



ACCUROY™ PULSATION DAMPENERS

DESCRIPTION

AccuRoy™ pulsation dampeners consist of a pressurized vessel containing a flexible, elastomeric bladder or diaphragm which separates pressurized gas in the upper chamber from process liquid in the lower chamber. In the most common application, surges from the pump output enter the pulsation dampener and are instantaneously absorbed by the gas due to its inherent compressibility (the gas is precharged to a lower pressure than pump outlet pressure). Steady discharge flow and pressure result. Pulsation dampeners can also be used to significantly reduce acceleration pressure losses in suction piping by installing close to the pump inlet.

FEATURES

- All dampeners are equipped with a pressure gauge with brass connections and 2½" dial in a stainless steel case. Gauge is glycerin filled to reduce effects of cyclic pressure load.
- All dampeners are equipped with gas fill valve, brass automotive type, with high pressure core and cap.
- Charging hose accessory available as an option. Unit consists of a 10' length of tubing with a ¼" male NPT fitting at one end (for connection to a nitrogen bottle regulator), and a cross fitting with charging adapter and purge valve at the other end.
- ANSI flanged connection is available as an option. Contact your local representative for details.



DAMPENERS

SPECIFICATIONS

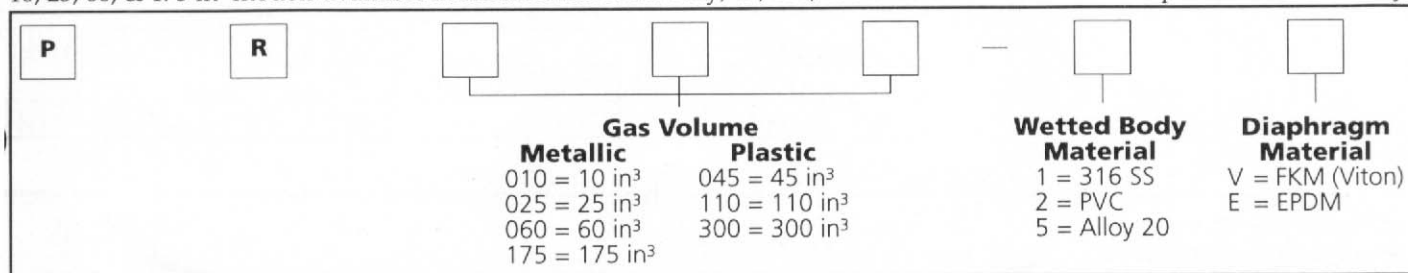
Refer to Model Code and Dimensions sections for more information.

General Specifications		
Gas Volume (cubic inches)	Rating (psig)	Shipping Weight
10	1000	15 lbs.
25	250	15 lbs.
45	150	18 lbs.
60	250	20 lbs.
110	150	23 lbs.
175	250	50 lbs.
300	150	55 lbs.

Material Specifications	
<i>Gas Shell</i>	
Steel	ASTM A-216, Grade WCB
<i>Available Wetted Components</i>	
316 SS	ASTM A-743, Grade CF-8M
Alloy 20	ASTM A-743, Grade CN-7M
PVC	Rigid Polyvinyl Chloride
FKM (Viton)/fluoroelastomer	ASTM D-2000/HK
EPDM/ethylene propylene diene monomer	ASTM D-200/CA

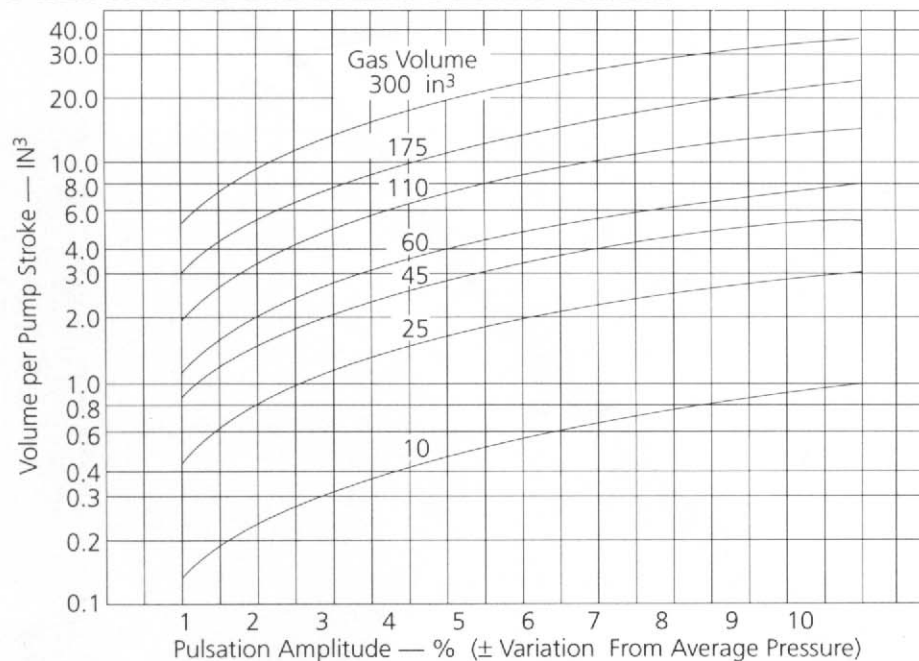
MODEL CODE

10, 25, 60, & 175 in³ models available in metallic materials only; 45, 110, & 300 in³ models available in plastic materials only.





PULSTION DAMPENER SIZING CHART



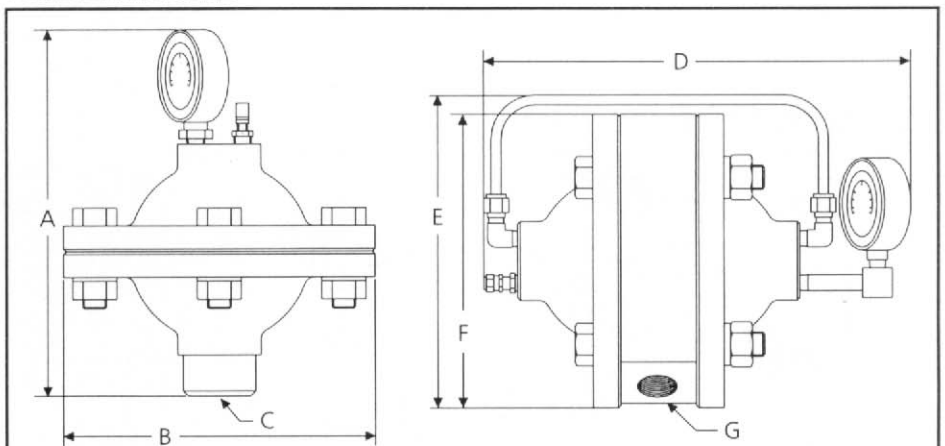
- Select a pulsation dampener that gives 5–10% dampening (variation from average pressure). This degree of dampening is considered acceptable for most applications, including flowmeter function.
- Pulsation dampeners are generally not intended for use with slurries or viscous liquids. Contact representative for application assistance.
- Temperature is limited to 40–165°F (10°F minimum without pressure gauge or with suitable fill media) for all materials except PVC, which is limited to 150°F. Modification for metallic dampeners up to 300°F is available.
- Use the following formula to determine in³/stroke:
 $(\text{GPH} \times 3.85) / \text{SPM} = \text{in}^3 / \text{stroke}$
- Special materials and temperature ratings are available.

AVAILABLE ACCESSORIES

In addition to metering pumps & chemical feed systems, Milton Roy offers the following accessories:

- Calibration Columns
- Sludge Traps
- Dissolving Baskets
- Valve Actuators
- Gauge Glasses
- Tanks
- Floats
- Mixers
- Back Pressure Valves
- Safety Valves
- Pressure Gauges

DIMENSIONS



Cubic Inches	Type	A	B	C (NPTF)	D	E	F	G (NPTF)
10	Metallic	9½"	6"	½"-14	—	—	—	—
25	Metallic	9"	7½"	¾"-14	—	—	—	—
45	Plastic	—	—	—	10½"	8"	7½"	¾"-14
60	Metallic	10½"	8⅞"	1"-11½"	—	—	—	—
110	Plastic	—	—	—	12¼"	9"	8½"	1"-11½"
175	Metallic	12⅝"	11⅞"	1¼"-11½"	—	—	—	—
300	Plastic	—	—	—	14⅜"	11⅞"	11⅜"	1¼"-11½"

All information contained herein subject to change without notice.

