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# G - SERIES PRESSURE RELIEF VALVE



**Griffco G-Series** 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: **PVC, CPVC, PP, PVDF, PTFE, Halar, 316 SS, A20 and Hastalloy C.** Available sizes: 1/2" - 4".

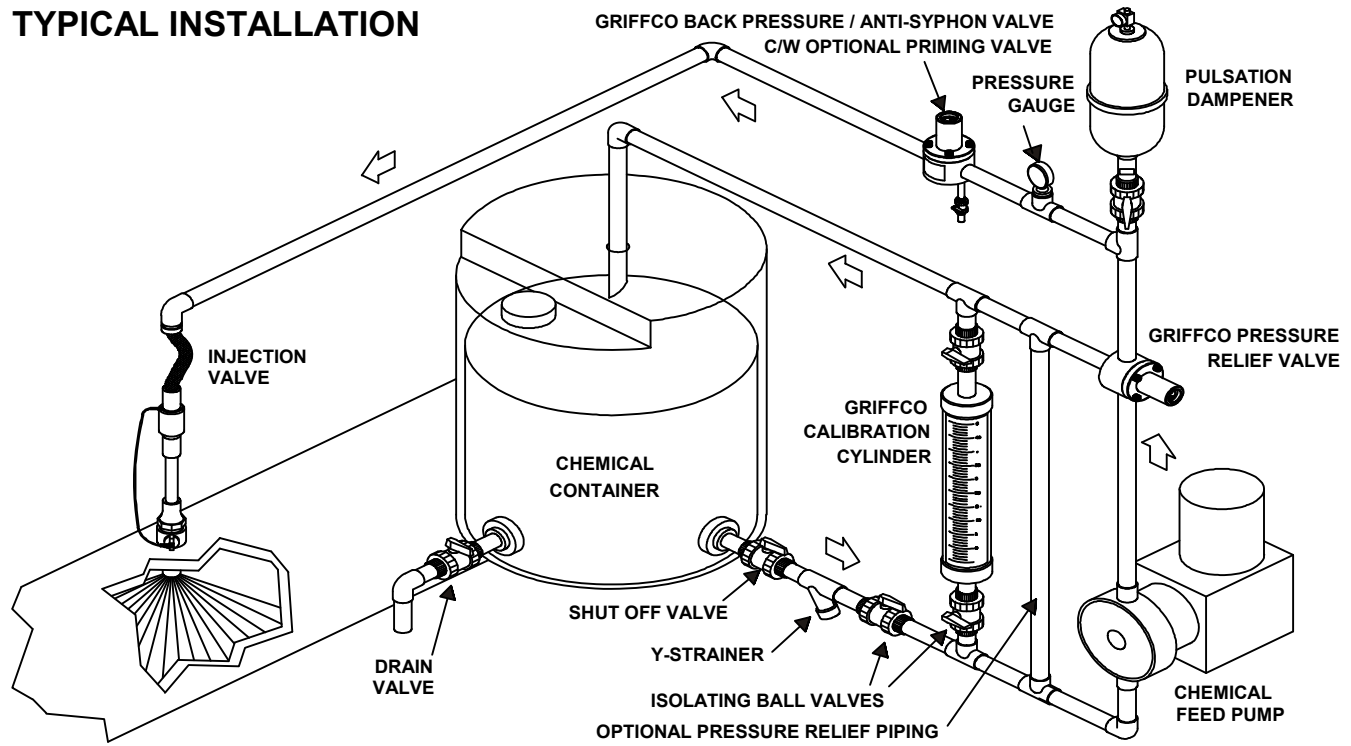
## Features:

- Molded Noryl Top
- High Reliability / Low Cost
- Molded PTFE/EPDM Diaphragm
- Adjustable 10 - 150 PSI
- Optional: Other PSI Rated Valves
- 2 & 3 Port Configurations
- Ventable to Suction Line
- Robust, Machined Construction
- Wide Range of Materials

## Operation:

**Griffco** diaphragm pressure relief valves operate when the pressure in the chemical system exceeds the preset pressure of the valve. The diaphragm is held against the valve seat by an internal spring. When the preset pressure is exceeded the diaphragm is forced up and the chemical flows out the relief port, back to the chemical tank or to the suction side of the pump. The valves are pre-set at 50 psi, however they are field adjustable from 10 - 150 psi, (up to 350 psi) via the adjustment screw. The relief valve should be set approximately 15 psi higher than the system 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.

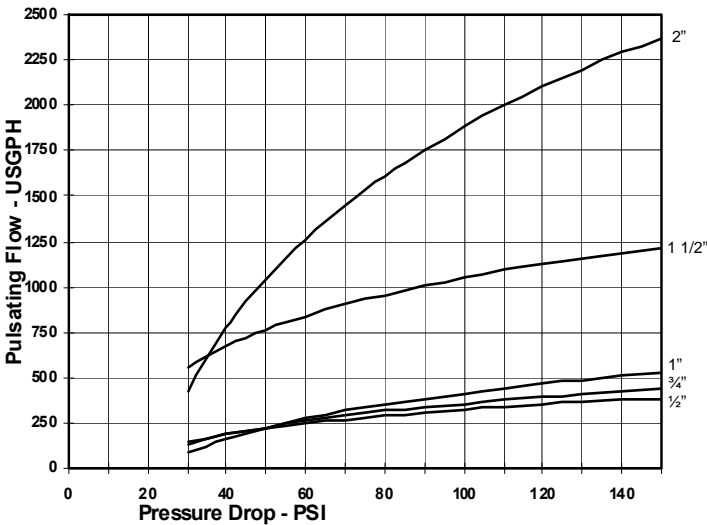
## TYPICAL INSTALLATION



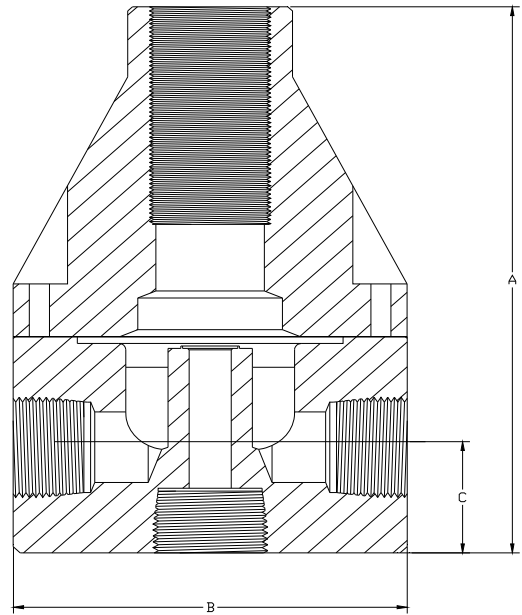
## Technical Data:

<b>Model PRG 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 PRG 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	7.0
1"	500 USgph	26 USgpm	3.5	6.0	7.0
1 1/2" (2 port only)	1200 USgph	63 USgpm	7.0	14.0	23.0
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: Noryl (1/2" - 2") PVC (3" & 4") Optional: 316 SS L		
<b>Valve Body</b>			PVC, CPVC, PP, PTFE, PVDF, Halar, 316 SS L, A 20, Hast. C		

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



## Dimensions:



## Product Codes For Ordering Pressure Relief Valves:

<b>PRG</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>PRG2 (2 port)</b>	1	2	3	4	
<b>1 = Size</b>	<b>2 = Material</b>	<b>3 = Spring Opt</b>	<b>4 = Options</b>		
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		S - Socket Connection		
200 - 2"	K - PVDF	<i>For 50-350 psi</i>	F - Flange Connection		
300 - 3"	H - Halar	<i>spring use option</i>	U - Union Connection		
400 - 4"	S - 316 SS	<i>code "MSS"</i>	OSS - 316 SS Top		
	A - Alloy 20		MSS - 50 - 350 psi		
	C - Hastelloy C		AR - Priming Valve		
			90 - 90° Configuration		

DIMENSIONS: PRG - Series				
All Materials (1.5" and larger are 2 port only, no bottom port)				
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: For Optional 2-Port pressure relief valve put "2" after PRG  
 Note: Option MSS only for use with 316SS, A20 & Hast C. valves  
 Note: 1.5" and larger are 2 port only, there is no bottom port.

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\* Note 3"&4" are flanged only

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