

DATA SHEET

PULSATION DAMPENER



Stainless Steel **6032**
Model:

Rechargeable and
Rebuildable



SPECIFICATIONS	U.S.	Metric
Maximum flow	10 gpm	37.8 lpm
Working pressure range	100–10,000 psi	6.9–689 bar
Precharge	6,000 psi	414 bar
Operating temperature range	32–180° F	0–82° C
Volume	15 cu. in	0.25 l
Safety factor	4/1	4/1
Bladder material	NBR	NBR
Body material	SS	SS
Port size (2)	½" NPT(F)	½" NPT(F)
Diameter	6.0"	152.4 mm
Length	6.4"	162.6 mm
Weight	22.2 lbs	10.1 kg

FEATURES

- Nitrogen precharged to eliminate moisture and bladder deterioration.
- Large diaphragm design provides greater pulsation reduction for smooth performance and long system component life.
- 316 stainless steel construction resists wear and abrasion caused by corrosive environments.
- Flow-through design utilizes interchangeable inlet and discharge ports.

ORDERING INFORMATION

Model 6032 is precharged to 6,000 psi at the factory. Contact Cat Pumps to specify the following:

1. No precharge (remove factory pressure)
2. A precharge different than 6,000 psi.

Add .800 to part number (e.g., 6032.800) and specify desired precharge when ordering.

Note: A handling charge will apply.

SHIPMENT REGULATIONS

- Precharged pulsation dampeners are defined as hazardous articles. **These articles use the proper shipping name of "Articles, Pressurized, Hydraulic" and use the identification number of "UN3164."**
- Uncharged pulsation dampeners require no special handling and can be shipped via standard shipping methods.
- All domestic shipments of hazardous articles must follow Department of Transportation CFR 49, parts 100 to 185 regulations (DOT).
- International shipments of hazardous articles must follow either International Air Transport Association regulation (IATA) or International Maritime Dangerous Goods Codes (IMDG).

Read all CAUTIONS and WARNINGS before commencing service or operation of any high-pressure system

⚠ WARNING

Do not charge pulsation dampeners with oxygen. Oxygen may cause an explosion, causing personal injury, death or property damage.

1. Use nitrogen only when charging pulsation dampeners, DO NOT USE OXYGEN.
2. Use proper charging tools to charge pulsation dampeners.
3. Charge pulsation dampener within specifications stated on data sheet to ensure proper pulsation dampening and prevent bladder failure.

SELECTION

This Pulsation Dampener should meet or exceed flow and pressure requirements of the system, and satisfy the liquid compatibility.

INSTALLATION

Pulsation dampeners must be mounted downstream and inline with the pump discharge manifold to optimize pulsation dampening and avoid system vibration damage. This pulsation dampener has two (2) ½" NPT(F) fluid ports, allowing the fluid to flow through it so the inlet and discharge ports are interchangeable.

OPERATION: Pulsation dampeners must be precharged with **dry Nitrogen only**.

This pulsation dampener is precharged to 6,000 PSI. However, it may be adjusted to offer more precise control of pulsation in critical applications such as reverse osmosis.

At a temperature of 70° F, optimum pulsation dampener performance is obtained when the precharge is calibrated at 50% of the system operating pressure.

NOTE: When operating at the lower temperatures, precharge should be 15% higher or 65% of system pressure. When operating at higher temperatures, precharge should be 15% lower or 35% of system pressure.

This precharge should be checked every 12 months for normal operation and more frequently for continuous-duty operation.

NOTE: Up to 50 PSI precharge pressure can be lost during the checking of your precharge.

FILLING AND GAUGING INSTRUCTIONS

⚠ DANGER

A qualified technician is required to charge or re-charge this pulsation dampener.

Incorrect handling can lead to serious accidents. The relevant protective measures must be taken for aggressive operating media.

⚠ DANGER

Ensure adequate ventilation when discharging nitrogen from pulsation dampener in enclosed spaces. Risk of asphyxiation.

⚠ WARNING

Do not charge pulsation dampeners with oxygen. Oxygen may cause an explosion, causing personal injury, death or property damage.

Removal of pulsation dampener from hydraulic system

1. Carefully clean the area around the fluid side connections.
2. Discharge and/or completely drain the pulsation dampener (e.g. depressurize the hydraulic system before work is carried out). The pulsation dampener can build up an amount of pressure again if the lines are later shut off on the fluid side.
3. All fluid-side lines connected to the pulsation dampener must be depressurized and must remain open.
4. Remove pulsation dampener from system.

6032 BLADDER REPLACEMENT

Removal of bladder

WARNING

Before commencing with service, shut off drive (electric motor, gas or diesel engine) and turn off water supply to pump. Relieve all discharge line pressure by triggering gun or opening valve in discharge line.

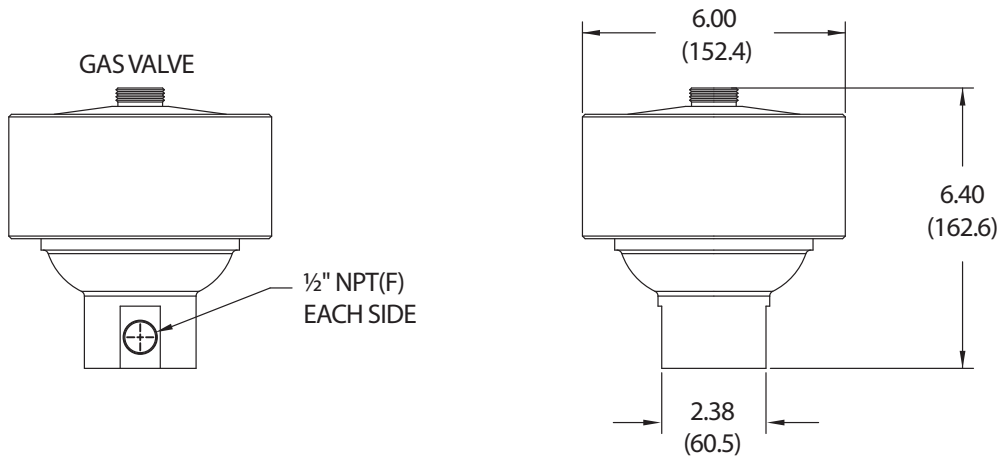
1. Loosen the charging screw to relieve any trapped nitrogen in the upper body.
2. Remove the pulsation dampener from the system.
3. Secure pulsation dampener in a vise.
4. Use an appropriate hook wrench to loosen the lock nut. Do not unscrew completely, allow two to three threads to remain engaged.
5. Grasp the top half of the pulsation dampener and pull it upwards to separate it from the bottom half of the pulsation dampener.
6. Use the hook wrench to completely unscrew and remove the lock nut.
7. Squeeze the diaphragm bladder together to separate it from the top part of the pulsation dampener.
8. Remove the backup ring. Inspect and replace if necessary.
9. Carefully inspect and clean the two halves of the pulsation dampener, and the locking nut with a non-aggressive, non-abrasive cleaning agent and then dry with a lint-free towel.

Reassembly of bladder

CAUTION: Be careful not to damage the backup ring and bladder during reassembly

1. Lubricate the backup ring and the groove on the top half of the pulsation dampener with liquid gasket (PN 6124) or equivalent.
2. Insert backup ring first and then bladder into the groove on the top half of the pulsation dampener.
3. Lubricate the bladder in the seal bead area with liquid gasket (PN 6124) or equivalent.
4. Place the top half of the pulsation dampener with the bladder into the bottom half of the pulsation dampener and press it down using a press or tapping it down with a mallet until it will go no further.
5. Lubricate the threaded portion of the lock nut and the bottom half of the pulsation dampener with anti-seize (PN 6139) or equivalent.
6. Hand thread lock nut into place.
7. Use the hook wrench to tighten the lock nut and torque to 2655 in-lbs (221 ft-lbs, 300 Nm).
8. **Pulsation dampener must be recharged to original pre-charge by a qualified technician.**
9. Reinstall to the system.

DIMENSIONS



OPTIONAL SPARE PARTS

P/N	MATL	DESCRIPTION
76501	—	Charging Screw with NBR Seal Washer
32195	NBR	Bladder Kit

⚠ CAUTIONS AND WARNINGS

All high-pressure systems require a primary pressure regulating device (e.g. regulator, unloader) and a secondary pressure relief device (e.g. pop-off valve, relief valve). Failure to install such relief devices could result in personal injury or damage to pump or property. Cat Pumps does not assume any liability or responsibility for the operation of a customer's high-pressure system.

Read all CAUTIONS and WARNINGS before commencing service or operation of any high-pressure system. The CAUTIONS and WARNINGS are included in each Service Manual and with each Accessory Data sheet. CAUTIONS and WARNINGS can also be viewed online at www.catpumps.com/dynamic-literature/cautions-and-warnings or can be requested directly from Cat Pumps.

WARRANTY

View the Limited Warranty online at www.catpumps.com/literature/cat-pumps-limited-warranty