6.18 (157.0)	8.12 (206.2)
2.00	4.23 (107.4)	3.25 (82.6)	2.065 (52.5)	6.74 (171.2)	8.37 (212.6)
3.00	4.23 (107.4)	2.53 (64.3)	2.065 (52.5)	7.683 (195.1)	9.31 (236.5)

\*Note: For Inlet sizes 1 inch and below the outlet is 1/2 inch.  
 For Inlet sizes 1.5 inches and larger the outlet is 1 inch.  
 For other configurations, call ASEPCO.

## Zero Dead Leg 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)

## Weights

Size	Valve Body	Total Weight with Manual Actuator	Total Weight with Pneumatic Actuator
inches	lb (kg)	lb (kg)	lb (kg)
0.50	1.00 (0.45)	3.05 (1.39)	2.75 (1.25)
0.75	1.40 (0.64)	3.45 (1.57)	3.15 (1.43)
1.00	1.50 (0.68)	5.70 (2.59)	6.55 (2.98)
1.50	2.20 (1.00)	8.75 (3.98)	10.55 (4.80)
2.00	3.50 (1.59)	10.05 (4.57)	11.85 (5.39)
3.00	6.00 (2.73)	13.00 (5.91)	29.75 (13.52)