

Pulsation Dampeners



Griffco pulsation dampeners are designed to prolong pump and system component life. They enhance the performance of chemical feed systems by reducing harmful shock waves created by the pump's action and deliver smooth, laminar and continuous chemical dosage at the injection point.

Features:

- High Reliability, Quality and Competitive Prices
- 22 Volumetric Sizes Available
- CPVC, PVDF, Noryl®, PVC, PP, 316LSS, Hastelloy 276C and A20 Construction
- Multiple Bladder Materials
- Pressures Up to 300 psi Metal; 150 psi Plastic
- Made in the USA
- Higher pressures and volumes available upon request

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

2 – Volume/Stroke of dosing pump in cubic in (V)

3 – System mean operation pressure (SP)

4 – Min and max operating pressure (Pmin & Pmax)

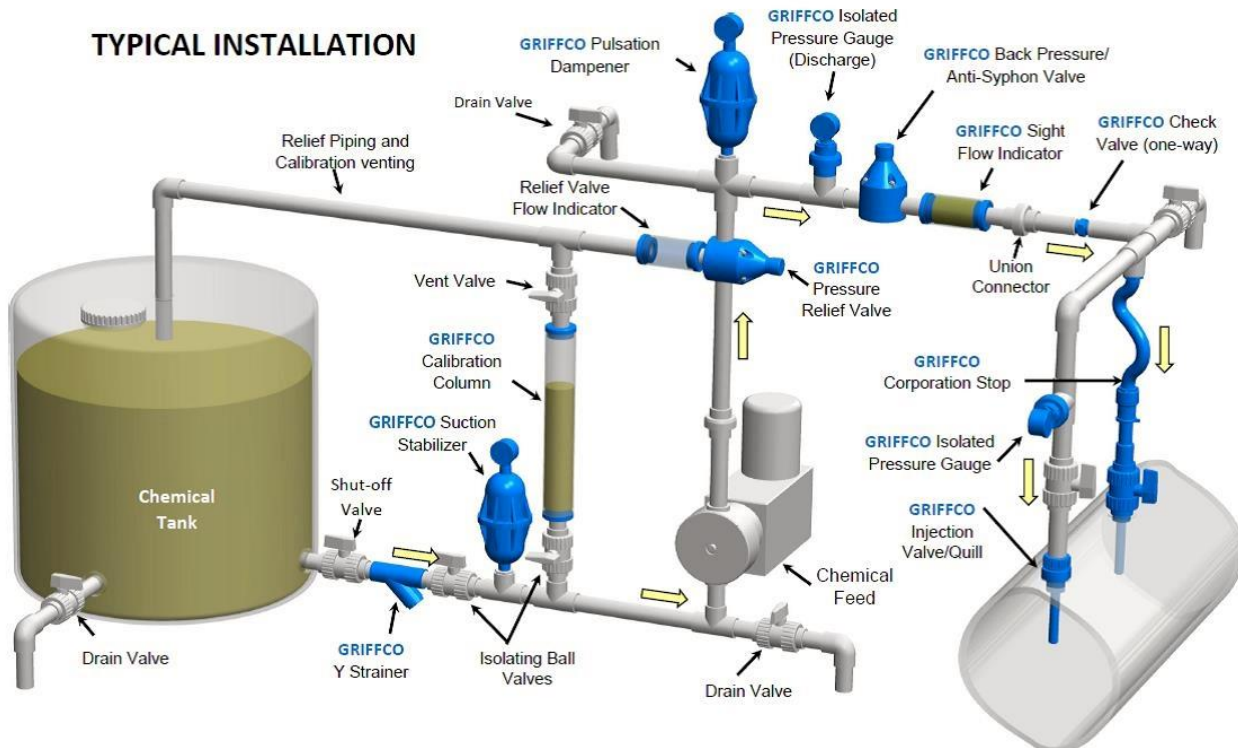
5 – Compressed charge in dampener (y)

Compressed Air/ Nitrogen=0.714

Required Dampener Capacity (C) Calculation:

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

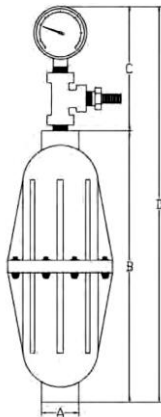
TYPICAL INSTALLATION



TECHNICAL DATA:

Materials of Construction:	Body: CPVC, PVDF, Noryl®, PVC, PP, 316L SS, Alloy 20 and Hastelloy® 276C
Connection Sizes:	1/2", 3/4", 1" and 2"
Connections:	Standard: NPT Optional: BSPT, Flanged, Socket, Union (plastics only)
Gauge Port Sizes:	Standard: 1/4" Optional: 1/8"
Max Temperature: (°F)	CPVC/PP: 175°; PVDF/Noryl: 225°; PVC: 140° Metal: Dependent on bladder material listed below
Max Operating Pressure (psi) @ 70 Deg. F:	Metal: 300 psi, Plastic: 150 psi.
Bladder Material w/ Min/Max Temperature: (°F)	Standard: EPDM: -60 – +280°, Optional: Viton®: -10 – +350°; Hypalon®: -20 – +275°; PTFE: -20 – +220°
Gauge and Charging Valve Materials:	Standard: Brass Optional: 316L SS
Optional Gauges:	Std: 0 – 160 psi; Optional: 0 – 60 psi, 0 – 100 psi, 0 – 200 psi, 0 – 300 psi

Dimensions for Plastics:



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
PD0042	160.0	2	8.50	5.00	13.50
PD0043	320.0	2	15.75	5.00	20.75

Note: Dimensions for 316L, Hastelloy® 276C and Alloy 20 available upon request

Product Codes for Ordering:

PD ☐☐☐ ☐ ☐ ☐ ☐
1 2 3 4 5 6

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
0042 – 160 in³
0043 – 320 in³

2 - Housing

Material

CP – CPVC
K – PVDF
N – Noryl®
P – PVC
PP – GF Polypro
S – 316L SS
A – A20
C – Hastelloy® 276C

3 - Diaphragm

Material

E – EPDM
H – Hypalon®
V – Viton®
T – PTFE .

4 - Charging Assembly

Options

0 – Brass Tee & Economy Gauge
1 – Brass Tee & Mid-Range Gauge
2 – Brass Tee & Premium Gauge
3 – 316 SS Tee & Economy Gauge
4 – 316 SS Tee & Mid-Range Gauge
5 – 316 SS Tee & Premium Gauge
6 – Brass Tee - Compound Gauge
7 – 316 SS Tee - Compound Gauge

5 - Pressure Options

1 – 160 psi
2 – 60 psi
3 – 100 psi
4 – 200 psi
5 – 300 psi

6 - Other

Options

B – BSPT Connection
F – Flanged Connection
R – Rubber Boot for Gauge
S – Socket Connection
U – Union Connection
UD – Metric Union Connection
UZ – Threaded Union Connection
M – Back Mount Gauge
M8 – Back Mount 1/8" Gauge
XL – XL Gauge