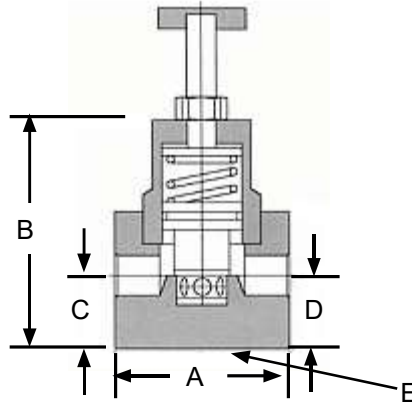


PRESSURE REGULATOR (Pressure Control Valve)

Corrosion Resistant Pressure Regulator Product Data



FilterChem's Pressure Regulator's are designed to handle corrosive chemicals and liquids. This valve protects against downstream pressure in the fluid line. Set the pressure regulator to open or to close to maintain a selective downstream pressure. Pressure Regulators are used to protect piping and equipment from excessive line pressure. The adjustable screw and lock nut allow varying upstream pressure to be precisely converted into a set, accurate downstream pressure. Adjustable from 10-80 psi. No metal come in contact with fluid. Standard mounting holes allow for easy installation. Top-entry design simplifies maintenance of the pressure regulator. Available in PVC, Polypropylene, and PVDF.

Features:

- Pressure protection designed to safeguard piping systems and equipment from pressure fluctuations.
- Adjustable screw and locking nut provide precise downstream pressure regulation across varying upstream pressure
- Top-entry design and parallel inlet and outlet ports allow for easy installation and help prevent piping issues.
- Ideal for pressure protection in systems requiring additional pressure control.

Valve Sizes:

- 1/4" • 3/8" • 1/2" • 3/4" • 1" (straight through flow)
- 1-1/2" • 2" (step down ports)

Valve Body Materials:

- PVC
- CPVC
- Polypropylene
- PVDF

Temperature Ranges:

- PVC: 0°F - 140°F
- CPVC: 0°F - 200°F
- Polypropylene: 0°F - 180°F
- PVDF: 0°F - 280°F

Spring Material:

- Spring 304 SS (Out of Solution)

Mounting Holes:

- 1/4" - 1/2" - (4) 1/4"-20 FPT Mounting holes
- 3/4" - 1" - (4) 3/8"-16 FPT mounting holes
- 1-1/2" - 2" - (4) 7/16"- 16 FPT mounting holes

O-Ring Materials:

- Viton (standard)
- EPDM (upon request; DI water applications)
- Kalrez (contact Sales Dept for pricing)

PRESSURE REGULATOR DIMENSIONS					
SIZE	A	B	C	D	E Thds
1/4"	3.0"	4.75"	.925"	.925"	1/4"-20
3/8"	3.0"	4.75"	.925"	.925"	1/4"-20
1/2"	3.0"	4.75"	.925"	.925"	1/4"-20
3/4"	3.95"	6.75"	.95"	.95"	3/8"-16
1"	3.95"	6.75"	.95"	.95"	3/8"-16
1-1/2"	4.59"	9.25"	1.375"	2.9"	7/16"-16
2"	4.70"	10.25"	1.645"	3.52"	7/16"-16

PRESSURE REGULATOR (Pressure Control Valve)

Engineering and Performance Data

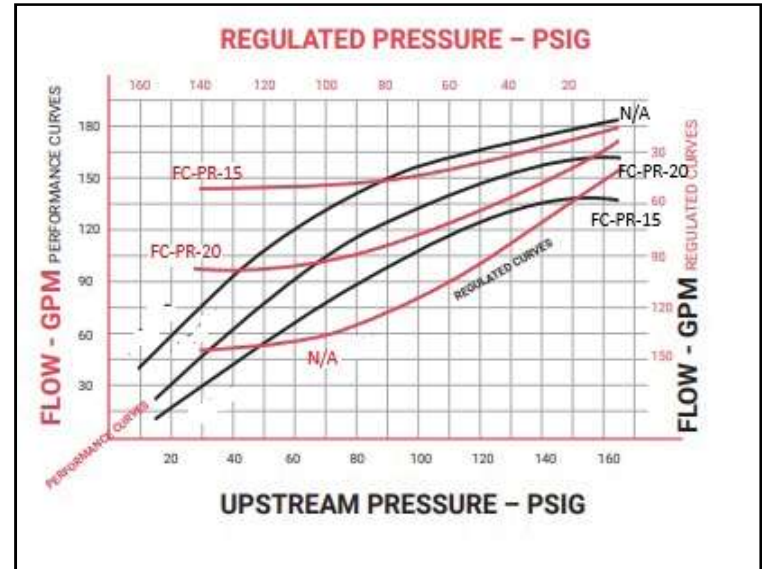
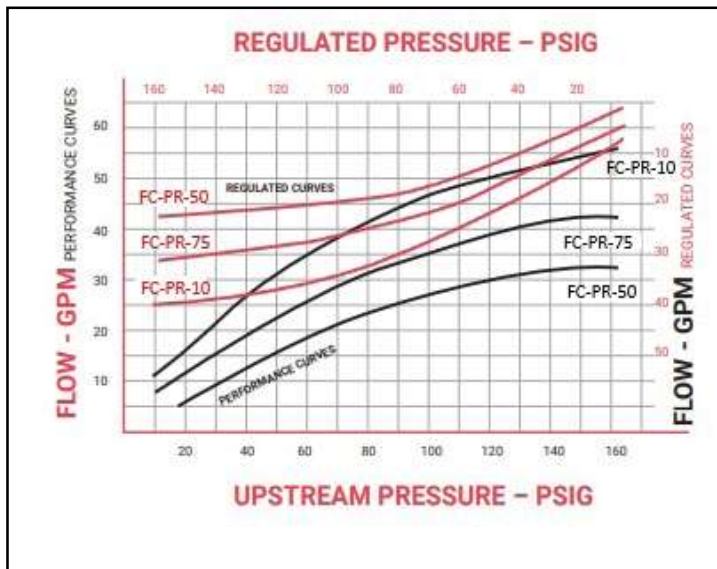


1/4"-1" Straight Through Style

1-1/2"-2" Step Down Style



The performance curves shown in the performance data show the flow rate of the valves when piston seal is fully open. The regulated curves show the flow rate of the valves at the point of the pre-set down stream pressure.

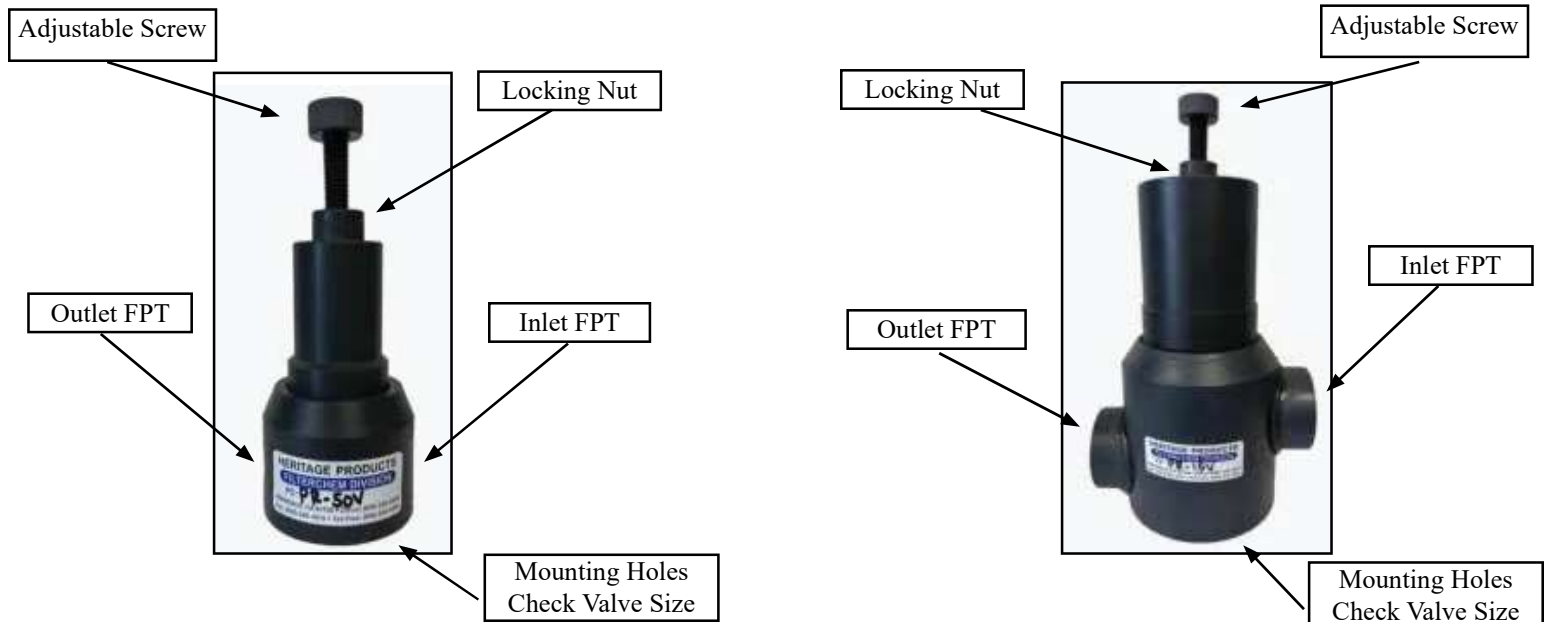


NOTES:

- Test data was performed at 68°F water and 160 PSIG max pressure
- The performance curve will change with higher viscosity and/or higher temperature
- Consult your local sales rep for custom products, or special applications

PRESSURE REGULATOR (Pressure Control Valve)

Installation and Operation Manual



Set Up Instructions:

- **Verify Flow Direction** and install the regulator with the inlet and outlet oriented according to the “IN” sticker on the body.
- **Ensure the adjusting screw is backed out** (counter-clockwise) to it’s minimum setting, closing the valve, before pressurizing the system.
- **Install a downstream pressure gauge** to accurately monitor the regulated outlet pressure during adjustment.
- **Slowly pressurize the system** and check all connections for leaks before making adjustments.
- **Turn the adjusting screw clockwise** to increase downstream pressure, or counter-clockwise to decrease, while observing the gauge.
- **Lock the adjustment in place** with the locking nut once the desired pressure is achieved.

Installation:

- Apply **PTFE (Teflon) thread seal tape** to all male pipe threads; wrap tape in the direction of the threads to ensure proper sealing during installation.
- Identify the “**IN**” port on the regulator body and connect it to the high-pressure supply line; incorrect orientation will prevent proper regulation.
- Install **pressure gauges on both the inlet and outlet** sides to accurately monitor supply pressure and regulated pressure during setup and operation.
- Verify that **inlet pressure is always higher than the desired outlet pressure**; a regulator cannot increase pressure above the supply pressure.
- If the desire outlet pressure cannot be achieved, **stop adjustment** and check the supply line to confirm adequate and stable inlet pressure is available.
- **Do not overtighten fittings**; excessive torque may damage plastic threads and compromise sealing.
- This regulator is designed for **plastic piping systems only**; do not connect to metallic pipe or fittings.

Operating

- Verify **chemical compatibility** of the chosen material prior to use, and do not exceed the regulator’s **maximum rated temperature or pressure**; this valve is intended for **clean fluids only** - pumping solids or sands may cause plugging, improper regulation, and premature wear.