



PR01 SERIES

Inlet 0 to 3,000 PSIG & Outlet 10 to 720 PSIG

Fred C. Gilbert Co.
106 Norris Road
Bakersfield, Ca. 93308
661-399-9569
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MINIATURE NON-VENTING REGULATOR

Features

- Miniature Size – 1-3/4" Diameter by 3-1/2" High
- Soft Seat – Suitable for Dead End Service
- Tight Shutoff
- Single Hole Panel Mounting
- Optional Pressure Gauges

Applications

- R & D Pilot Plants
- Research Laboratories
- Chromatography
- Cylinder Pressurization
- Bubbling Operations
- Instrument Pressurization
- Slow Gas Purge Control
- Inert Gas Blanketing (Food Processing)
- Pilot Control for Large Control Units
- Lecture Bottles

Technical Data

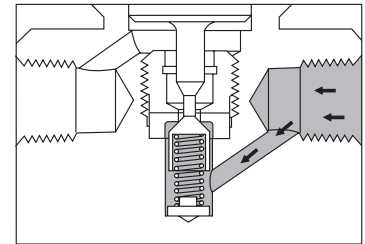
Materials of Construction

- Body – Aluminum Alloy, Anodized Blue
 Seat – Kel F or Nylatron
 Seal – Buna N, Ethylene Propylene, Neoprene or Viton®
 Trim – Stainless St. or Plated Steel
 Handle – ABS Plastic
 Gauges – Brass

How It Works

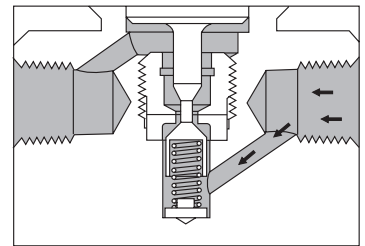
CLOSED

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



REGULATING

As the downstream process demands flow, the pressure action on the piston decays, allowing the adjusting spring force to push the piston down, which in turn unseats the poppet. This permits flow to start, and pressure under piston to increase, until balance is achieved between adjusting spring force and downstream pressure. This condition continues until process demand ceases, at which point increasing pressure overcomes spring force, moving piston up and allowing poppet to close.



Port Sizes & Connections

1/8" Female Pipe

Media

Inert Gases

Pressure Rating

Inlet – 0 to 3,000 PSIG (207 BAR)
 Outlet – 10 to 720 PSIG

Temperature Range

-65°F to +160°F;
 -54°C to +71°C

Weights

Regulators – 8.2 oz.
 Gauges – 5.2 oz.



CIRCLE SEAL CONTROLS, INC.

A division of CIRCOR International, Inc.

Certified to ISO 9001

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How To Order

PR01 3 A 1P N D O

BASIC MODEL NUMBER _____

PR01 Series

MAXIMUM OUTLET PRESSURE _____

1 - 100 PSIG (7 BAR)
2 - 200 PSIG (14 BAR)
3 - 400 PSIG (28 BAR)
4 - 800 PSIG (55 BAR)

BODY & PANEL NUT MATERIAL _____

A - Aluminum Alloy, Anodized Blue

PORT SIZE & TYPE _____

1P - 1/8" Female Pipe Thd.

OPTIONS

O - None
G - Gauges, 1-1/2" Dia.
P - Panel Mount

SEAT MATERIAL

D - Nylatron (Std.)
B - Kel-F

SEAL MATERIAL

E - EPR
N - Neoprene (Std.)
V - Viton®
9 - Buna N

| Model Number | Approx. Handle Turns Max. Outlet | Operating Press. Range (PSI) | Approx. Outlet Press. Increase per 100 PSI, Inlet Decrease PSI | Approx. Air Flow Vs. Outlet Press. (SCFM/PSI)* | Approx. Cv* |
|--------------|----------------------------------|------------------------------|--|--|-------------|
| PR011 | 3-3/4 | 10 - 90 | 3.5 | 10 / 70 | .007 |
| PR012 | 4-1/2 | 20 - 180 | 3.5 | 18 / 140 | .012 |
| PR013 | 1-3/4 | 40 - 360 | 3.5 | 31 / 280 | .021 |

Notes:

* At maximum inlet and set at maximum rated outlet lock-up pressure.

40 micron absolute filtration of inlet fluid media recommended.

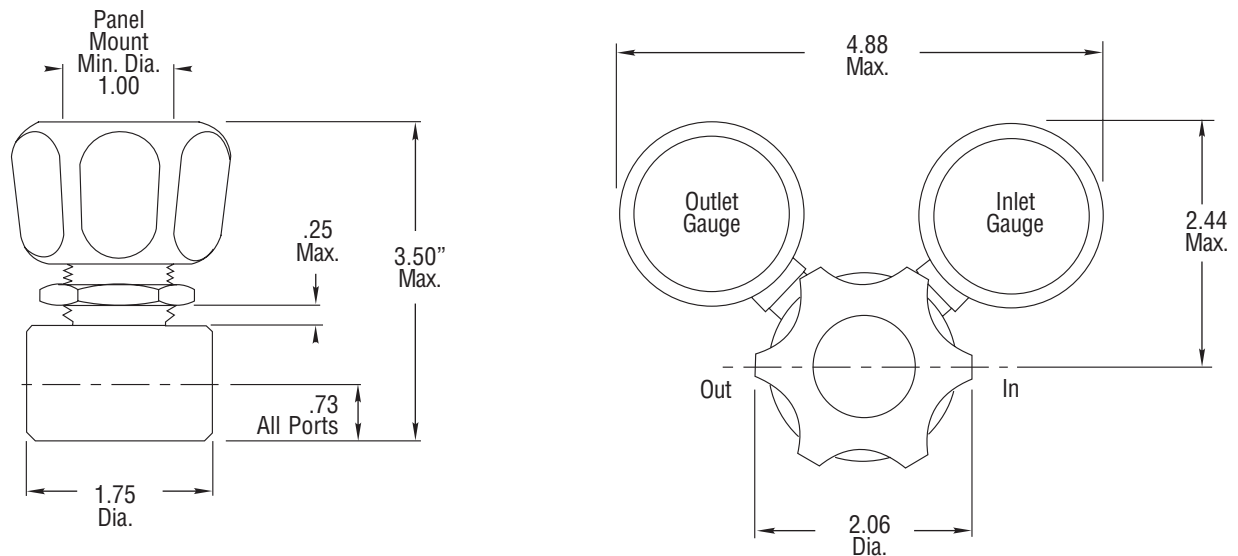
Relief valve downstream of outlet port should always be used.

Main seat is factory tested to be bubble tight for a period of one minute with full inlet pressure.

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

Viton® is a registered trademark of DuPont Dow Elastomers.

Dimensions



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