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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

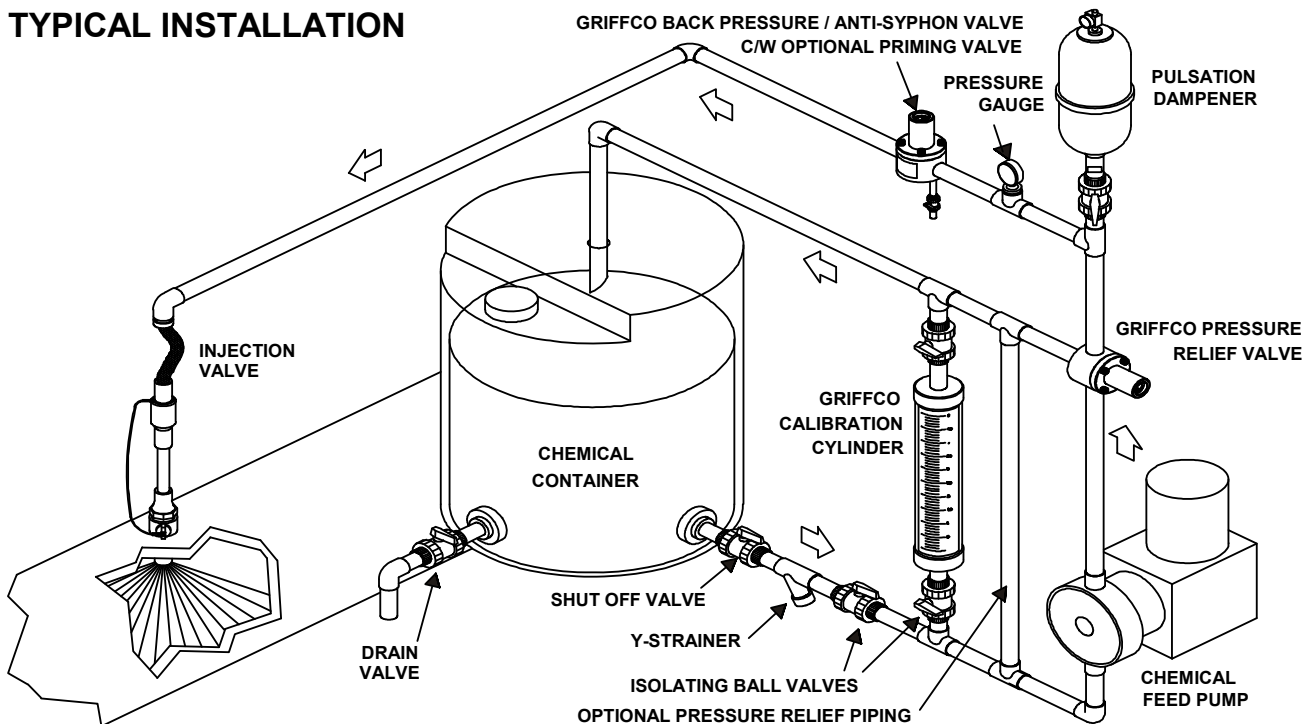
## Operation:

**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-siphon 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



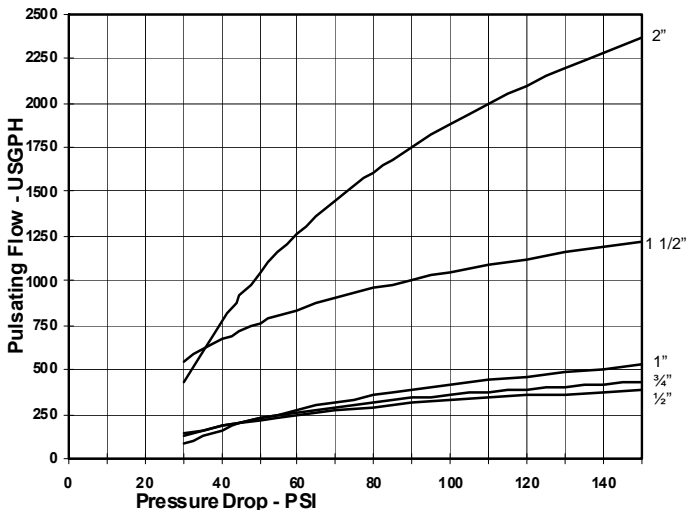
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Bulletin # BPG1003-2014R1

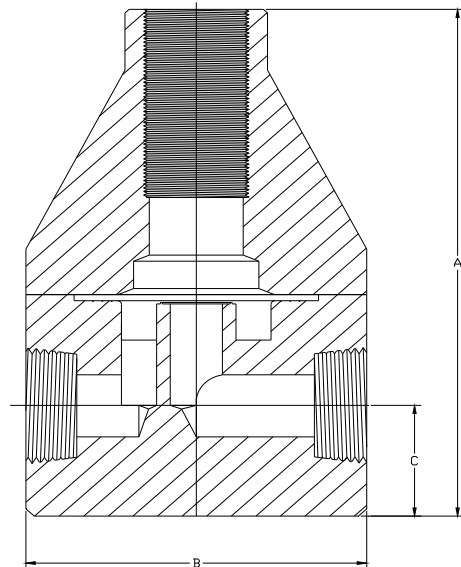
## Technical Data:

<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>			<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"	300 USgph	21 USgpm	3.0	5.5	6.5
3/4"	300 USgph	21 USgpm	3.0	5.5	6.5
1"	500 USgph	26 USgpm	3.5	6.0	7.0
1 1/2"	1200 USgph	63 USgpm	9.0	18.5	26.0
2"	2350 USgph	120 USgpm	9.0	20.0	30.0
3"	5200 USgph	270 USgpm	28.0		
4"	5200 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)



### Dimensions:



### Product Codes For Ordering Back Pressure Valves:

**BPG**

1 2 3 4

**1 = Size**   **2 = Material**   **3 = Spring Opt**   **4 = Options**

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

DIMENSIONS: BPG - Series				
All Materials				
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: Option MSS only for use with 316SS, A20 & Hast C. valves.

\* Note 3" & 4" are flanged only

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