Datasheet – ASEPCO Block and Bleed Valve

# ASEPCO Weirless Radial-Diaphragm™ Block and Bleed Valve

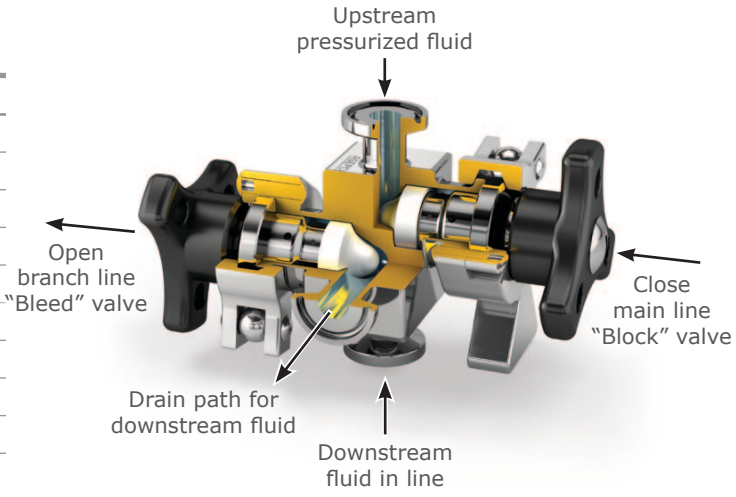
## Designed for Critical Aseptic Processing Applications

ASEPCO weirless diaphragm valves are specifically designed for applications where leakage, dead legs, and cross-contamination are unacceptable. We've applied our contamination-free, radial-diaphragm technology and easy-to-use clamp assembly to an inline valve configuration, creating a reliable valve that is easy to assemble and inspect.

ASEPCO
Advanced Aseptic Processing Equipment

## Features

- Block body design eliminates dead leg area
- Radial-diaphragm
- Clean, self-draining design
- Simple clamp assembly
- Integral travel stops
- Patented shoulder seal
- Isolates process fluids absolutely
- Easy to seal and inspect
- Up to 80% reduction in maintenance costs
- Reduced down-time when changing diaphragms
- Never needs re-tightening or adjustment

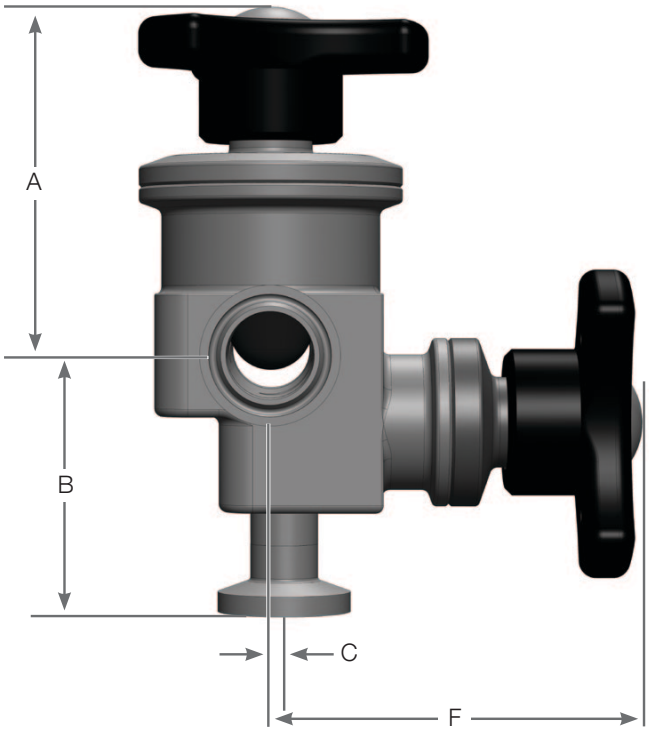


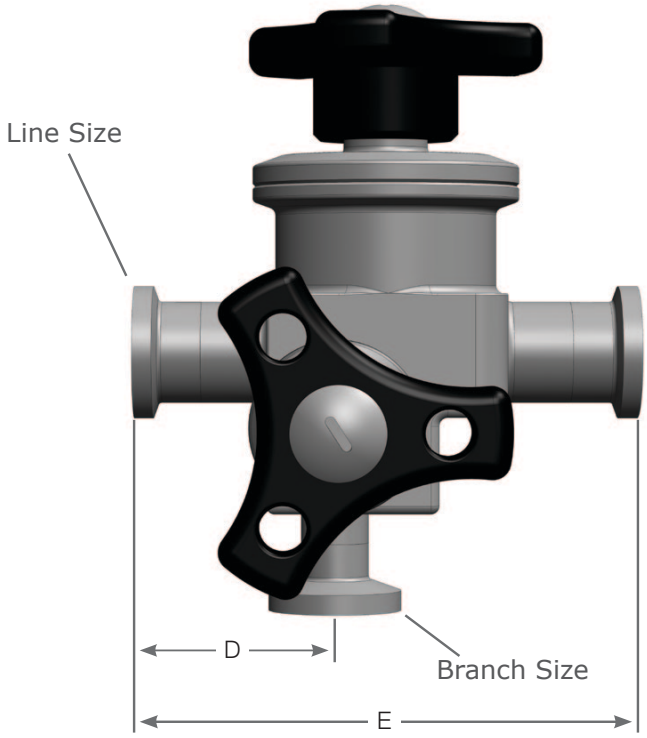

## Specifications

| Valves | | | | |
|---|---|---|---|---|
| Material | 316L, AL6XN, Hastelloy<br>Machined from solid, hot-rolled, bar stock or forgings | | | |
| 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 | | | |
| Sizes | 0.5-inch Compact, 0.75 inch, 1 inch, and 1.5 inches | | | |
| Available Connections | Hygienic clamp, tube-end | | | |
| Handle Colors | Standard: 1/2, 3/4, 1, and 1.5 inch black<br>On request: blue, red, yellow, amber, green, purple | | | |
| Maximum Pressure | 150 psi | | | |
| Maximum Temperature | 135ºC/275ºF | | | |
| 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 pneumatic<br>Fail open or closed | | | |
| Material | Base is 304 stainless, manual handle is PES, pneumatic housing is PPS | | | |
| Size | 0.5 inch, 0.75 inch, 1 inch, and 1.5 inches | | | |
| Operating Air Pressure | 100 psi max for pneumatic actuators | | | |
| Seals | PTFE 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 |
| Temperature Range | -60 to 275°F | -60 to 275°F | -30 to 275°F | -30 to 275°F |
| Pressure Range | 100-150psi | 100-150psi | 100-150psi | 100-150psi |
| Parylene Treatment | – | √ | – | √ |
| Class | All materials: USP Class VI, 21 CFR 177.2600 | | | |

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

## Block and Bleed Valve Dimensions, Flow Rates, and Weights Specifications




### Block and Bleed Valve Dimensions

| Line x Branch Size<br>inches | A<br>in (mm) | B<br>in (mm) | C<br>in (mm) | D<br>in (mm) | E<br>in (mm) | F<br>in (mm) |
|---|---|---|---|---|---|---|
| 1/2″ x 1/2″ | 4.35 (110.5) | 1.70 (43.2) | 0.00 (0.0) | 1.24 (31.5) | 2.75 (69.9) | 2.65 (67.3) |
| 3/4″ x 1/2″ | 4.52 (114.8) | 1.92 (48.8) | 0.10 (2.5) | 1.50 (38.1) | 3.75 (95.2) | 2.75 (69.9) |
| 3/4″ x 3/4″ | 5.25 (133.4) | 2.65 (67.3) | 0.00 (0.0) | 1.63 (41.4) | 3.70 (94.0) | 2.58 (65.5) |

### Block and Bleed Valve's Main Line Flow Rates

| Size<br>inches | Cv at 1 psi (0.07 bar)<br>GPM (LPM) |
|---|---|
| 1/2″ x 1/2″ | 4.70 (17.8) |
| 3/4″ x 1/2″ | 9.51 (36) |
| 3/4″ x 3/4″ | 9.51 (36) |

### Block and Bleed Valve Weights

| Size<br>inches | Total Weight with Manual Actuator<br>lb (Kg) | Total Weight with Pneumatic Actuator<br>lb (Kg) |
|---|---|---|
| 1/2″ x 1/2″ | 1.50 (0.68) | 2.60 (1.20) |
| 3/4″ x 1/2″ | 2.2 (1.00) | 6.20 (2.80) |
| 3/4″ x 3/4″ | 5.60 (2.50) | 9.30 (4.20) |

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We make it right.

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