

PR-2 Series*

Economy Brass Pressure Reducing Regulator



The PR-2 Series are compact brass body regulators designed for maximum flexibility in many classes of instrumentation service. Specifically designed for gas applications, this regulator is capable of accepting high pressures directly from cylinders and other high pressure, non-corrosive systems. It is ideally suited for carrier gas pressure regulation, yet it is economical enough to use in low-pressure air systems such as instrument cabinet air purge service.

* Replaces the LPR Series.

Features & Specifications

- Gas or liquid service
- Brass (alloy 360) construction
- Stainless steel diaphragm with Teflon® lining
- Stainless steel poppet
- Better than 25 Ra finish in diaphragm cavity
- 20µ inlet filter
- Bubble-tight shutoff
- Outlet pressure ranges: 0–10 psig, 0–25 psig, 0–50 psig, 0–100 psig, 0–250 psig, 0–500 psig and 0–750 psig
- Operating temperatures: –40° F to +175° F (–40° C to +80° C)
- Inlet and outlet connection: ¼" FNPT

Options

- ½" or ¾" FNPT connections
- Panel mount (requires 1 ⅜" mounting hole)
- Extra ports
- Pressure gauges

Maximum Temperature & Operating Inlet Pressures

Seat Material	Maximum Temperature*	@	Maximum Operating Inlet Pressure
Tefzel®	150° F (66° C)	@	3,600 psig (24.82 MPa)
High density Teflon®	150° F (66° C)	@	3,600 psig (24.82 MPa)
CF Teflon®	175° F (80° C)	@	3,600 psig (24.82 MPa)
PCTFE (formerly Kel-F® 81)	175° F (80° C)	@	3,600 psig (24.82 MPa)
Polyimide	175° F (80° C)	@	3,600 psig (24.82 MPa)
PEEK™	175° F (80° C)	@	3,600 psig (24.82 MPa)

* Temperatures in excess of 175° F (80° C) require the use of a metal knob or the tamper-proof option.

Circle Seal Controls

2301 Wardlow Circle • Corona, CA 92880
 Phone (951) 270-6200 • Fax (951) 270-6201
 www.circle-seal.com

pressure regulators

PR-2 Series

How to Order

K/ PR2 - 2 A 1 1 A 3 C 1 1 1 C

REPAIR KIT ————

BODY MATERIALS ————

2 Brass
8 Brass, chrome-plated
A Brass, nickel-plated

PORT CONFIGURATION ————

A Standard (one inlet & one outlet port)
For more port configurations, see page 35.

PROCESS PORT TYPES ————

1 1/4" FNPT (1/4" FNPT gauge ports)
4 3/8" FNPT (1/4" FNPT gauge ports)
0 1/8" FNPT (1/8" FNPT gauge ports)
A 1/4" ISO 7-Rc taper (1/4" FNPT gauge ports)

SURFACE FINISH/DIAPHRAGM CAVITY ————

1 < 25 Ra, standard

SEAT MATERIALS ————

A Tefzel®
B CF Teflon®
C Polyimide
H PCTFE (formerly Kel-F® 81)
I High-density Teflon®
Q PEEK™

FLOW COEFFICIENT ————

3 0.06
5 0.2
C 0.025
H 0.50

OUTLET RANGE ————

C 0-10 psig
D 0-25 psig
E 0-50 psig
G 0-100 psig
I 0-250 psig
J 0-500 psig
W 0-750 psig

OPTIONAL CAP FINISH

Blank Black anodize (standard)
1 Chrome-plated
2 Electroless nickel-plated

CAP ASSEMBLY

1 Standard, aluminum
3 1" panel mount, aluminum
4 Panel mount, aluminum
5 Captured vent, aluminum
6 Captured vent, panel mount, aluminum
8 Tamper-proof, aluminum
9 Fine adjust, 1/2" panel mount, aluminum
0 Fine adjust, 1 3/8" panel mount, aluminum
A Captured vent, tamper-proof, aluminum
E Tamper-proof, panel mount, aluminum

DIAPHRAGM FACING/BACKING

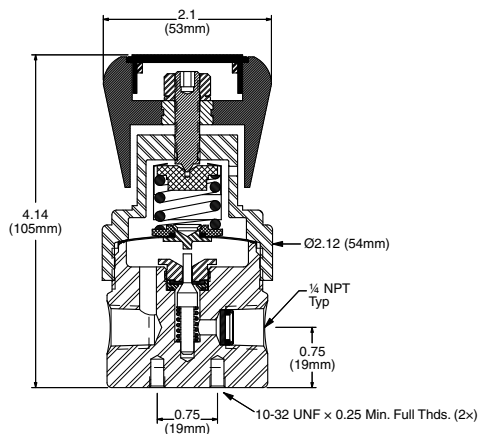
1 Teflon®/stainless steel
2 Teflon®/Viton®
6 Tefzel® ring/stainless steel

DIAPHRAGM TYPE

1 Standard diaphragm
2 Diaphragm attached poppet
3 Self-relieving
4 Vacuum assist spring, standard diaphragm
5 Vacuum assist spring, diaphragm attached poppet
6 Vacuum assist spring, self-relieving
7 Liquid service

Outline & Mounting Dimensions

Weight = 1.7 lbs (0.77kg)

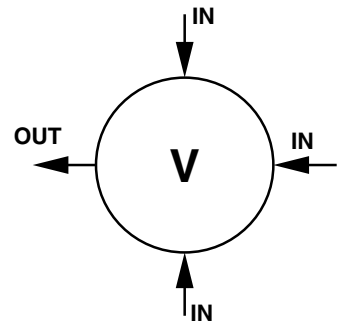
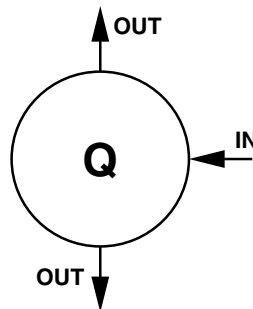
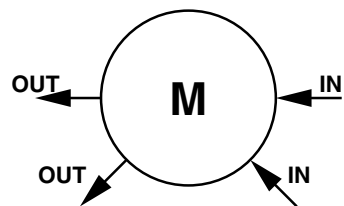
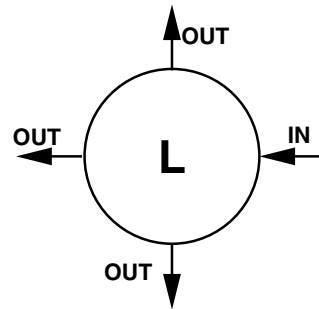
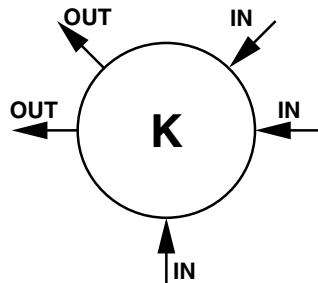
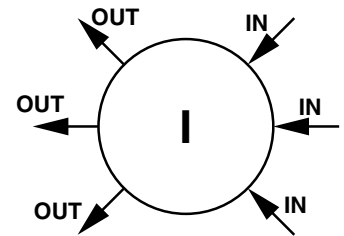
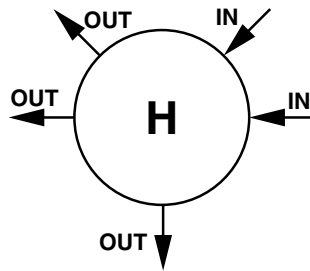
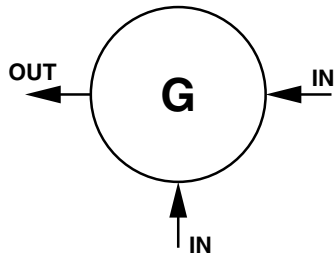
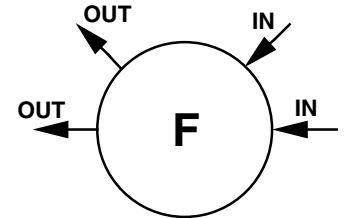
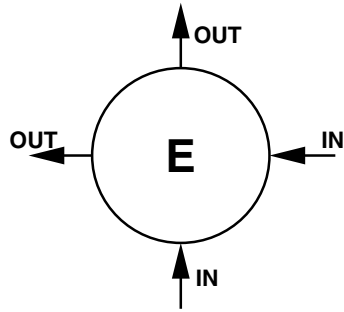
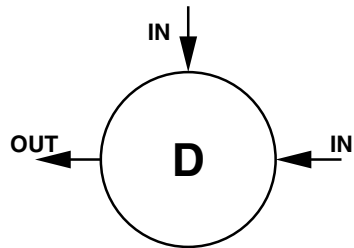
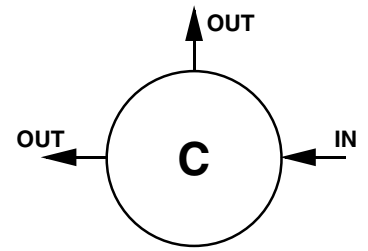
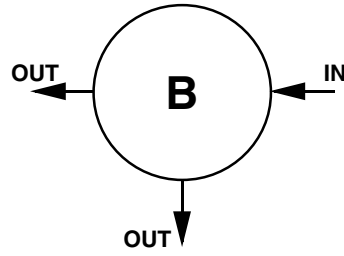
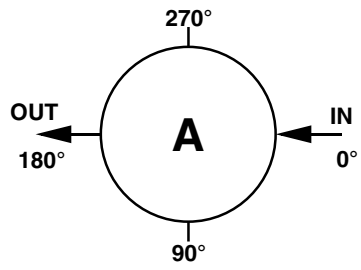


For Your Safety

It is solely the 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 or property damage.

Teflon® and Tefzel® are registered trademarks of the DuPont Company.
PEEK™ is a trademark of Victrex PLC.
Kel-F® is a registered trademark of 3M Company.

Porting Configurations for Pressure Regulators



Location Of Ports From Top View