



PRV Series

Inlet 0 to 3,000 psig & Outlet 2" H₂O to 60 psig

Low Pressure Regulator

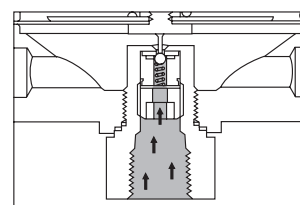
Features

- Low Outlet Pressure Ranges
- Exceptional Accuracy & Response
- Compatible with Corrosive and Non-corrosive Gases & Liquids

Applications

- Chromatography
- Process Stream Sampling
- Bubbling Operations
- Medical Instrumentation
- Research Laboratories
- Instrument Calibration

How It Works

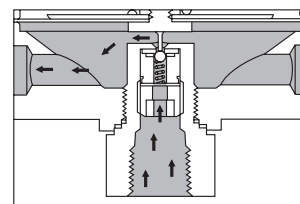


CLOSED

With the poppet against the seat, full upstream pressure is applied to the poppet effecting a bubble tight seal

Technical Data

| | |
|-----------------------------|--|
| Body Construction Material: | • Polyvinyl Chloride |
| Spring Housing Materials: | • PVR-1, 2 & 3: Polyvinyl Chloride • PVR-4 & 5: Aluminum Alloy |
| Seat Materials: | • Kel F with Synthetic Sapphire Ball Poppet |
| Diaphragm Material: | • Teflon® |
| Adjustment Screw Material: | • Delrin |
| Lock Nut Material: | • Aluminum Alloy |
| Trim Material: | • 316 Stainless Steel or Monel |
| Port Size: | • 1/4" Female Pipe |
| Pressure Ratings: | • Inlet – 3,000 psig (207 BAR) • Outlet – 2" H ₂ O to 60 psi (4 BAR), 5 Ranges |
| Temperature Range: | • 0° F to +125° F (-18° C to +46° C) |
| Flow Capacity: | • C _v = 0.011 Max. • ESEOD = 0.025" |
| Weight: | • PVR-1, 2 & 3 - 14 oz; PVR-4& 5 - 1.5 lbs. |
| Leakage: | • Bubble Tight |
| Sensitivity: | • Less than 1/2 psi on all ranges over 2 psi |



REGULATING

As the downstream process demands flow, the pressure acting on the bottom of the diaphragm decays, allowing the adjusting spring force to push the poppet down. This in turn unseats the poppet allowing flow to begin and pressure under the diaphragm to increase until balance is achieved between adjusting spring force and downstream pressure. This condition continues until process ceases. At this point, increasing pressure overcomes spring force, moving diaphragm up and allowing the poppet to close.

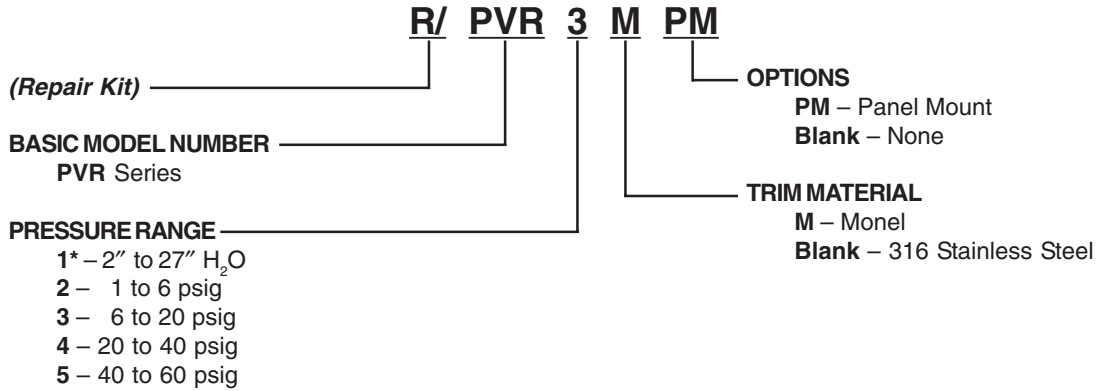
NOTE: Proper filtration is recommended to prevent damage to sealing surfaces.

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How to Order



NOTE:

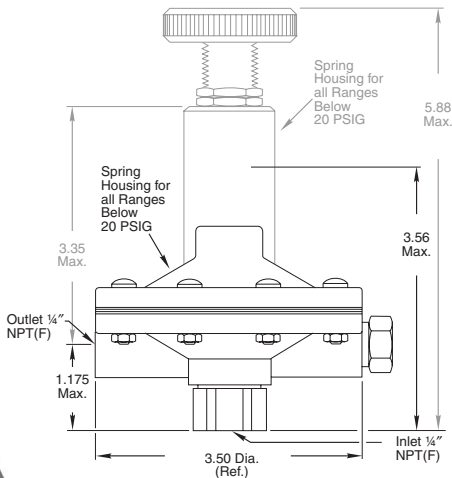
If this regulator is to be used in oxygen service, specify "GENERAL OXYGEN SERVICE" when ordering or furnish the factory a copy of the special requirements.

* 27" H₂O model not recommended for dead end service.

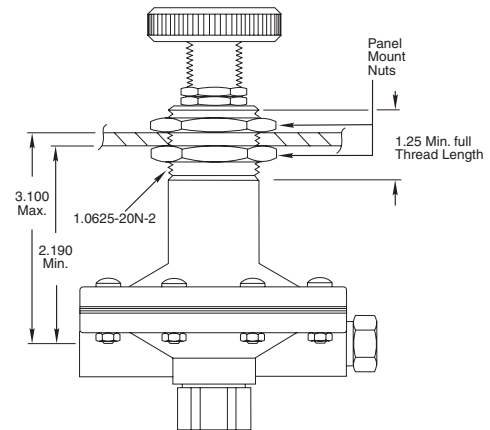
Please consult your Circle Seal Controls Distributor, Representative or the factory for information on special connections, operating pressures and temperature ranges.

Teflon® is a registered trademark of Dupont.

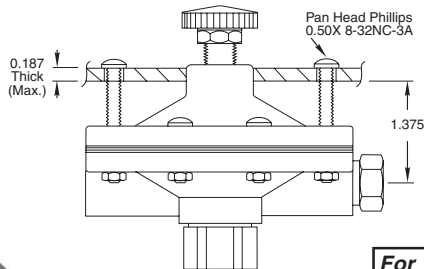
Dimensions



Panel Mounting for PVR-4 & -5



Panel Mounting for PVR-1, -2 & -3



For Your Safety

It is the sole responsibility of the system designer and user to select products suitable for their specific application requirements and to ensure proper installation, operation and maintenance of these products. Material compatibility product ratings and application details should be considered in the selection. Improper selection or use of products described herein can cause personal injury