DATA SHEET
INLET PRESSURE RELIEF VALVE

The Pumps with Nine Lives

Brass Model: **7420**

Stainless Steel Model: **7421**

7421

7420

FEATURES

- Simple, pre-set design protects the inlet line from overpressurization with no adjustments necessary.
- Designed for use with a single pump system to protect from excessive inlet pressure or pressure spikes.
- Built for convenient, compact installation.

SPECIFICATIONS	U.S.	Metric
Flow Range	0–10 gpm	0–37.8 lpm
Relief Pressure (7420)	125 psi	8.6 bar
Relief Pressure (7421)	75 psi	5.2 bar
Maximum Temperature	210° F	99° C
Inlet Port	½" NPT(M)	½" NPT(M)
Bypass Port	½" NPT(F)	½" NPT(F)
Weight	0.50 lbs	0.20 kg
Dimensions	2.5 x 1.5 x 1.0"	63.5 x 38.1 x 25.4 mm

SELECTION
Select a relief valve to meet or exceed the flow and pressure requirements of the system, as well as material requirements.

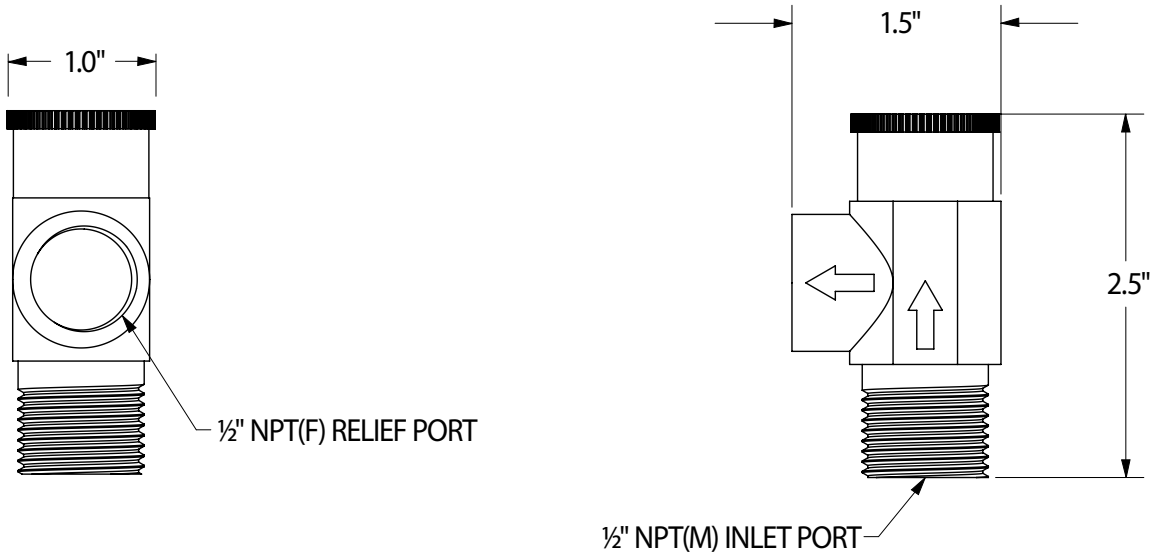
INSTALLATION
The Inlet Pressure Relief Valve should be plumbed parallel to the inlet line upstream from the pump's inlet port. If there is an inlet pressure regulator, the relief valve should be plumbed parallel between the regulator and the pump's inlet port. The relief valve inlet port is at the bottom, and the bypass port is on the side of the valve. Bypass flow from the relief valve should be returned to a reservoir (preferred method) or drain to the floor. Do not route the bypass flow back to the inlet of the pump.

OPERATION
The relief valve is non-adjustable. It will open at or slightly above the set relief pressure point listed.

MAINTENANCE
Periodically check and clean the relief valve on a similar schedule with the inlet filter.

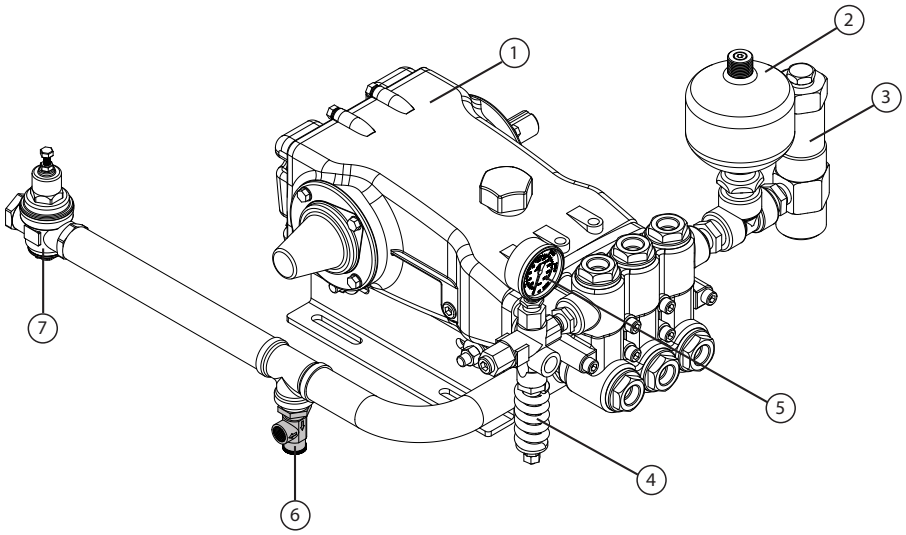
NOTE: The Inlet Pressure Relief Valve is a secondary safety device. It does not replace an inlet pressure regulator.

DIMENSIONAL DRAWING



TYPICAL REGULATOR INSTALLATION

1. Triplex Plunger Pump
2. Pulsation Dampener
3. Pressure Regulator
4. Relief Valve
   (Shown as a secondary safety Relief Valve)
5. Pressure Gauge
6. **Inlet Pressure Relief Valve**
7. Inlet Pressure Regulator



⚠ CAUTIONS AND WARNINGS

All high-pressure systems require a primary pressure regulating device (i.e. regulator, unloader) and a secondary pressure relief device (i.e. 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

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