

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

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

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/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)

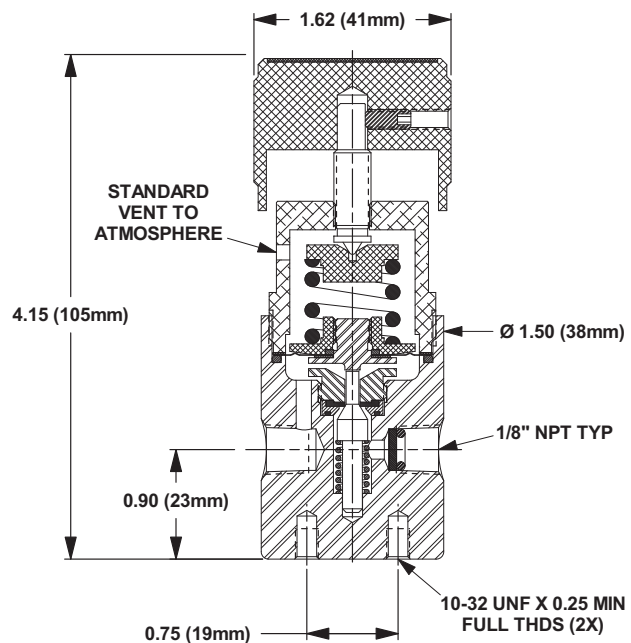
Maximum Temperature & Operating Inlet Pressures

SEAT MATERIAL	MAXIMUM TEMPERATURE	@	MAXIMUM OPERATING INLET PRESSURE
Tefzel®	150° F (66° C)	@	3600 psig (24.82 MPa)
PCTFE (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)



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 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.