



## Griffco Valve Inc.

188 Creekside Dr  
Amherst, NY 14228 USA  
Phone: +1 716 835-0891  
Fax: +1 716 835-0893

# PRHP SERIES PRESSURE RELIEF VALVES



**Griffco** diaphragm pressure relief valves are designed to protect chemical feed systems from over pressure damage caused by defective equipment or a blockage in the chemical feed line. Robust construction ensures reliability in the rigorous service of municipal and industrial applications. Wetted materials include **316 SS, A 20 and Hast. C (body), and Kynar and 316SS/316L (poppet)**.

Available sizes: 1/4", 3/8", 1/2", 3/4" and 1"

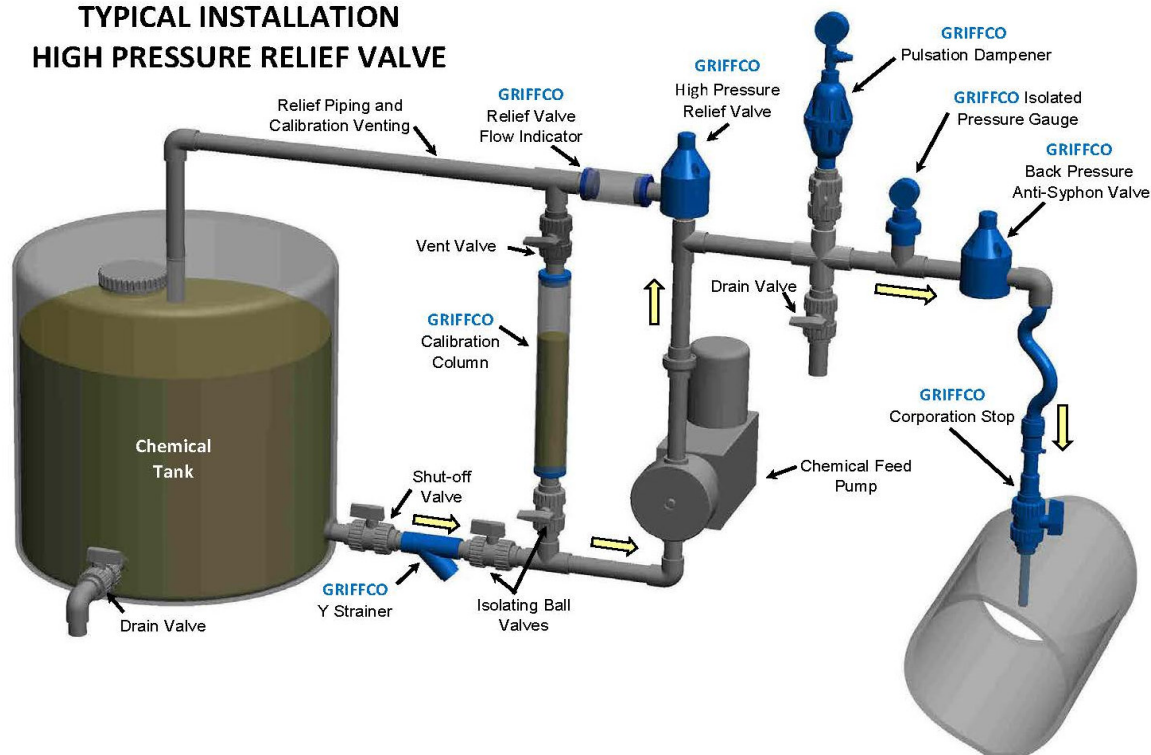
## Features:

- High Reliability / Low Cost
- Pressure Range Up To 4000 psi
- Compact Size for OEM Applications
- 2 Port, 90° Configuration
- Multiple Connection Options: Threaded, Socket, and Flanged
- Robust, Machined Construction
- Wide Range of Materials

## Operation:

**Griffco** high pressure relief valves operate when the pressure in the chemical system exceeds the preset pressure of the valve. The piston is held against the valve seat by an internal spring. When the preset pressure is exceeded the piston is forced up and the chemical flows out the relief port, to drain or back to the chemical tank. The valves are pre-set on request, however they are field adjustable from 350 - 4000 psi via the adjustment screw. The relief valve should be set approximately 10% higher than the system operating 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 their recommendations.

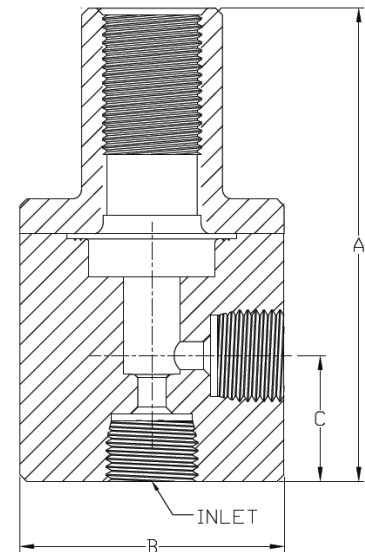
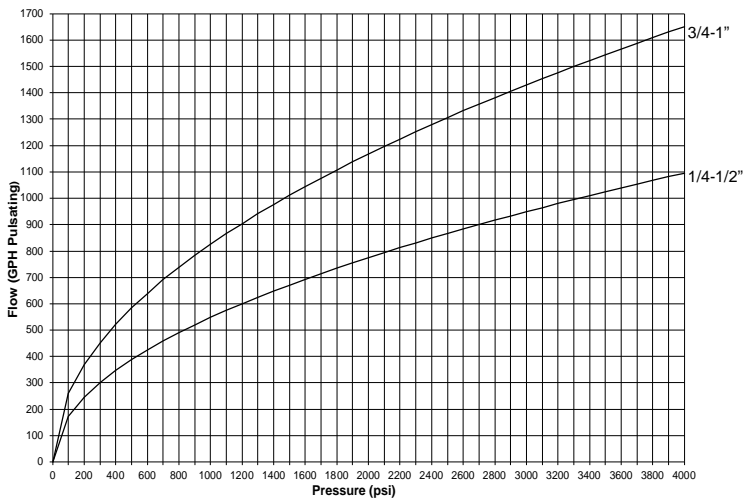
## TYPICAL INSTALLATION HIGH PRESSURE RELIEF VALVE



## Technical Data:

|                                       |                  |                   |  |                   |                           |                             |
|---------------------------------------|------------------|-------------------|--|-------------------|---------------------------|-----------------------------|
| <b>Sizes:</b><br>Model PRHP and PRHP4 |                  |                   | 1/4", 3/8", 1/2", 3/4" & 1"                  |                   |                           |                             |
| <b>Connections:</b>                   |                  |                   | NPT, Socket, and Flanged                     |                   |                           |                             |
| <b>Pressure Adjustment</b>            |                  |                   | PRHP: 350 – 2500 psi, PRHP4: 1000 – 4000 psi |                   |                           |                             |
| <b>Max Flow Rates</b>                 |                  | <b>@ 2500 psi</b> | <b>@ 4000 psi</b>                            | <b>@ 2500 psi</b> | <b>@ 4000 psi</b>         | <b>Shipping Weight: lbs</b> |
| <b>Size</b>                           | <b>Pulsating</b> | <b>Pulsating</b>  | <b>Continuous</b>                            | <b>Continuous</b> | <b>Metal / Metal Top:</b> |                             |
| 1/4"                                  | 830 USgph        | 1050 USgph        | 44 USgpm                                     | 56 USgpm          | 3.0                       |                             |
| 3/8"                                  | 830 USgph        | 1050 USgph        | 44 USgpm                                     | 56 USgpm          | 3.0                       |                             |
| 1/2"                                  | 830 USgph        | 1050 USgph        | 44 USgpm                                     | 56 USgpm          | 3.5                       |                             |
| 3/4"                                  | 1340 USgph       | 1650 USgph        | 70 USgpm                                     | 86 USgpm          | 7.0                       |                             |
| 1"                                    | 1340 USgph       | 1650 USgph        | 70 USgpm                                     | 86 USgpm          | 7.0                       |                             |
| <b>Max Temperature: (°F)</b>          |                  |                   | 300°, (Operating; Short Term 390°)           |                   |                           |                             |
| <b>Materials of Construction:</b>     |                  |                   |  |                   |                           |                             |
| <b>Piston</b>                         |                  |                   | PVDF or optional 316SS                       |                   |                           |                             |
| <b>Diaphragm</b>                      |                  |                   | PTFE / EPDM, Optional: Viton & PTFE / Viton  |                   |                           |                             |
| <b>Oring Seat</b>                     |                  |                   | PTFE   |                   |                           |                             |
| <b>Valve Top</b>                      |                  |                   | 316 SS                                       |                   |                           |                             |
| <b>Valve Body</b>                     |                  |                   | 316 SS, A 20, Hast. C, Others on Request     |                   |                           |                             |

## Performance Curves:



## Dimensions:

## Product Codes For Ordering:

PRHP (2500 psi)    □ □ □ □ □  
 PRHP4 (4000 psi)    1    2    3

**1 = Size**  
 025 – 1/4"  
 038 – 3/8"  
 050 – 1/2"  
 075 – 3/4"  
 100 – 1"

**2 = Material**  
 S - 316 SS  
 A - Alloy 20  
 C - Hastelloy C

**3 = Options**  
 Blank - NPT & PTFE/EPDM Diap.  
 V - Viton Diaphragm  
 TV - PTFE/Viton Diaphragm  
 S - Socket Connections  
 F (# rating) – Flange connection with lb rating

| D    | A<br>PRHP | A<br>PRHP4 | B     | C    |
|------|-----------|------------|-------|------|
| 1/4" | 4.25      | 4.72       | 2.375 | 1.10 |
| 3/8" | 4.25      | 4.72       | 2.375 | 1.10 |
| 1/2" | 4.25      | 4.72       | 2.375 | 1.10 |
| 3/4" | 5.90      | 6.40       | 3.50  | 1.25 |
| 1"   | 5.90      | 6.40       | 3.50  | 1.25 |