

## 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

### Options

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

pressure regulators

# CPR-1 Series

To Order, contact your local Distributor Link below:  
[www.goreg.com/distributor/index.htm](http://www.goreg.com/distributor/index.htm)

Verify that your chosen part number is valid using the GO Wizards at  
[www.goreg.com/products/matrix/index.htm](http://www.goreg.com/products/matrix/index.htm)

## How to Order

### CPR1 –

#### BODY MATERIAL

- 1 316L stainless steel

#### PORT CONFIGURATION

- A Standard

For more port configurations, see page 33.

#### 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®  
 B CF PTFE  
 H PCTFE (formerly Kel-F® 81)  
 Q PEEK™

#### FLOW COEFFICIENT (Cv)

- 3 0.06  
 5 0.2  
 C 0.025

#### OUTLET RANGE

- A 1–30 psia  
 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

#### OPTIONS

- A EB33  
 B EB5  
 D Helium leak test  
 E Pressure test certificate  
 F Certificate of Conformity  
 G CMTR

#### 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  
 O 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/PTFE  
 2 PTFE/Viton®/Viton®  
 3 PTFE/Viton®/PTFE  
 4 PTFE/stainless steel/Viton®  
 7 Tefzel® ring/stainless steel/Viton®  
 8 Tefzel® ring/INCONEL®/PTFE  
 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)

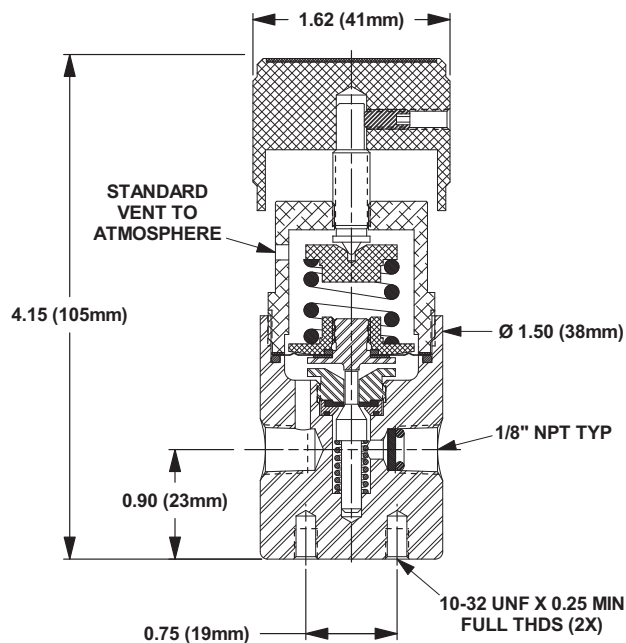
## Maximum Temperature & Operating Inlet Pressures

| SEAT MATERIAL                 | MAXIMUM TEMPERATURE | @ | MAXIMUM OPERATING INLET PRESSURE |
|-------------------------------|---------------------|---|----------------------------------|
| Tefzel®                       | 150° F (66° C)      | @ | 3600 psig (24.82 MPa)            |
| PCTFE<br>(formerly Kel-F® 81) | 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)            |
| CF PTFE                       | 175° F (80° C)      | @ | 3600 psig (24.82 MPa)            |

NOTE: Contact the factory for any additional requirements.

## Outline and Mounting Dimensions

Weight = 1.1 lbs (0.50kg)



Viton® is a registered trademark of DuPont Dow Elastomers.  
 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.  
 INCONEL® is a registered trademark of Special Metals Corporation.