Griffco high flow diaphragm pressure relief valves are designed to protect chemical transfer systems from over pressure damage caused by defective equipment or a blockage in the chemical line. Large orifice sizes facilitate high flows and high viscosity. Wetted materials include PVC, CPVC, PP, PVDF, PTFE, 316SS, A20 and Hast. C. Available sizes: 1/2”, 3/4, and 1”.

**Features:**
- High Reliability / Low Cost
- Large Orifice for High Viscosity Fluids
- Higher Flow / Lower Pressure Drop
- Adjustable 10 - 150 PSI
- Ventable to Suction Line
- 2 Port Design
- Vulcanised PTFE/EPDM Diaphragm
- Wide Range of Materials

**Operation:**
Griffco diaphragm pressure relief valves operate when the pressure in a chemical line exceeds the pre-set pressure of the valve. The diaphragm is held against the valve seat by an internal spring. When the pre-set pressure is exceeded the diaphragm is forced up and the chemical flows out the relief port, back to the chemical tank or to the suction side of the pump. The valves are pre-set at 50 psi, however they are field adjustable from 10 - 150 psi via the adjustment screw. The relief valve should be set approximately 15 psi higher than the system pressure. Installation should be made as close to the pump as possible, without any valves or accessories between the relief valve and the pump. Consult your pump manufacturer for his recommendations.

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**Typical Installation**

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**CALL 1 - 800 - GRIFFCO**
Technical Data:

Sizes:
Model PRHF
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 Plastic</th>
<th>Continuous Plastic</th>
<th>Metal / Plastic Top</th>
<th>Metal / Metal Top</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2”</td>
<td>600 USgph 3.5</td>
<td>30 USgpm</td>
<td>6.0</td>
<td>7.0</td>
</tr>
<tr>
<td>3/4”</td>
<td>600 USgph 3.5</td>
<td>30 USgpm</td>
<td>6.0</td>
<td>7.0</td>
</tr>
<tr>
<td>1”</td>
<td>1000 USgph 7.0</td>
<td>54 USgpm</td>
<td>14.0</td>
<td>23.0</td>
</tr>
</tbody>
</table>

Max Temperature: (°F)
PVC, PP: 140°; CPVC: 190°; PTFE, PVDF & 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:

PRHF □ □ □ □ □ □
1 2 3 4

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

Website: www.griffcovalve.com
Email: sales@griffcovalve.com