

# GO REGULATOR

## 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, and is economical enough to use in low pressure air systems, such as instrument cabinet air purge service.

### Features & Specifications

- Gas or liquid service
- Brass (alloy 360) construction
- Stainless steel diaphragm with PTFE lining
- Stainless steel poppet
- Better than 25 Ra finish in diaphragm cavity
- 20 micron inlet filter
- Bubble-tight shutoff
- Outlet pressure ranges 0–10, 0–25, 0–50, 0–100, 0–250, 0–500 and 0–750 psig
- Operating temperatures -40° F to +175° F (-40° C to +80° C)
- Inlet and outlet connection 1/4" FNPT
- Cv flow coefficients: 0.025, 0.06, 0.20, and 0.5 (0.06 standard)

### Options

- 1/8" or 3/8" FNPT connections
- Panel mount (requires 1 3/8" mounting hole)
- Extra ports
- Pressure gauges

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### GO Regulator

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# PR-2 Series

## How to Order

PR2 -

BODY MATERIAL

2 Brass

8 Brass, chrome-plated

PORT CONFIGURATION

A Standard

For more port configurations, see page 35.

PROCESS PORT TYPES

(GAUGE PORT TYPES, IF SPECIFIED)

0 1/8" FNPT (1/8" FNPT gauge ports)

1 1/4" FNPT (1/4" FNPT gauge ports), standard

4 3/8" FNPT (1/4" FNPT gauge ports)

SURFACE FINISH OF DIAPHRAGM CAVITY

1 < 25 Ra, standard

SEAT MATERIAL

A Tefzel®

B CF PTFE

C Polyimide

H PCTFE (formerly Kel-F® 81)

I High density PTFE

Q PEEK™

FLOW COEFFICIENT (Cv)

3 0.06

5 0.2

C 0.025

H 0.5

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

1 Chrome-plated

2 Electroless nickel-plated

CAP ASSEMBLY

1 Standard, 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 MATERIAL

1 PTFE/stainless steel

2 PTFE/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

NOTE: The choices above represent an abbreviated list of the more commonly ordered options. For a complete listing of all available options, please see the Selection Wizard on the GO website at [www.goreg.com](http://www.goreg.com) or contact the factory.

## Maximum Temperature & Operating Inlet Pressures

SEAT MATERIAL	MAXIMUM TEMPERATURE	@	MAXIMUM OPERATING INLET PRESSURE
Tefzel®	150° F (66° C)	@	3600 psig (24.82 MPa)
High density PTFE	150° F (66° C)	@	3600 psig (24.82 MPa)
PCTFE (formerly Kel-F® 81)	175° F (80° C)	@	3600 psig (24.82 MPa)
Polyimide	175° F (80° C)	@	3600 psig (24.82 MPa)
PEEK™	175° F (80° C)	@	3600 psig (24.82 MPa)

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

## Outline and Mounting Dimensions

Panel mount option requires 1.390 (35.3mm) minimum diameter panel cut out. 0.150 maximum panel thickness.

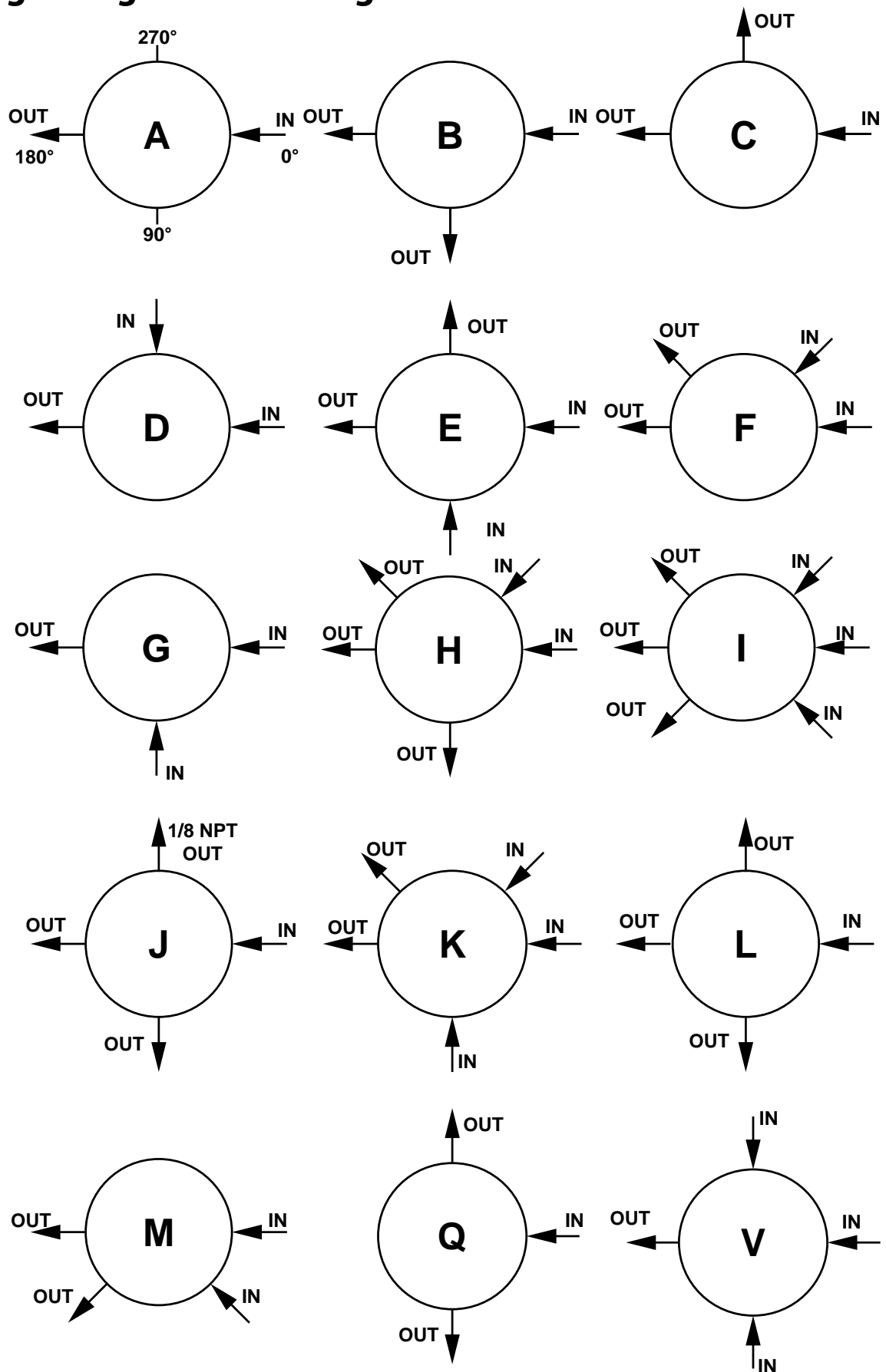
Weight = 1.9 lbs (0.86 kg)

The diagram is a cross-sectional view of the pressure regulator. Key dimensions and features include:

- Top cap width: 2.1 (53mm)
- Overall height: 4.14 (105mm)
- Internal bore diameter: Ø2.12 (54mm)
- Port thread: 1/4 NPT Typ
- Port height: 0.75 (19mm)
- Bottom mounting hole diameter: 0.75 (19mm)
- Bottom mounting hole spacing: 10-32 UNF x 0.25 Min. Full Thds. (2x)

4 GO Regulator Single Stage Pressure Regulators

# Porting Configurations for Single Stage Pressure Regulators



LOCATION OF PORTS FROM  
TOP VIEW