Series 386 Pressure-Reducing Valve (PRV Station)

WARNING

• Read and understand all instructions before attempting to install any Victaulic piping products.
• Depressurize and drain the piping system before attempting to install, remove, adjust, or maintain any Victaulic piping products.
• Wear safety glasses, hardhat, and foot protection.

Failure to follow these instructions could result in death or serious personal injury and property damage.

ASSEMBLY DRAWINGS (Example Single-Stage Pressure Reduction with Low-Flow Bypass)

Instructions Follow on the Opposite Side
Series 386 Pressure-Reducing Valve (PRV Station)

RECEIVING, HANDLING, AND INSPECTION

**WARNING**

- Verify that the proper equipment is available for handling the Pressure-Reducing Valve (PRV) Station (reference Victaulic publication 102.16 for weights and dimensions).
- Use proper material handling techniques to prevent the PRV Station assembly from tipping.
- The PRV station shall be anchored securely to the floor or wall with appropriate fasteners for the substrate and load.

Failure to follow these instructions could result in death or serious personal injury and property damage.

INSTALLATION

1. Verify that the valve handles will be accessible with the installation orientation (gauges can be rotated as needed). Securely anchor the PRV Station to the floor or wall using appropriate fasteners for the substrate and load (Victaulic does not provide these anchors).
2. Flush the system inlet piping to remove any debris.
3. Remove dust caps from the inlet and outlet of the PRV Station.
4. An authorized electrician shall connect limit switches, pressure transmitters, etc. to the Building Management System (BMS), as required by the system design.
5. Verify that pressure gauge isolation valves are open.
6. When required, install proper drain vents. Refer to the specific components shall be replaced immediately. Contact Victaulic at 1-800-PICK VIC for assistance, and have the serial number available for the valve/trim.

DOWNSTREAM PRESSURE SETTINGS

1. Set each branch separately (isolate other branches). **NOTE:** The factory set point for Pressure-Reducing Valves is 35 psi/241 kPa/2.4 Bar.
2. Refer to the installation and operation manual for the pressure control valve to remove air from the control chamber and to check the control loop strainer and set downstream pressure (Models 720, 820). The installation and operation manual is shipped with the PRV Station and can be downloaded at victaulic.com.
3. Set redundant branches to the same downstream pressure value.
4. Set the low-flow bypass to 7 – 10 psi/48 – 69 kPa/0.5 – 0.7 Bar higher than the main branch(es).
5. Set safety valves (Models 73Q, 72S, 794) to 15 psi/103 kPa/1.0 Bar higher than the highest setting of the primary PRV.
6. Refer to each valve model’s installation and operation manual, which is shipped with the PRV Station and can be downloaded at victaulic.com.

TESTING THE SYSTEM

1. Test each branch separately, then test the complete PRV Station.
2. Confirm that the control loop cock valves off of each valve are open or closed, in accordance with the valve model’s installation and operation manual.
3. Fill the consumer’s line downstream from the PRV Station in a slow and controlled manner by fully opening the upstream isolating valve and partially opening the downstream isolating valve. Downstream pressure shall be reduced in accordance with pilot settings. Safety valves shall be in standby position (73Q - CLOSED, 794 and 72S - OPEN). **NOTE:** There must be flow through the system during the test.
4. When testing safety valve operation, increase the pressure setting of the PRV by 25 psi/172 kPa/1.7 Bar and activate the safety valves. Check the signal to the BMS.

MAINTENANCE

**WARNING**

- Isolate each section and vent pressure before attempting to remove, adjust, or maintain the PRV Station.

Failure to follow this instruction could result in death or serious personal injury and property damage.

Annual Preventive Maintenance

1. Check isolation valves for proper operation.
2. Check and clean control loop wye strainers (refer to installation and operation manual).
3. Check and clean main strainers (refer to installation and operation manual).
4. Check drains for any blockages and clean.
5. Check PRV and safety valve functionality by following the “Testing the System” section above.
6. Check limit switch and pressure switch functionality and connection to BMS.

5-Year Preventive Maintenance

1. Disassemble the actuator from the valve body and inspect for any damage, wear, or debris.
2. Inspect internal seals and valve seat.
3. Replace any damaged components and elastomers, as required. Contact Victaulic at 1-800-PICK VIC for assistance, and have the serial number available for the valve/trim.