Fluid Energy Controls

Pulsation Control Products

Stainless Steel

Stainless Steel Pulsation Dampeners

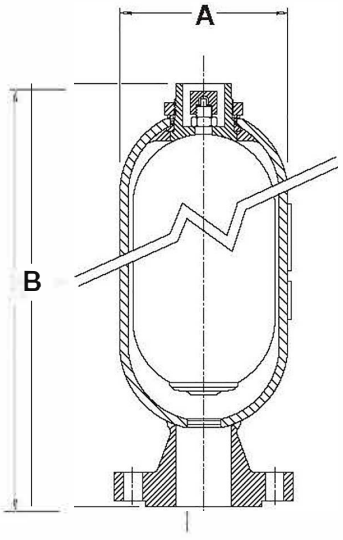
Positive Displacement (PD) pumps create pulsation and hydraulic shock due to the reciprocating nature of their stroking action, potentially damaging the entire pumping system. Pulsation Dampeners remove hydraulic shock and reduce the pressure and flow fluctuations. This enhances the all-around performance and reliability of fluid handling equipment in industrial, chemical transfer, and precision metering applications.

Increase productivity, safety, reliability and efficiency. Decrease maintenance and operating costs.

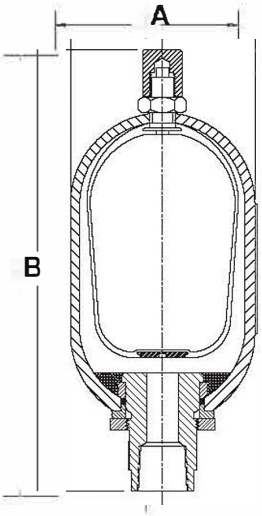
Fluid Energy Controls' pulsation dampeners are designed to minimize pressure pulses generated by positive displacement pumps. The dampeners are built to withstand high pressure as they smooth out the harmful pressure pulses originating from the pump. They are especially suitable for water and petrochemical applications.

Features:

- **Flexible bladder design** effectively reduces pump pulsations, vibrations and noises
- **No poppet and spring** to restrict flow of viscous process liquids.
- **Designed and stamped** per ASME Section VIII, Div. I. European CE, Canadian CRN, Brazilian NR-13, Chinese SELO, and Malaysian DOSH certifications also available
- **Buna-N bladder with integral anti-extrusion button** for long life. Viton and other compounds available
- **All wetted parts are stainless steel**
- **Prolongs service life of pumps, valves, instruments, and pipe joints**



Flanged Fluid Port Configuration



NPT Fluid Port Configuration

Size	PSI*	Standard Port*	Part Number	Approx. Wt. (lb.)	"A" (in.)	"B" (in.)
1 Quart	1500	1/2" 900# RFWN Flange	C60FB1550	14	4.50	13.00
		1" NPT	C60FB1590	12	4.50	10.75
1 Gallon	1500	1" 900# RFWN Flange	001FB1501	55	7.13	16.75
		1¼" NPT	001FB1590	50	7.13	15.00
2.5 Gallon	1500	2" 900# RFWN Flange	025FB1502	75	9.13	19.00
		2" NPT	002FB1590	65	9.13	21.38
5 Gallon	1500	3" 900# RFWN Flange	005FB1503	100	9.13	31.13
		2" NPT	005FB1590	80	9.13	33.38

** Other pressure rating and port options also available.*

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Stainless Steel Pulsation Dampeners

Fluid Energy Controls 316 Stainless Steel Pulsation Dampener is specifically designed to satisfy the needs of petrochemical, reverse osmosis and water processing industries. It can effectively dampen the damaging pulsations caused by the reciprocating pumps. This reduces the possibility of costly damage to pipelines, instrumentation, loosened pipe fittings, leakage and downtime.

Features:

- Significantly reduces pump pulsations
- Reduces pump vibration and noise
- Increases pump service life; reduces wear and fatigue on pump's internal parts
- Repairable in the field
- All wetted parts are of 316 series stainless steel for protection against corrosion

Specifications:

- **Volume** — 60 cubic inches
- **Maximum working pressure** — 1,500 PSI
- **Operating temperature range** — -20°F to +185°F
- **Diameter** — 4.5 inches
- **Length** — 11 inches
- **Port** — 1" NPT (female)
- **Weight** — 10 lbs.

Installation, operation and maintenance are simple...

Installation — Install the dampener as close as possible to the discharge port of the pump.

Operation

- Precharge dampener with dry Nitrogen to approximately 70% of the system operating pressure.
- Check the precharge pressure periodically.

Ordering Information

Bladder Compound	Part Numbers	
	Pulsation Dampener	Repair Kit
Viton	7217000	5250016
Buna-N	7218000	5250017
EPR	7219000	5250018

Pre-Charge Monitor Schedule

The Accumulators, Surge Suppressors and Pulsation dampeners shipped from the factory of Fluid Energy Controls are only pre-charged to 20 psi with dry Nitrogen gas. This pre-charge protects the bladders from getting damaged during shipping. After installation of the unit, the bladder inside the unit needs to be properly pre-charged with dry Nitrogen gas to 70-80% of the working pressure of the pipeline. The pre-charging is accomplished before the fluid starts pumping in the pipeline.

For newly installed units, the pre-charge should be monitored every two weeks. There should be no fluid pumping through the pipeline during this process. If the pre-charge has dropped, then more Nitrogen gas should be pumped into the bladder to raise the pre-charge in the bladder to the recommended pressure. When there is no loss of pre-charge noticed, the pre-charge should be monitored every four weeks.

Caution: Do not use Oxygen or air to pre-charge the bladder. Use only Nitrogen for pre-charging.

Note: All dimensions and weights are for general information only. Since products are in a continual state of refinement, please verify all critical dimensions with Fluid energy Controls, Inc. Other materials of construction, pressure and connection are available upon request.

Warranty: Fluid Energy Controls, Inc. guarantees its products for materials and workmanship for one full year from the date of purchase, but because we cannot anticipate or control the many different conditions under which this information and our products may be used, we do not guarantee the applicability or suitability of our products in any given situation. Users of our products should make their own tests to determine the suitability of each product for their particular purpose. The products discussed are sold with a limited warranty and buyer assumes all responsibility for loss or damage arising from the handling and use of our products whether done in accordance with directions or not. Also, statements concerning the possible use of our products are not intended as recommendations to use our products.

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