



**Griffco Valve Inc.**  
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# HIGH FLOW SERIES PRESSURE RELIEF VALVES



**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, 316 SS, A 20 and Hast. C.** Available in 1/2" – 2" sizes.

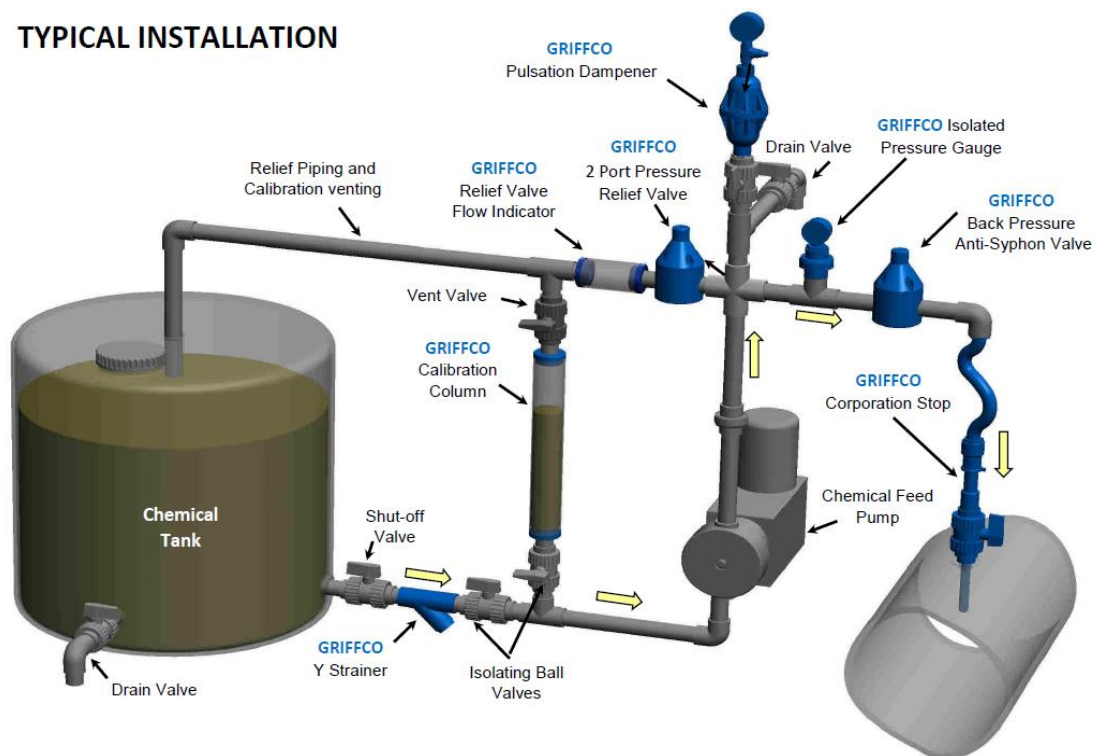
## Features:

- High Reliability / Low Cost
- Large Orifice for High Viscosity Fluids
- Higher Flow / Lower Pressure Drop
- Adjustable 10 - 150 psi
- Vent able 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 chemical flows out the relief port back to the chemical feed tank or to the suction side of the pump. The valves are pre-set for 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 as close to the pump as possible, without any valves or accessories between the relief valve and the pump. Consult the pump manufacturer for their recommendations.

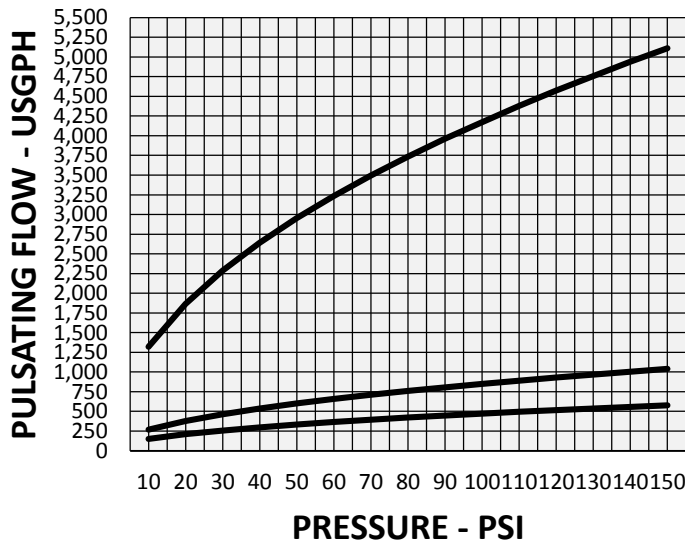
## TYPICAL INSTALLATION



## Technical Data:

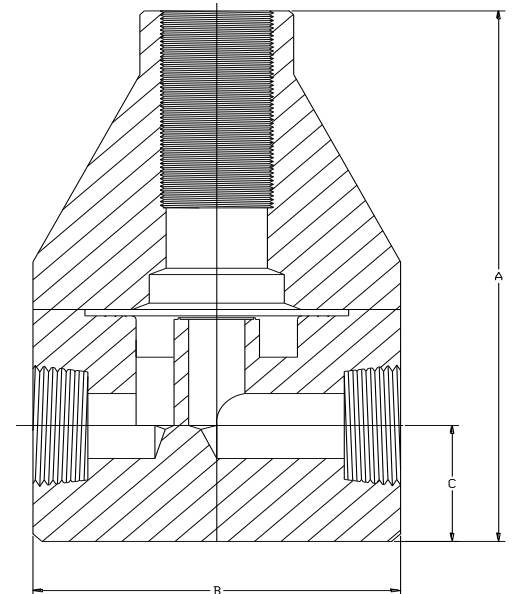
<b>Sizes:</b> Model BPHF		1/2", 3/4", 1", 1 1/2" & 2"			
<b>Connections:</b>		NPT, Socket, Union & Flange			
<b>Pressure Adjustment</b>		Standard: 10 - 150 psi, Optional: 0 - 50 psi, 10 - 250 psi			
<b>Flow Rates @ 150 psi</b>		<b>Shipping Weight: lbs</b>			
<b>Size</b>	<b>Pulsating</b>	<b>Continuous</b>	<b>Plastic</b>	<b>Metal / Plastic Top</b>	<b>Metal / Metal Top</b>
1/2"	600 USgph	30 USgpm	3.5	6.0	7.0
3/4"	600 USgph	30 USgpm	3.5	6.0	7.0
1"	1000 USgph	54 USgpm	7.0	14.0	23.0
1 1/2"	5157 USgph	270 USgpm	10.00	35.00	45.00
2"	5157 USgph	270 USgpm	10.00	35.00	45.00
<b>Max Temperature: (°F)</b>		PVC: 140° ; CPVC & PP: 195°; PVDF, PTFE and all Metal: 300°, (Peak 390°)			
<b>Materials of Construction:</b>					
<b>Diaphragm</b>		PTFE / EPDM, Optional: Viton & PTFE / Viton			
<b>Valve Top</b>		Standard: Noryl Optional: 316 SS			
<b>Valve Body</b>		PVC, CPVC, PP, PTFE, PVDF, 316 SS, A 20, Hast. C, Others on Request			

## Performance Curves



## Dimensions:

2.0"  
1.5"  
  
1"  
3/4"  
1/2"



## Product Codes For Ordering:

BPHF        
 1 2 3 4

**1 = Size**   **2 = Material**   **3 = Spring Opt**   **4 = Options**  
 050 - 1/2"   P - PVC   Blank - 10 - 150 psi   V - Viton Diaphragm  
 075 - 3/4"   CP - CPVC   1 - 0- 50 psi   S - Socket Connection  
 100 - 1"   PP - Polypro   2- 10 - 250 psi   F - Flange Connection  
 150 - 1 1/2"   T - PTFE   U - Union Connection  
 200 - 2"   K - PVDF   B - BSP Connections  
                   H - Halar   OSS - 316 SS Top  
                   S - 316 SS   AR - Priming Valve  
                   A - Alloy 20  
                   C - Hastalloy C

DIMENSIONS: BPHF-SERIES			
All Materials			
Size	A(in)	B(in)	C(in)
1/2"	5.560	3.500	1.125
3/4"	5.560	3.500	1.125
1"	7.250	4.900	1.250
1 1/2"	9.850	5.950	2.150
2"	9.850	5.950	2.150