



Griffco Valve, Inc.
 6010 North Bailey Ave, Ste 1B
 Amherst, NY 14226
 Phone: 1 716 835-0891
 Fax: 1 716 835-0893

Pulsation Dampeners



Features:

- High Reliability, Low Cost
- 9 Volumetric Sizes Available
- Noryl®, PVC, CPVC, PP, PVDF, 316 SS Construction
- Multiple Diaphragm Materials
- Pressures up to 250 psi Metallic; 150 psi Plastic
- Made in the USA

Information needed to size a dampener:

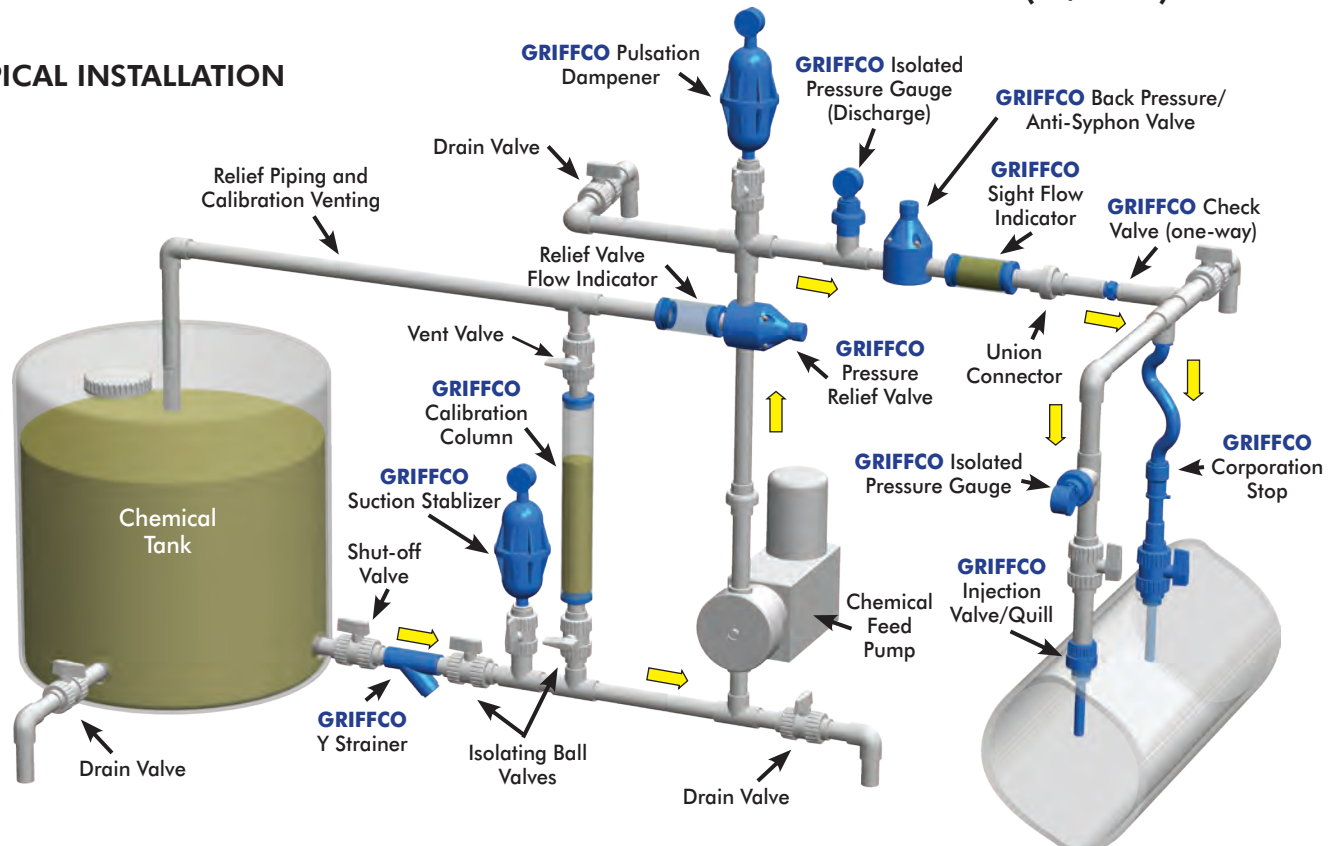
- 1 – Type of pump. (**K** factor)
 Simplex: Single Acting = .60; Double Acting = .25
 Duplex: Single Acting = .25; Double Acting = .15
 Triplex: Single Acting = .13; Double Acting = .06
 Quadruplex: Single Acting = .10; Double Acting = .06
 Quintuplex: Single Acting = .06; Double Acting = .02
- 2 – Volume/Stroke of dosing pump in cubic in (**V**)
- 3 – System mean operating pressure (**SP**)
- 4 – Min and max operating pressure (**Pmin & Pmax**)
- 5 – Compressed charge in dampener (**y**)
 Compressed Air = 1.0; Nitrogen = .714

Required Dampener Capacity (C) Calculation:

$$C \text{ (cubic inches)} = \frac{(V) \times (K) \times (SP/P_{min})^y}{1 - (SP/P_{max})^y}$$

Griffco pulsation dampeners are designed to enhance the performance of chemical feed systems by reducing harmful shock waves and delivering continuous chemical dosage at the injection point.

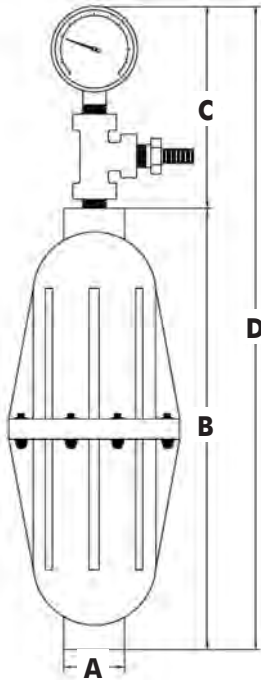
TYPICAL INSTALLATION



TECHNICAL DATA:

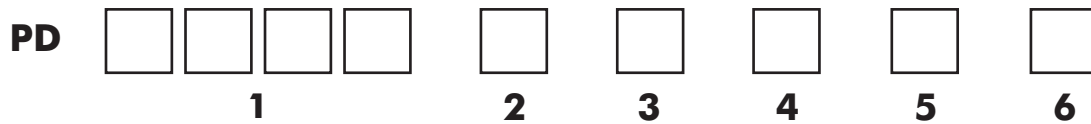
| | |
|--|---|
| Materials of Construction: | Noryl®, PVC, CPVC, PP, PVDF, 316 SS |
| Connection Sizes: | 1/2", 3/4" and 1" |
| Connections: | NPT, BSPT, Union, Flange |
| Gauge Port Sizes: | 1/8", 1/4" and 1/2" |
| Max Temperature: (°F) | PVC: 140°; CPVC: 175°; PP: 175°; PVDF: 225°; Noryl®: 225° |
| Max Operating Pressure (psi) @ 70 Deg. F | Plastic: 150 psi (Peak: 250 psi); Metal: 250 psi (Peak: 350 psi) |
| Diaphragm Material | Std.: EPDM. Optional: Viton®, Hypalon® |
| Gauge and Charging Valve Materials | Std.: Brass, Optional: 316 SS |
| Dampening Effect | ±2.5% |
| Optional Gauges | Std: 0 – 160 psi; Optional: 0 – 60 psi, 0 – 100 psi, 0 – 200 psi, 0 – 250 psi |

DIMENSIONS:



| Model | Capacity (cu in) | A (in) | B (in) | C (in) | D (in) |
|--------|------------------|--------|--------|--------|--------|
| PD0011 | 6.0 | 1/2 | 4.23 | 4.20 | 8.43 |
| PD0012 | 10.0 | 1/2 | 5.70 | 4.20 | 9.90 |
| PD0013 | 15.0 | 1/2 | 7.15 | 4.20 | 11.35 |
| PD0021 | 16.0 | 3/4 | 5.26 | 4.40 | 9.66 |
| PD0022 | 29.0 | 3/4 | 7.76 | 4.40 | 12.16 |
| PD0023 | 42.0 | 3/4 | 10.26 | 4.40 | 14.66 |
| PD0031 | 36.0 | 1 | 5.79 | 4.40 | 10.19 |
| PD0032 | 80.0 | 1 | 9.90 | 4.40 | 14.30 |
| PD0033 | 125.0 | 1 | 14.00 | 4.40 | 18.40 |

Product Codes for Ordering:



1 = Size

- 0011 – 6 in³
- 0012 – 10 in³
- 0013 – 15 in³
- 0021 – 16 in³
- 0022 – 29 in³
- 0023 – 42 in³
- 0031 – 36 in³
- 0032 – 80 in³
- 0033 – 125 in³

2 = Housing Material

- CP – CPVC
- K – PVDF
- N – Noryl®
- P – PVC
- PP – GF Polypro
- S – 316 SS

3 = Diaphragm Material

- E – EPDM
- H – Hypalon®
- V – Viton®

4 = Charging Assembly Options

- 0 – Brass Tee & Econo Gauge
- 1 – Brass Tee & Mid Gauge
- 2 – Brass Tee & Premium Gauge
- 3 – 316 SS Tee & Econo Gauge
- 4 – 316 SS Tee & Mid Gauge
- 5 – 316 SS Tee & Premium Gauge
- 6 – Brass Tee & Compound Gauge
- 7 – 316 SS Tee & Compound Gauge
- 8 – 1/8" Black Mount Gauge with Tee

5 = Pressure Options

- 1 – 160 psi
- 2 – 60 psi
- 3 – 100 psi
- 4 – 200 psi
- 5 – 250 psi

6 = Other Options

- B – BSPT Connection
- F – Flanged
- U – Union Connection
- UD – Metric Union Connection
- UZ – Threaded Union Connection