



Griffco Valve Inc.
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G-SERIES PTFE FLANGED VALVE



Griffco G-Series diaphragm back pressure valves are designed to enhance the performance of chemical feed systems by applying a continuous back pressure to the chemical feed pump, while also acting as an anti-syphon valve. Robust construction ensures reliability in the rigorous service of sulphuric acid for both municipal and industrial applications. Wetted materials are: **PTFE**. Available sizes: DN15 – DN25.

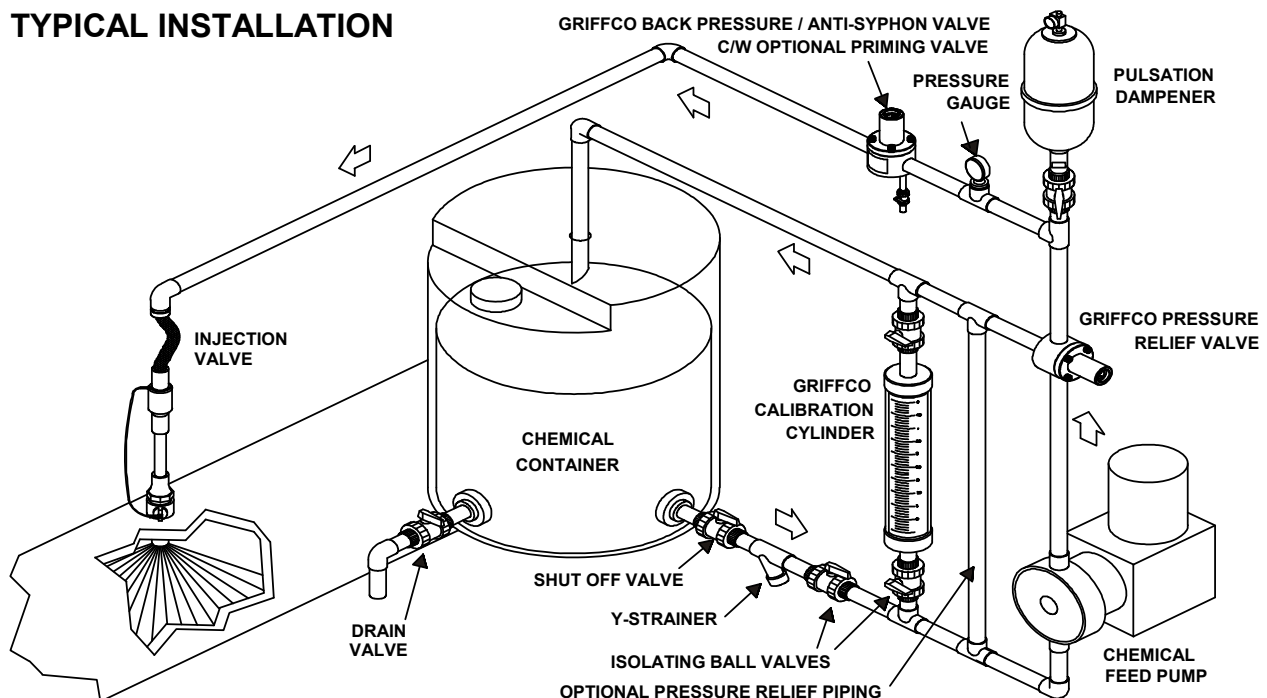
Features:

- One Piece Machined Construction
- High Reliability / Low Cost
- Composite PTFE/EPDM Diaphragm
- Adjustable 1 - 10 Bar
- Optional PSI Rated Valves
- Anti-Syphon Function
- Bottom Support Disc
- Tamper Resistant Adjustment Screw
- Molded Noryl Top

Operation:

Griffco diaphragm back pressure valves apply positive discharge pressure to a metering 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 3.5 bar, however they are field adjustable from 1 – 10 bar 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



Model BPG Sizes:			DN 15, DN 20, DN 25		
Connections:			Flange		
Pressure Adjustment			Standard: 1 - 10 bar; Optional: 0 – 3.5 bar		
Flow Rates @ 10 bar			Shipping Weight: kgs		
Size	Pulsating	Continuous	Plastic	Metal / Plastic Top	Metal / Metal Top
DN 15	1135 l/h	4770 l/h	1.4	N/A	N/A
DN 20	1135 l/h	4770 l/h	1.4		
DN 25	1890 l/h	5905 l/h	1.6		
Max Temperature: (°C)			148°C		
Max Operating Pressure(psi) @ 20°C			Plastic/Noryl: 25 bar		
Materials of Construction:					
Diaphragm			PTFE / EPDM, Optional: Viton, Hypalon, & PTFE / Viton		
Valve Top			Noryl, Optional: 316 SS		
Valve Body			PTFE		

The graph illustrates the relationship between Pulsating Flow (USGPH) and Pressure Drop (PSI) for three different orifice sizes. The flow rate increases as the pressure drop increases for all three sizes. The 1 inch orifice consistently provides the highest flow rate, followed by the 3/4 inch orifice, and then the 1/2 inch orifice.

Pressure Drop - PSI	1" Orifice Flow (USGPH)	3/4" Orifice Flow (USGPH)	1/2" Orifice Flow (USGPH)
30	140	130	90
40	190	180	140
60	260	240	200
80	340	310	260
100	410	360	310
120	470	400	350
140	520	430	380

BPG ☐☐☐ ☐ ☐ ☐
 1 2 3 4

Dimensions: BPG-Series			
All Materials			
Size	A (cm)	B (cm)	C (cm)
DN 15	14.12	18.87	2.867
DN 20	14.12	18.87	2.867
DN 25	14.12	18.87	2.867