

## The Weirless ASEPCO Radial-Diaphragm™ Point of Use 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 Point of Use Valve is used in situations where sampling, draining, transferring, or diverting process fluid from a line is necessary.

### Features

- Radial-diaphragm
- Valve seat flush with process line
- Integrated elbows for connection to piping loops
- Minimal L/D ratio enables easy cleaning
- Can be CIP/SIP to eliminate caking
- Simple clamp assembly
- Change diaphragms in seconds
- Integral travel stops

### Specifications

#### Valves

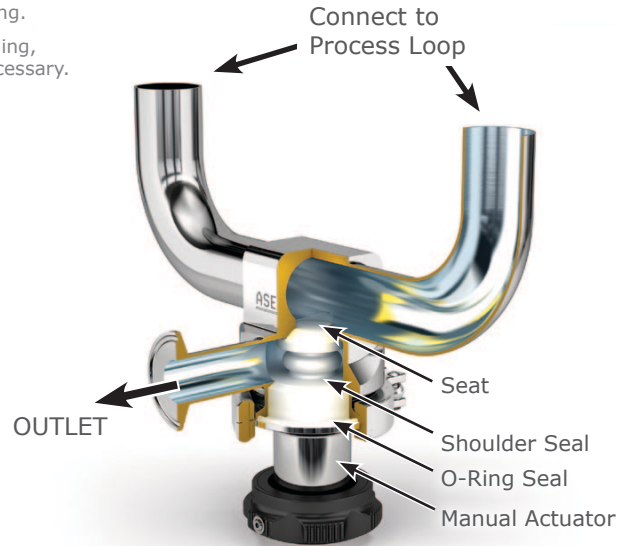
|                          |  |
|--------------------------|--|
| Material                 | 316L, AL6XN, Hastelloy, Alloy C-22 and C276<br>Machined from solid, hot-rolled, bar stock  |
| Surface Finish           | Max 20 micro-inch Ra (0.5 µm Ra), Electropolished<br>Max 15 micro-inch Ra (0.375 µm Ra), Electropolished<br>Max 10 micro-inch Ra (0.25 µm Ra), Electropolished |
| Inlet Sizes              | 0.5 inch, 0.75 inch, 1 inch, 1.5 inch, 2 inches, 2.5 inches, 3 inches, 4 inches  |
| Outlet Sizes             | 0.5 inch, 0.75 inch, 1 inch, 1.5 inch, 2 inches  |
| Inlet/Outlet Connections | Sanitary flange outlet and buttweld inlet are standard, other options 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<br>Fail open or closed                       |
| Material                 | 304 stainless steel housing; can be made in 316L                         |
| Sizes                    | 0.5 inch through 2 inches  |
| Operating Air Pressure   | 100psi 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 |

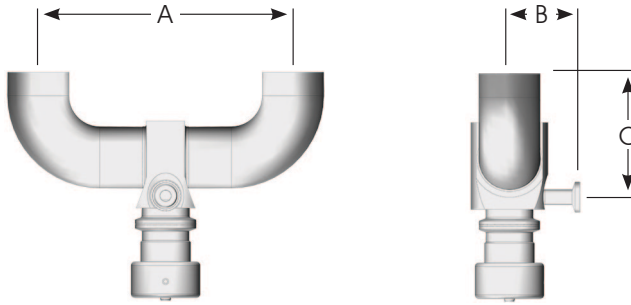
#### Diaphragms

| 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

## Point of Use Valve Dimensions, Flow Rates, and Weights Specifications



### Point of Use Valve Flow Rates

| Outlet Size<br>(inches) | Cv at 1 psi (0.07 bar)<br>GPM (LPM) |
|-------------------------|-------------------------------------|
| 0.50                    | 2.7 (10.2)                          |
| 0.75                    | 10.6 (40)                           |
| 1.00                    | 15.8 (59.8)                         |
| 1.50                    | 48 (180)                            |
| 2.00                    | 72 (272)                            |

### UPXX-100-X Point of Use Valve Dimensions Center to Center Dimension (A)

| Line Size (BW)      | 0.50         | 0.75         | 1.00         | 1.50          | 2.00          | 2.50          | 3.00          | 4.00          |
|---------------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|
| Outlet Size (Clamp) | in (mm)      | in (mm)      | in (mm)      | in (mm)       | in (mm)       | in (mm)       | in (mm)       | in (mm)       |
| 0.50                | 7.71 (195.8) | 7.71 (195.8) | 7.71 (195.8) | 8.80 (223.5)  | 11.00 (279.4) | 14.00 (355.6) | 15.50 (393.7) | 19.00 (482.6) |
| 0.75                |              | 8.50 (215.9) | 8.50 (215.9) | 10.00 (254.0) | 12.00 (304.8) | 14.00 (355.6) | 15.50 (393.7) | 19.00 (482.6) |
| 1.00                |              |              | 8.50 (215.9) | 10.00 (254.0) | 12.00 (304.8) | 14.00 (355.6) | 15.50 (393.7) | 19.00 (482.6) |
| 1.50                |              |              |              | 11.94 (303.3) | 12.50 (317.5) | 14.00 (355.6) | 16.00 (406.4) | 20.00 (508.0) |
| 2.00                |              |              |              |               | 13.75 (349.3) | 15.25 (387.4) | 16.00 (406.4) | 20.00 (508.0) |

### Center to Face Dimension (B)

| Line Size (BW)      | 0.50        | 0.75        | 1.00        | 1.50        | 2.00        | 2.50        | 3.00        | 4.00        |
|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Outlet Size (Clamp) | in (mm)     | in (mm)     | in (mm)     | in (mm)     | in (mm)     | in (mm)     | in (mm)     | in (mm)     |
| 0.50                | 2.08 (52.8) | 2.08 (52.8) | 2.08 (52.8) | 2.08 (52.8) | 2.28 (57.9) | 2.53 (64.3) | 2.53 (64.3) | 2.53 (64.3) |
| 0.75                |             | 2.53 (64.3) | 2.53 (64.3) | 2.53 (64.3) | 2.53 (64.3) | 2.78 (70.6) | 2.78 (70.6) | 2.53 (64.3) |
| 1.00                |             |             | 2.53 (64.3) | 2.53 (64.3) | 2.53 (64.3) | 2.78 (70.6) | 2.78 (70.6) | 2.53 (64.3) |
| 1.50                |             |             |             | 3.35 (85.1) | 3.35 (85.1) | 3.35 (85.1) | 3.35 (85.1) | 3.25 (82.6) |
| 2.00                |             |             |             |             | 3.25 (82.6) | 3.25 (82.6) | 3.25 (82.6) | 3.25 (82.6) |

### Center to Face Dimension (C)

| Line Size (BW)      | 0.50        | 0.75         | 1.00         | 1.50         | 2.00         | 2.50         | 3.00         | 4.00          |
|---------------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Outlet Size (Clamp) | in (mm)     | in (mm)      | in (mm)      | in (mm)      | in (mm)      | in (mm)      | in (mm)      | in (mm)       |
| 0.50                | 3.53 (89.7) | 3.78 (96.0)  | 3.78 (96.0)  | 4.77 (121.2) | 5.99 (152.1) | 7.58 (192.5) | 8.58 (217.9) | 10.77 (273.6) |
| 0.75                |             | 4.06 (103.1) | 4.06 (103.1) | 5.19 (131.8) | 6.44 (163.6) | 7.50 (190.5) | 8.69 (220.7) | 10.64 (270.3) |
| 1.00                |             |              | 4.06 (103.1) | 5.07 (128.8) | 6.32 (160.5) | 7.37 (187.2) | 8.57 (217.7) | 10.52 (267.2) |
| 1.50                |             |              |              | 5.81 (147.6) | 7.06 (179.3) | 8.07 (205.0) | 9.06 (230.1) | 11.30 (287.0) |
| 2.00                |             |              |              |              | 6.81 (173.0) | 7.82 (198.6) | 8.81 (223.8) | 11.05 (280.7) |

All Process Line and Outlet sizes are in inches

### Weights

| Line Size (BW)      | 0.50       | 0.75       | 1.00       | 1.50        | 2.00        | 2.50         | 3.00         | 4.00         |
|---------------------|------------|------------|------------|-------------|-------------|--------------|--------------|--------------|
| Outlet Size (Clamp) | lb (Kg)    | lb (Kg)    | lb (Kg)    | lb (Kg)     | lb (Kg)     | lb (Kg)      | lb (Kg)      | lb (Kg)      |
| 0.50                | 3.33 (1.5) | 3.89 (1.8) | 4.63 (2.1) | 4.53 (2.0)  | 6.59 (3.0)  | 8.99 (4.1)   | 13.75 (6.3)  | 18.93 (8.6)  |
| 0.75                |            | 6.09 (2.8) | 4.63 (2.1) | 6.13 (2.8)  | 8.29 (3.8)  | 8.99 (4.1)   | 13.75 (6.3)  | 18.93 (8.6)  |
| 1.00                |            |            | 8.58 (3.9) | 8.28 (3.8)  | 10.44 (4.7) | 11.14 (5.1)  | 16.00 (7.3)  | 21.08 (9.6)  |
| 1.50                |            |            |            | 19.43 (8.8) | 21.29 (9.7) | 22.09 (10.0) | 22.95 (10.4) | 37.43 (17.0) |
| 2.00                |            |            |            |             | 20.99 (9.5) | 21.79 (9.9)  | 22.85 (10.4) | 37.43 (17.0) |

All weights are with manual actuator.

All process line and outlet sizes are in inches.