

# GO REGULATOR

## CPR-1 Series

Compact Stainless Steel Pressure Reducing Regulator



The CPR-1 Series is a compact pressure regulator with most of the same internal design features employed in our time proven PR-1 Series. This regulator was designed to provide optimum performance as a "lecture bottle regulator" for pressure control in any application where a small size and low internal volume are required. The low internal volume allows more rapid purging in analytical instrumentation and semiconductor doping gas applications.

### Features & Specifications

- Internal dead volume less than 4cc
  - Gas or liquid service
  - 316L stainless steel body
  - Stainless steel diaphragm
  - 40 micron inlet filter
  - Bubble-tight shutoff
  - Outlet pressure 0-10, 0-25, 0-50, 0-100, 0-250, 0-500\* and 0-750\*
  - Cv flow 0.025, 0.06, and 0.20
  - Operating temperatures -40° F to +500° F (-40° F to +260° C)
  - Inlet/outlet connections 1/8" FNPT
- \* not with Viton®-backed diaphragm assembly*

### Options

- Panel mount (requires 1 3/8" mounting hole)
- Special welded connections
- Pressure gauges
- Captured vent

pressure regulators

### GO Regulator

405 Centura Court • PO Box 4866 • Spartanburg, SC 29303  
Phone (864) 574-7966 Fax (864) 574-5608  
www.goreg.com • sales@goreg.com

# CPR-1 Series

## How to Order

### CPR1 -

#### BODY MATERIAL

- 1 316L stainless steel

#### 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), standard

#### SURFACE FINISH OF DIAPHRAGM CAVITY

- 1 < 25 Ra, standard

#### SEAT MATERIAL

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

#### FLOW COEFFICIENT (Cv)

- 3 0.06
- 5 0.2
- C 0.025

#### OUTLET RANGE

- A 1–30 psig
- 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

#### CAP ASSEMBLY

- 1 Standard, aluminum
- 4 Panel mount, aluminum
- 5 Captured vent, aluminum
- 7 Captured vent, stainless steel
- 8 Tamper-proof, aluminum
- 9 Fine adjust, 1/2" panel mount, aluminum
- 0 Fine adjust, 1 3/8" panel mount, aluminum
- D Captured vent, tamper-proof, stainless steel

#### DIAPHRAGM FACING/BACKING/ O-RING MATERIAL

- 1 Tefzel® ring/stainless steel/Teflon®
- 2 Teflon®/Viton®/Viton®
- 3 Teflon®/Viton®/Teflon®
- 4 Teflon®/stainless steel/Viton®
- 7 Tefzel® ring/stainless steel/Viton®
- 8 Tefzel® ring/Inconel®/Teflon®
- H Tefzel® ring/Inconel®/Viton®

#### DIAPHRAGM TYPE

- 1 Standard, Nylon dia. slip ring (170° F maximum temperature)
- 2 Standard, Polyimide dia. slip ring (high temperature service)

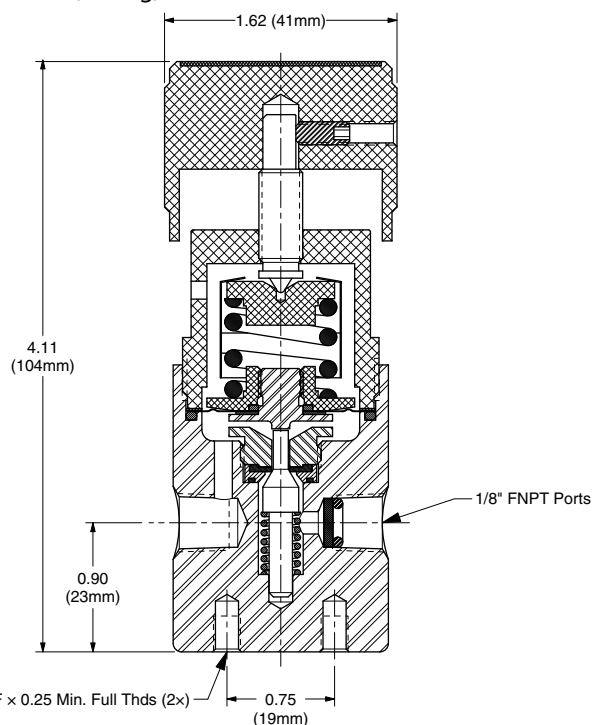
NOTE: The choices above represent an abbreviated list of the more commonly ordered options. For a complete listing of all available options, please see the Selection Wizard on the GO website at [www.goreg.com](http://www.goreg.com) or contact the factory.

## 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 Teflon®	150° F (66° C)	@	3600 psig (24.82 MPa)
PCTFE (formerly Kel-F® 81)	175° F (80° C)	@	6000 psig (41.37 MPa)
Polyimide	500° F (260° C)	@	3600 psig (24.82 MPa)
Polyimide	175° F (80° C)	@	6000 psig (41.37 MPa)
PEEK™	500° F (260° C)	@	3600 psig (24.82 MPa)
PEEK™	175° F (80° C)	@	6000 psig (41.37 MPa)

## Outline and Mounting Dimensions

Weight = 1.1 lbs (0.50kg)



Viton® is a registered trademark of DuPont Dow Elastomers.

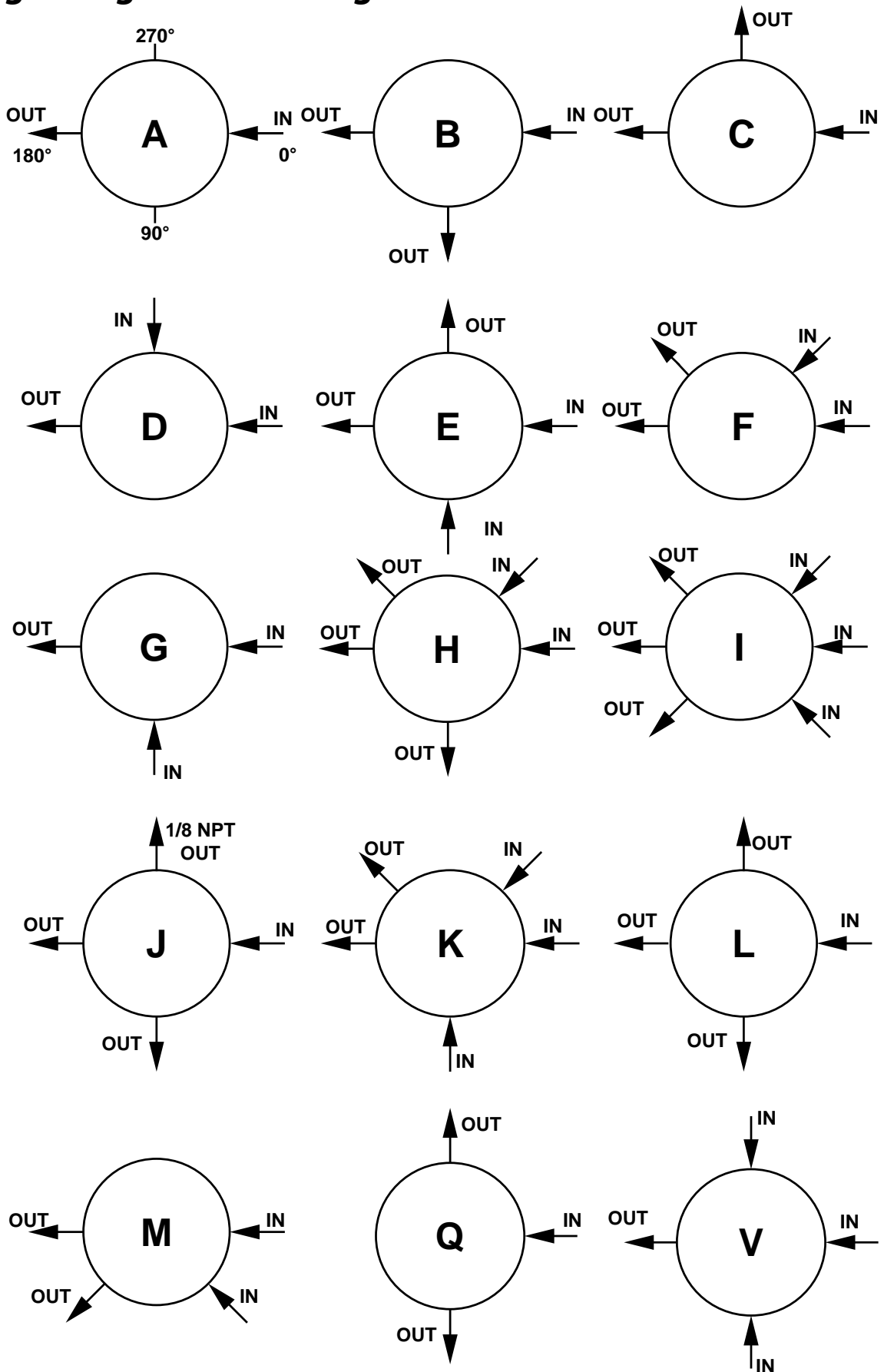
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Kel-F® is a registered trademark of 3M Company.

PEEK™ is a trademark of Victrex PLC.

Inconel® is a registered trademark of Special Metals Corporation.

# Porting Configurations for Single Stage Pressure Regulators



LOCATION OF PORTS FROM  
TOP VIEW