

PXPG Installation and Operating Manual

Introduction

The Overpressure Gauge Protection Valve (Model PXPG) is designed to safeguard instrumentation from excessive pressure spikes. This valve automatically isolates the gauge when pressure surpasses a predetermined setpoint, reopening once pressure normalizes. The PLV is essential for extending the lifespan of pressure-sensitive instruments in critical applications.

Specifications

Model: PXGP Series

Body Material: 316 Stainless Steel, Brass, Monel, Hastelloy C-272

Connection Sizes: 1/2" F x 1/2" M, 1/4" F x 1/4" M

Max Allowable Pressure: 8,700 psi

Max Allowable Temperature: 175°F

Spring Range Options:

- 6 to 35 psi
- 30 to 85 psi
- 70 to 360 psi
- 290 to 870 psi
- 725 to 3,625 psi
- 3,480 to 5,800 psi
- 5,800 to 8,700 psi

Optional Features:

- Factory-set valve
- Instrument installation
- NACE MR0175 compliance
- Heavy-duty stainless steel tag
- Snubber installation for water, gas, or heavy oils

Safety Precautions

- Ensure proper selection of the spring range based on the application.
- Confirm that the valve is rated for the operating pressure and temperature.
- Always depressurize the system before installation, adjustment, or maintenance.
- Use appropriate personal protective equipment (PPE) when handling pressurized systems.
- Do not exceed the specified pressure limits.

Installation Instructions

1. Installation Requirements

- a. The PLV must be mounted in an accessible position for inspection and operation.
- b. Ensure the valve is protected from mechanical damage and environmental exposure.

2. Connecting the PLV

- a. The PLV must be connected directly to the instrument or process.
- b. Avoid introducing excessive force or bending strain on the valve during installation.
- c. Use proper sealing techniques such as PTFE tape or thread sealant.

- d. If welded connections are used, ensure compliance with approved welding procedures.

Operating Instructions

1. Functionality

- a. The valve remains open under normal operating pressure.
- b. When the set pressure is exceeded, the valve automatically closes to protect the gauge.
- c. Once pressure drops approximately 25% below the setpoint, the valve reopens, restoring normal operation.

2. Adjusting the Set Pressure (If Applicable)

- a. Loosen the locking screw to allow for adjustments.
- b. To increase the pressure set point, turn the adjusting screw clockwise.
- c. To decrease the set point, turn the adjusting screw counterclockwise.
- d. Apply pressure to verify the desired set point.
- e. Once set, tighten the locking screw to prevent unintended drift.

Maintenance and Troubleshooting

1. Regular Maintenance

- a. Periodically inspect the PLV for leaks, corrosion, or blockages.
- b. Ensure proper sealing and tight connections.

2. Troubleshooting Guide

Issue	Possible Cause	Solution
Valve Does Not Open	Excessive Contamination or Blockage	Clean the Valve and Reinstall
Valve Leaks	Improper Installation or Damaged Seal	Reinstall or Replace Seals
Gauge Remains Isolated	Pressure Not Reducing Below Setpoint	Verify System Pressure and Spring Setting

For additional assistance, contact Reotemp at (800) 648-7737 or visit reotemp.com.