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# G-SERIES BACK PRESSURE VALVES

## Features:

- Molded Noryl Top
- High Reliability/Low Cost
- Molded PTFE/EPDM Diaphragm
- Adjustable Relief Settings
- Optional Pressure Rated Valves
- Anti-Siphon Function
- Robust, Machined Construction
- Tamper Resistant Adjustment Screw
- Wide Range of Materials

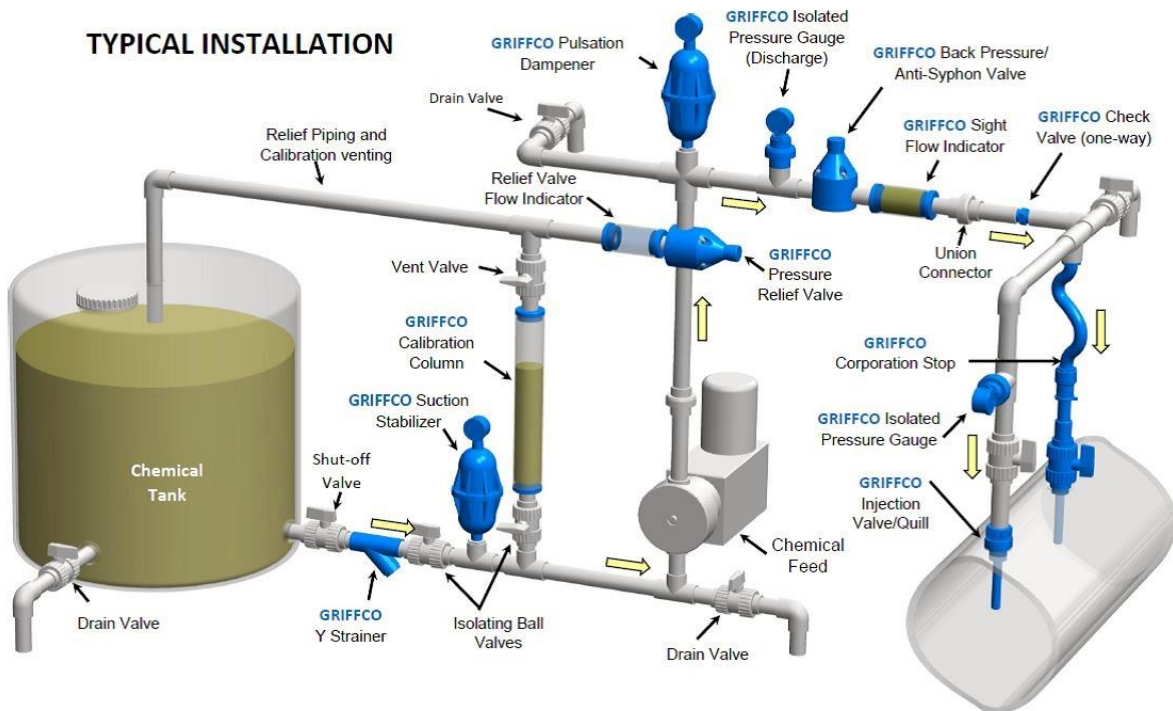
## Operation:

**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 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.



**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 municipal and industrial applications. Wetted materials include: **PVC, CPVC, PP, PVDF, PTFE, Halar, 316 SS, A20 and Hast. C.** Available sizes: 1/2" - 4".

## TYPICAL INSTALLATION



**CALL 1 - 800 - GRIFFCO**

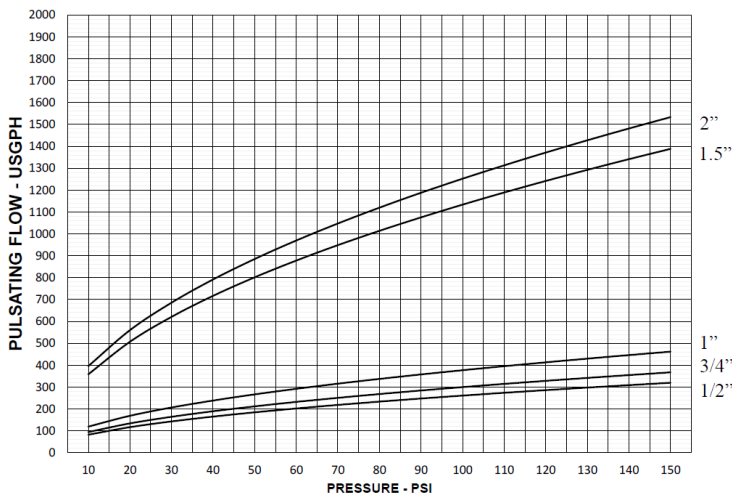
Bulletin # BPG1003-2017-01

## Technical Data:

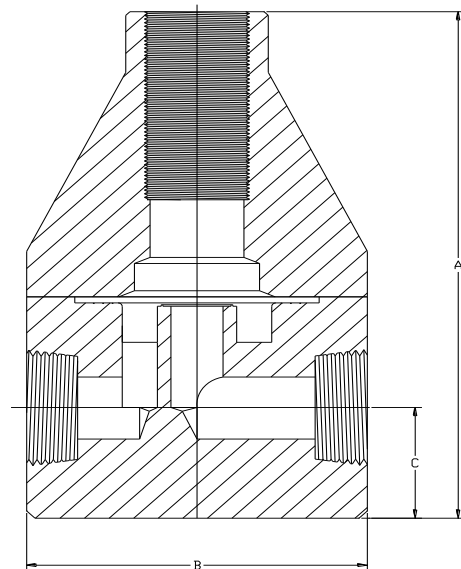
<b>Model BPG Sizes</b>			1/2", 3/4", 1", 1 1/2", 2", 3", 4"		
<b>Connections:</b>			NPT, Socket, Union, Flange		
<b>Pressure Adjustment</b>			Standard: 10 - 150 psi; Optional: 0 - 50 psi, 10 - 250 psi, 50 - 350 psi *Note: Size 1 1/2" and Larger BPG valves 10 - 250 psi Max range ONLY.		
<b>Flow Rates @ 150 psi</b>			Shipping Weight: lbs		
<b>Size</b>	<b>Pulsating</b>	<b>Continuous</b>	<b>Plastic</b>	<b>Metal / Plastic Top</b>	<b>Metal / Metal Top</b>
1/2"	320 USgph	16.7 USgpm	3.0	5.5	6.5
3/4"	367 USgph	19.2 USgpm	3.0	5.5	6.5
1"	462 USgph	24.2 USgpm	3.5	6.0	7.0
1 1/2"	1388 USgph	72.7 USgpm	9.0	18.5	26.0
2"	1533 USgph	80.3 USgpm	9.0	20.0	30.0
3"	5157 USgph	270 USgpm	28.0		
4"	5157 USgph	270 USgpm	30.0		
<b>Max Temperature: (°F)</b>			PVC: 140° ; CPVC & PP: 195°; PTFE, PVDF & Metal: 300°, (Peak 390°)		
<b>Max Operating Pressure(psi) @ 70 Deg. F</b>			Plastic/Noryl: 375 psi		Metal/Metal: 2000 psi
<b>Materials of Construction:</b>					
<b>Diaphragm</b>			PTFE / EPDM, Optional: Viton, Hypalon, & PTFE / Viton		
<b>Valve Top</b>			Standard: 1/2" - 2" Noryl 3" & 4" PVC Optional: 316 SS		
<b>Valve Body</b>			PVC, CPVC, PP, PTFE, PVDF, Halar, 316 SS, A 20, Hast. C		

### Performance Curves: (3" & 4" curves on request)

Performance Curves - Pulsating Flow



### Dimensions:



### Product Codes For Ordering Back Pressure Valves:

BPG        
 1 2 3 4

**1 = Size** 050 - 1/2" 075 - 3/4" 100 - 1" 155 - 1 1/2" 200 - 2" 300 - 3" 400 - 4"  
**2 = Material** P - PVC CP - CPVC PP - Polypro T - PTFE K - PVDF H - Halar S - 316 SS A - Alloy 20 C - Hastelloy C  
**3 = Spring Opt** Blank - 10-150 psi 1 - 0 - 50 psi 2 - 10 - 250 psi  
*For 50-350 psi spring use option code "MSS"*  
**4 = Options** Blank- NPT, PTFE/EPDM V - Viton Diaphragm TV - PTFE/Viton Diaph. S - Socket Connection F - Flange Connection U - Union Connection OSS - 316 SS Top MSS - 50 - 350 psi AR - Priming Valve 90 - 90° Configuration

### DIMENSIONS: BPG - Series

All Materials (See Note below for 4" PVC & CPVC)

Size	A (in.)	B (in.)	C (in.)	Orifice (in.)
1/2"	5.560	3.500	1.125	0.375
3/4"	5.560	3.500	1.125	0.375
1"	5.860	3.500	1.250	0.437
1.5"	8.350	4.90	1.825	0.750
2"	8.900	4.90	2.150	0.875
3" *	11.25	15.0 *	3.0	1.500
4" ***	11.25	15.0 **	3.0	1.500

\* Note 3" & 4" are flanged only \*\* B Dim on 4" PVC & CPVC is 17"

Note: Option MSS only for use with 316SS, A20 & Hast C. valves.

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