

CYL-20 Series

Corrosion-resistant Two-stage Pressure Reducing Regulator



Precision pressure control is now possible with the CYL-20 Series regulator. This two-stage regulator, constructed of 316L stainless steel and Teflon®, has less than 0.01 percent outlet pressure change with varying inlet pressures and is designed for use in gas calibration systems and semiconductor materials processing.

With materials of only 316L stainless steel, Teflon® and Tefzel®, this regulator is suitable for service in corrosive streams as well as non-corrosive streams with potential surface absorption problems. This regulator accepts inlet pressures up to 6000 psig and has bubble-tight shutoff. Operating temperature ranges may vary from -40° C up to +260° C and outlet pressure ranges of 0-10 psig up to 0-500 psig are easily adjustable by a fluted knob.

Features & Specifications

- 316L stainless steel, Inconel®, Teflon® & Tefzel® in contact with operating media only
- Stainless steel caps & adjusting screws
- Bubble-tight shutoff
- CGA fitting for cylinder connection
- 2" diameter stainless steel 316 gauges
- Maximum inlet pressure: 6000 psig
- Outlet pressure ranges of 0-10 psig, 0-50 psig, 0-100 psig, 0-250 psig and 0-500 psig
- Cv flow coefficients: 0.025, 0.06, 0.20, 0.50
- Operating temperatures of one line: -40° F to +500° F (-40° C to +260° C)
- Outlet pressure change is 0.01 psig per 100 psig of inlet decay

Options

- Relief valve
- Captured vent
- Special fittings including all metal VCR®-compatible
- Shutoff valve

pressure regulators

GO Regulator

405 Centura Court • PO Box 4866 (29305) • Spartanburg, SC 29303
Phone (864) 574-7966 Fax (864) 574-5608
www.goreg.com • sales@goreg.com

CYL-20 Series

How to Order

Standard items in bold

C2 - **1** **F** **1** **C** **1** **1** **1** **1** **1** **0** **0** **0** **1** **A** **3** **A** **3**

BODY MATERIAL

1 316L stainless steel

PORT CONFIGURATION

F Standard

For more port configurations, see page 19.

PROCESS PORT TYPES

(GAUGE PORT TYPE, IF SPECIFIED)

1 ¼" FNPT (¼" FNPT gauge ports)

3 ¼" sch. 80 pipe stub, 4" long (¼" FNPT gauge ports)

4 ⅜" FNPT (¼" gauge ports)

K ¾" sch. 40 pipe stub, 4" long (¼" FNPT gauge ports)

OUTPUT 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

DIAPHRAGM TYPE, 1ST STAGE

1 Standard diaphragm

2 Diaphragm-attached poppet

8 Tefzel® ring/stainless steel

9 Teflon®/Inconel®

B Tefzel® ring/stainless steel, diaphragm-attached poppet

DIAPHRAGM TYPE, 2ND STAGE

1 Standard diaphragm

2 Diaphragm-attached poppet

3 Self-relieving

8 Tefzel® ring/stainless steel

9 Teflon®/Inconel®

B Tefzel® ring/stainless steel, diaphragm-attached poppet

CGA Fitting

2ND STAGE Cv FLOW

3 0.06

5 0.2

C 0.025

H 0.5

2ND STAGE SEAT MATERIAL

A Tefzel®

H PCTFE (formerly Kel-F® 81)

I High density Teflon®

Q PEEK™, low temperature service, plastic knob

1ST STAGE Cv FLOW

3 0.06

5 0.2

1ST STAGE SEAT MATERIAL

A Tefzel®

H PCTFE (formerly Kel-F® 81)

I High density Teflon®

Q PEEK™

GAUGES

1 Include gauges

2 Omit gauges

3 Customer-supplied

CGA FITTINGS

Use '000' to omit CGA

Use 'CUS' for customer-supplied CGA

CAP ASSEMBLY, 2ND STAGE

1 Standard

4 Panel mount

CAP ASSEMBLY, 1ST STAGE

1 Tamper-proof

For a full list of options, visit the selection matrix for this product on www.goreg.com

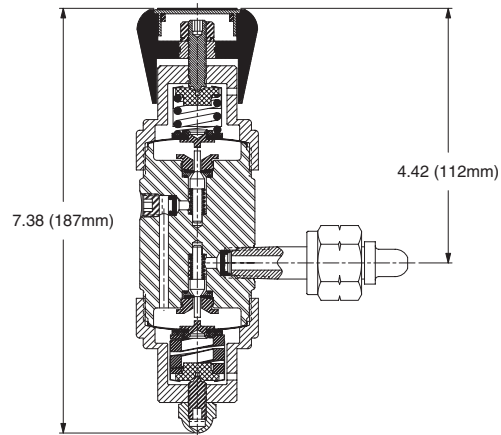
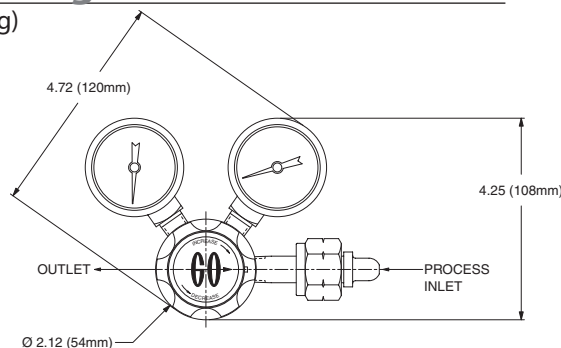
Maximum Temperature & Operating Inlet Pressures

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)

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 or contact the factory.

Outline & Mounting Dimensions

Weight = 3.9 lbs (1.77 kg)



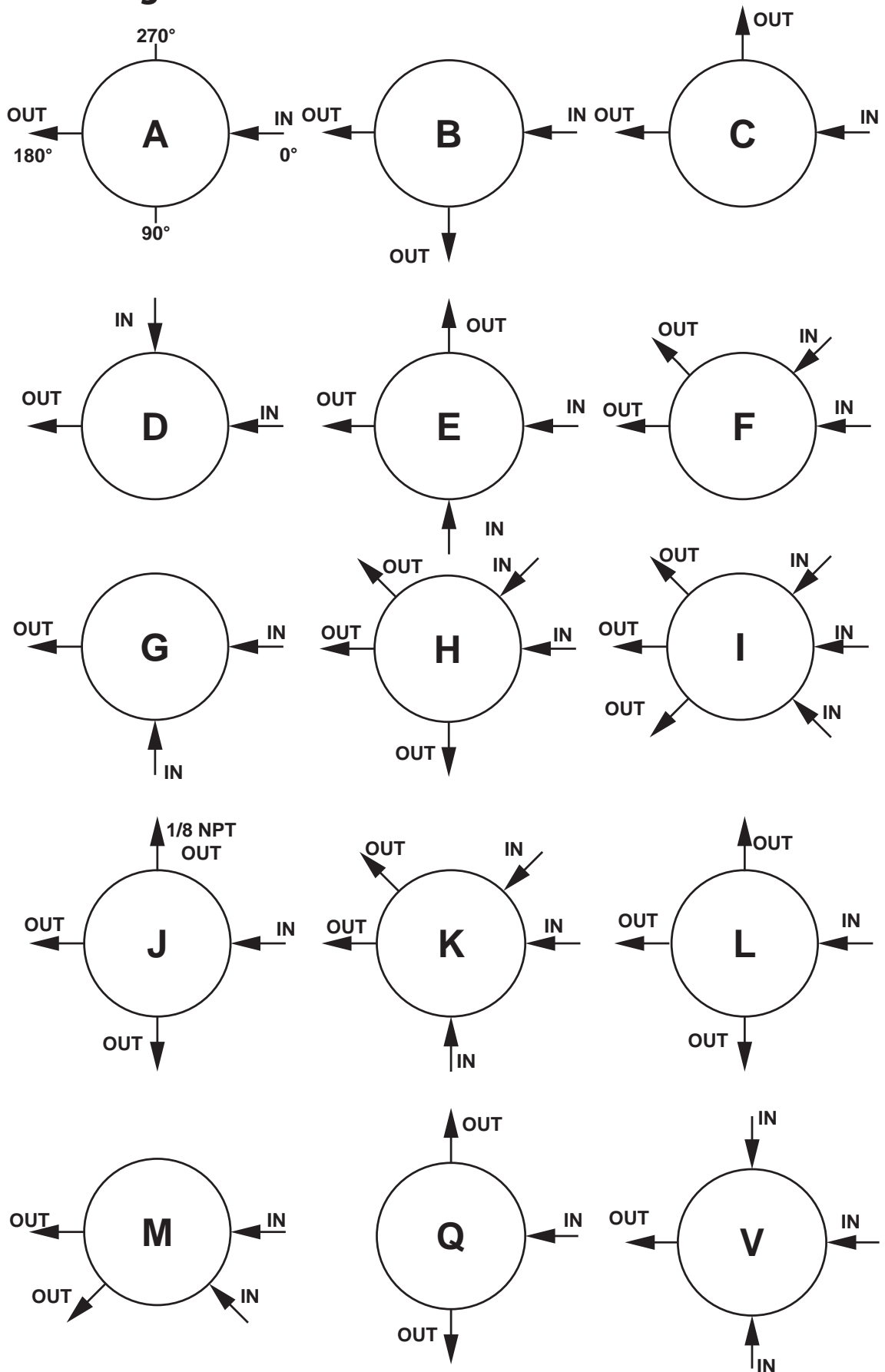
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Kel-F® is a registered trademark of 3M Company.

PEEK™ is a trademark of Victrex PLC.

Porting Configurations for Cylinder Regulators



LOCATION OF PORTS FROM TOP VIEW