Griffco high flow diaphragm back pressure valves are designed to enhance the performance of higher flow, continuous feed pumps that require a constant head pressure, while also acting as an anti-syphon valve. Larger orifice sizes make the valve ideal for use with higher viscosity fluids. Wetted materials include: PVC, CPVC, PP, PVDF, PTFE, 316 SS, A20 and Hast. C. Available in ½", ¾" and 1" sizes.

Features:
- High Reliability / Low Cost
- Large Orifice for High Viscosity Fluids
- Higher Flow / Lower Pressure Drop
- Adjustable 10 - 150 PSI
- Anti-Siphon Function
- Robust, Machined Construction
- Vulcanised PTFE/EPDM Diaphragm
- Wide Range of Materials

Operation:
Griffco diaphragm back pressure valves apply positive discharge pressure to any pump system to prevent siphoning and eliminate varying dosage rates caused by 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 chemical flows through the valve to the injection point. The valves are preset for 50 psi, however they are field adjustable from 10 - 150 psi via the adjustment screw. Installation should be as close to the injection point as possible to prevent chemical line drainage and it is most important that all chemical system equipment such as pulsation dampeners and pressure gauges are between the pump and back pressure valve.

TYPICAL INSTALLATION
Technical Data:

Sizes:
Model BPHF
1/2", 3/4", 1"

Connections: NPT, Socket, Union & Flange

Pressure Adjustment
Standard: 10 - 150 psi, Optional: 0 - 50 psi, 10 - 250 psi

Flow Rates @ 150 psi
<table>
<thead>
<tr>
<th>Size</th>
<th>Pulsating</th>
<th>Continuous</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>600 USgph</td>
<td>30 USgpm</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>600 USgph</td>
<td>30 USgpm</td>
</tr>
<tr>
<td>1&quot;</td>
<td>1000 USgph</td>
<td>54 USgpm</td>
</tr>
</tbody>
</table>

Shipping Weight: lbs
<table>
<thead>
<tr>
<th>Size</th>
<th>Plastic</th>
<th>Metal / Plastic Top</th>
<th>Metal / Metal Top</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>3.5</td>
<td>6.0</td>
<td>7.0</td>
</tr>
<tr>
<td>3/4&quot;</td>
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<td>7.0</td>
</tr>
<tr>
<td>1&quot;</td>
<td>7.0</td>
<td>14.0</td>
<td>23.0</td>
</tr>
</tbody>
</table>

Max Temperature: (°F)
PVC: 140°; CPVC & PP: 195°; PVDF, PTFE and all Metal: 300°, (Peak 390°)

Materials of Construction:
Diaphragm
PTFE / EPDM, Optional: Viton & PTFE / Viton

Valve Top
Standard: Noryl
Optional: 316 SS

Valve Body
PVC, CPVC, PP, PTFE, PVDF, 316 SS, A 20, Hast. C, Others on Request

Performance Curves

Dimensions:

Product Codes For Ordering:

BPHF □□□ □ □ □ □ □ □

1 = Size 2 = Material 3 = Spring Opt 4 = Options

050 - 1/2" P - PVC 1 - 0 - 50 psi V - Viton Diaphragm
075 - 3/4" OP - CPVC 2 - 10 - 250 psi S - Socket Connection
105 - 1" PP - Polypro T - PTFE F - Flange Connection
T - PTFE U - Union Connection
K - PVDF B - BSP Connections
H - Halar OSS - 316 SS Top
S - 316 SS AR - Priming Valve
A - Alloy 20 B - BSP Connections
C - Hastalloy C

DIMENSIONS: BPHF-SERIES
All Materials

<table>
<thead>
<tr>
<th>Size</th>
<th>A (in)</th>
<th>B (in)</th>
<th>C (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>5.560</td>
<td>3.500</td>
<td>1.125</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>5.560</td>
<td>3.500</td>
<td>1.125</td>
</tr>
<tr>
<td>1&quot;</td>
<td>7.250</td>
<td>4.900</td>
<td>1.250</td>
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</table>

For more detailed information visit us at www.griffcovalve.com