



Don't Pump Without Us!



KEEP THE
**FLOW GOING WITH
NO CHATTER**

Blacoh's new and improved Back Pressure & Pressure Relief Valves

Blacoh's engineering team has carefully redesigned the back pressure valves and pressure relief valves from the inside out. We believed that it was possible to produce a better valve that can still be priced competitively, while providing more value to our users and customers. Fully protect your pumping system from pressure damage with these reliable, CNC precision machined units.

The Blacoh Back Pressure Valve Advantages:

The new Blacoh back pressure valve features patent-pending flow stabilization technology to improve the consistency of flow and pressure downstream of the valve. Traditional back pressure valves have a similar design to pressure relief valves which are designed to discharge a high volume of fluid once they open. Testing shows that the opening and closing of a traditional back pressure valve creates interruptions in the flow and a corresponding change in line pressure. Blacoh's new valve varies the output as pressure changes, and has been optimized to provide a balance of flow, back pressure stability and downstream pressure stability.

PROTECT YOUR PUMPING SYSTEM

Back Pressure Valves

Diaphragm back pressure valves are designed to enhance the performance of pumping systems by applying a continuous back pressure to the system pump, while also acting as an anti-syphon valve.

Diaphragm back pressure valves apply positive discharge pressure to a metering pump system to improve the consistency of dosage rates by shielding the pump from fluctuating downstream pressure.

The diaphragm is held against the valve seat by an internal spring. When the preset pressure is exceeded, the diaphragm is forced up and system fluid flows through the valve to the injection point.

Pressure Relief Valves

Diaphragm pressure relief valves are designed to protect pumping systems from over pressure damage caused by defective equipment or blockage in the pump system line.

Diaphragm pressure relief valves operate when the pressure in the pumping system exceeds the preset pressure of the valve.

The diaphragm is held against the valve seat by an internal spring. When the preset pressure is exceeded, the diaphragm is forced up and the system fluid flows out of the relief port, back to the system fluid tank or to the suction side of the pump.

BLACOH™
INDUSTRIES

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🌐 www.Blacoh.com/Valves

📍 Made in the USA
📞 (951) 342-3100



THE INDUSTRY'S BEST

Features & Benefits

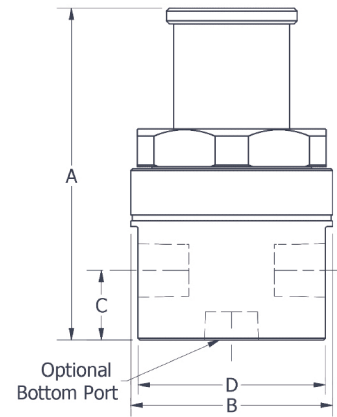
- ▶ **PLASTIC VALVE ADVANTAGES:**
 - Union-style construction provides a superior seal and distributes loading evenly over the entire sealing surface.
 - Fewer components and no metal fasteners to corrode.
 - Superior seal during thermal cycling.
- ▶ **METAL VALVE ADVANTAGES:**
 - Blacoh metal valves have a separate ring attached to the body with bolts. The ring distributes the clamping load over the surfaces for a more uniform clamping load and improved seal.
- ▶ All Blacoh valves feature a swiveling spring seat to ensure the force from the spring can be applied consistently over the diaphragm.

All Sizes & Materials

- ▶ Inlet Sizes: 0.25" to 2", consult factory for larger sizes
- ▶ Body Materials: PVC, CPVC, Polypropylene, PTFE, PVDF, 316L Stainless Steel, Alloy 20, Hastelloy C-276
- ▶ Diaphragms: PTFE, EPDM, Viton, Buna
- ▶ Pressure Ranges: Low (5-50 psi), Standard (5-150 psi), Mid (5-250 psi), High (50-350 psi metal only)
- ▶ Inlet Types: NPT, BSP, Socket Weld, ANSI Flange, Union Connection
- ▶ Configurations: 2 Port 180°, 2 Port 90° (right angle), 3 Port (PRV only)

TECHNICAL SPECIFICATIONS

| Size | Flow at 150 PSI pressure drop across valve: | | | | | |
|----------------------|---|---|----------------------|--|-------------------------------|----------------------|
| | Back Pressure Valves | | | Pressure Relief Valves | | |
| | BPV Part # | Pulsating US GPH | Continuous US GPM | PRV Part # | Pulsating US GPH | Continuous US GPM |
| 1/4" | BP-025-*.** | 240 | 12 | PR-025-*.** | 560 | 28 |
| 3/8" | BP-038-*.** | 260 | 13 | PR-038-*.** | 620 | 31 |
| 1/2" | BP-049-*.** | 288 | 14 | PR-049-*.** | 660 | 33 |
| 1/2" | BP-050-*.** | 600 | 30 | PR-050-*.** | 1240 | 62 |
| 3/4" | BP-075-*.** | 640 | 32 | PR-075-*.** | 1260 | 63 |
| 1" | BP-100-*.** | 710 | 36 | PR-100-*.** | 1300 | 65 |
| 1 1/2" | BP-150-*.** | 1500 | 75 | PR-150-*.** | 3000 | 150 |
| 2" | BP-200-*.** | 2000 | 100 | PR-200-*.** | 4300 | 215 |
| Body Material (*) | | PVC (PVC) Polypropylene (PP) CPVC (CPVC) PTFE (PTFE) | | PVDF (PVDF) 316L Stainless Steel (SS) Alloy 20 (A20) Hastelloy C-276 (H276) | | |
| Diaphragm (**) | | PTFE (T), EPDM (E), Viton (V), Buna (B) | | | | |
| Pressure Range (PSI) | | | Standard: 5-150 | | Optional: 5-50, 5-250, 50-350 | |
| Valve Top | | | Standard: PVC | | Optional: 316L SS, CPVC | |
| Maximum Temperature | | | Plastic: 140°F | | Metal: 300°F | |



| Blacoh Valve Dimensions | | | 2 Port 180° | | 3 Port, 2 Port 90° | |
|-------------------------|-------|--------|-------------|-------|--------------------|-------|
| Size (NPT) | B Dia | D Flat | A | C | A | C |
| Mini 1/4 - 1/2" | 2.47" | 2.30" | 4.24" | 0.85" | 4.48" | 1.09" |
| 1/2 - 1" | 3.47" | 3.22" | 5.51" | 1.00" | 5.71" | 1.20" |
| 1 1/2" | 4.47" | 3.87" | 8" | 1.6" | | |
| 2" | 4.97" | 4.22" | 9" | 2" | | |



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