

The ASEPCO Weirless Radial-Diaphragm™ Sample Valve

Designed for Critical Aseptic Processing Applications

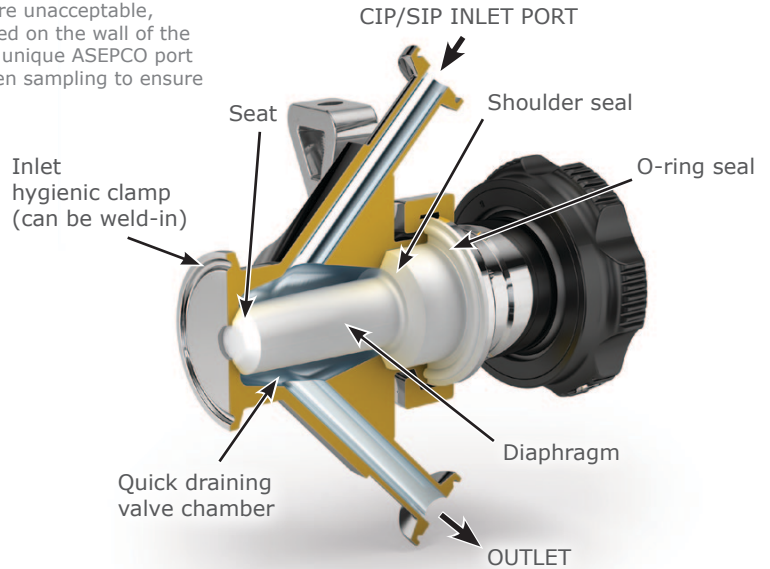
ASEPCO radial-diaphragm valves are specifically designed for applications where leakage, dead legs, and cross-contamination are unacceptable, just like ASEPCO's original Tank-Bottom Valve. Mounted on the wall of the vessel just above the *knuckle*, it is equipped with the unique ASEPCO port that allows through-the-chamber CIP/SIP flow between sampling to ensure a truly representative sample every time.



ADVANCED ASEPTIC
PROCESSING EQUIPMENT

Features

- Through chamber CIP/SIP
- Radial-diaphragm
- Mounted on wall of vessel just above knuckle
- Simple clamp assembly
- Change diaphragms in seconds
- Integral travel stops
- Patented shoulder seal
- Behind the seat flow path



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 |
| Mounting Sizes | Weld-in or 1-inch to 3-inch clamp |
| Inlet Size | 0.5 inch |
| CIP/SIP Port/Outlet Connections | Standard: 0.5-inch hygienic clamp, 0.5-inch tube end (others available) |
| 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 |
| Size | 0.5 inch |
| 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 | | | | | |

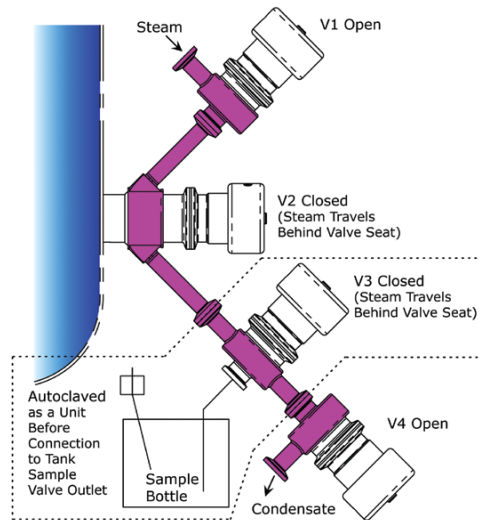
* Not available in all valve sizes

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

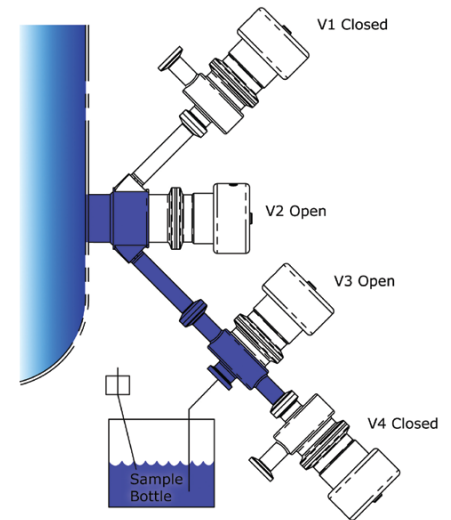
ASEPCO Tank Sampling

With "behind the seat" cleaning our valve system allows contamination-free sampling as depicted in the graphics at right.

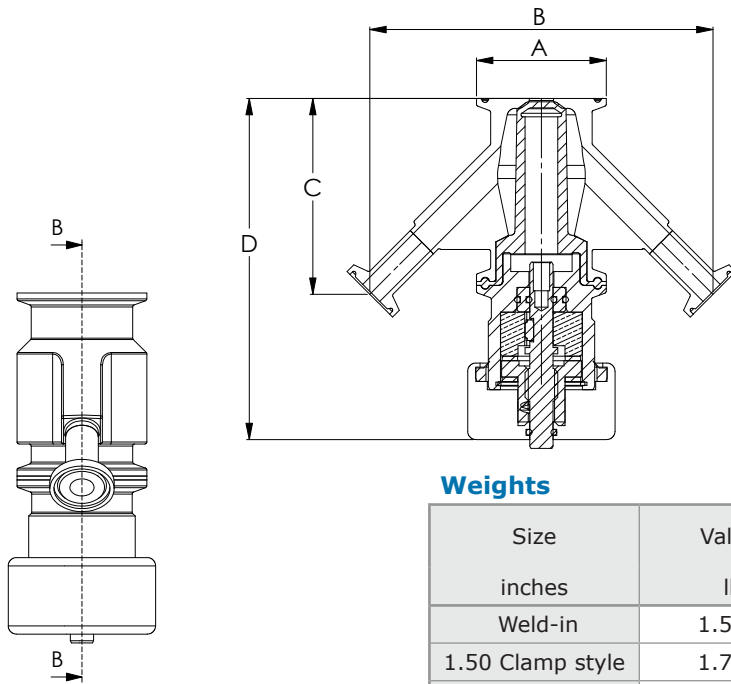
Decontamination Flowpath (Pre or Post Sample)



Sample Flowpath



Sample Valve Dimensions, Flow Rates, and Weights Specifications



Sample Valve Flow Rates

| Inlet OD Size (A) | Cv at 1 psi (0.07 bar) |
|-------------------|------------------------|
| inches | GPM (LPM) |
| Weld-in | 1.23 (4.66) |
| 1.50 Clamp style | 1.23 (4.66) |
| 2.00 Clamp style | 1.23 (4.66) |
| 3.00 Clamp style | 1.23 (4.66) |

The only thing that changes is the size of the tri-clamp inlet.

Weights

| Size | Valve Body | Total Weight with Manual Actuator | Total Weight with Pneumatic Actuator |
|------------------|-------------|-----------------------------------|--------------------------------------|
| inches | lb (kg) | lb (kg) | lb (kg) |
| Weld-in | 1.50 (0.68) | 4.30 (1.95) | 4.00 (1.82) |
| 1.50 Clamp style | 1.75 (0.79) | 4.25 (1.93) | 4.55 (2.06) |
| 2.00 Clamp style | 2.00 (0.91) | 4.50 (2.04) | 4.80 (2.18) |
| 3.00 Clamp style | 2.25 (1.02) | 4.75 (2.15) | 5.00 (2.27) |

SC/SW Sample 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) |
| Weld-in | 1.55 (39.37) | 5.25 (133.35) | 2.99 (75.95) | 5.21 (132.33) | 6.04 (153.42) |
| 1.50 Clamp style | 1.98 (50.29) | 5.25 (133.35) | 2.99 (75.95) | 5.21 (132.33) | 6.04 (153.42) |
| 2.00 Clamp style | 2.52 (64.01) | 5.25 (133.35) | 2.99 (75.95) | 5.21 (132.33) | 6.04 (153.42) |
| 3.00 Clamp style | 3.58 (91.00) | 5.25 (133.35) | 2.99 (75.95) | 5.21 (132.33) | 6.04 (153.42) |