

## **PVR SERIES**

Inlet 0 to 3,000 PSIG & Outlet 2" H,0 to 60 PSIG

# LOW PRESSURE REGULATOR

Fred C. Gilbert Co. 106 Norris Road Bakersfield, Ca. 93308 661-399-9569 fax 661-393-9654

## **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

### **Technical Data**

## **Materials of Construction**

Body - Polyvinyl Chloride

Spring Housing:

PVR-1, 2 & 3 — Polyvinyl Chloride PVR-4 & 5 — Aluminum Alloy

Seat – Kel F with Synthetic Sapphire Ball Poppet

Diaphragm - Teflon®

Adjustment Screw – Delrin Lock Nut – Aluminum Allov

Trim — 316 SS or Monel

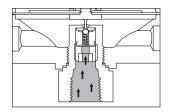
#### **Port Size & Connections**

1/4" Female Pipe

## **How It Works**

#### **CLOSED**

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



#### 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.

## **Pressure Ratings**

Inlet -3,000 PSIG (207 BAR)

Outlet - 2" H<sub>2</sub>O to 60 PSI (4 BAR), 5 Ranges

## Temperature Range Flow Capacity

 $0^{\circ}F \text{ to } +125^{\circ}F;$   $C_{V} = 0.011 \text{ Max.}$ -18°C to +46°C ESEOD = 0.025"

## Weight

PVR-1, 2 & 3 – 14 oz.; PVR-4 & 5 – 1.5 lbs.

## Leakage

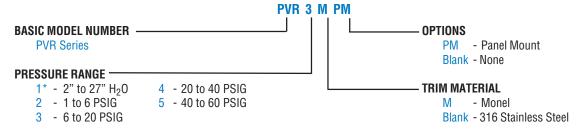
**Bubble Tight** 

## Sensitivity

Less than 1/2 PSI on all ranges over 2 PSI



## **How To Order**



#### Note:

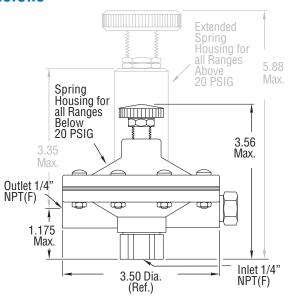
If this regulator is to be used in oxygen service, specify "GENERAL OXYGEN SERVICE" when ordering or furnish the factory a copy of the special requirements.

\*27" H<sub>2</sub>0 model not recommended for dead end service.

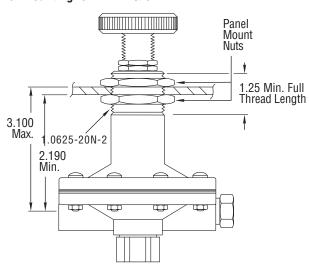
Please consult your Circle Seal Controls Distributor, Representative or the factory for information on special connections, operating pressures and temperature ranges.

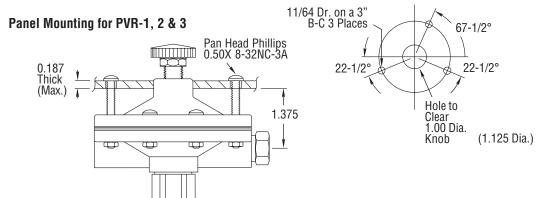
Teflon® is a registered trademark of DuPont.

## **Dimensions**



#### Panel Mounting for PVR-4 & 5







Certified to ISO 9001