

## 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  
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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** **1** **CGA Fitting** **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** ¼" 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, 1<sup>ST</sup> 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, 2<sup>ND</sup> 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

**2<sup>ND</sup> STAGE Cv FLOW**

- 3** 0.06
- 5** 0.2
- C** 0.025
- H** 0.5

**2<sup>ND</sup> STAGE SEAT MATERIAL**

- A** Tefzel®
- H** PCTFE (formerly Kel-F® 81)
- I** High density Teflon®
- Q** PEEK™, low temperature service, plastic knob

**1<sup>ST</sup> STAGE Cv FLOW**

- 3** 0.06
- 5** 0.2

**1<sup>ST</sup> 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, 2<sup>ND</sup> STAGE**

- 1** Standard
- 4** Panel mount

**CAP ASSEMBLY, 1<sup>ST</sup> STAGE**

- 1** Tamper-proof

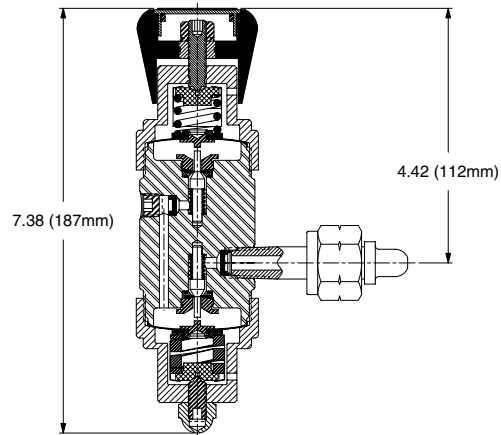
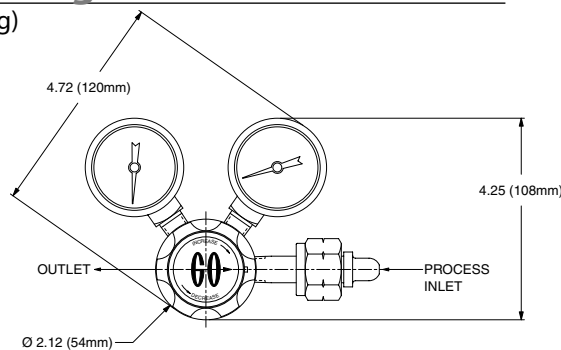
For a full list of options, visit the selection matrix for this product on [www.goreg.com](http://www.goreg.com)

## 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)

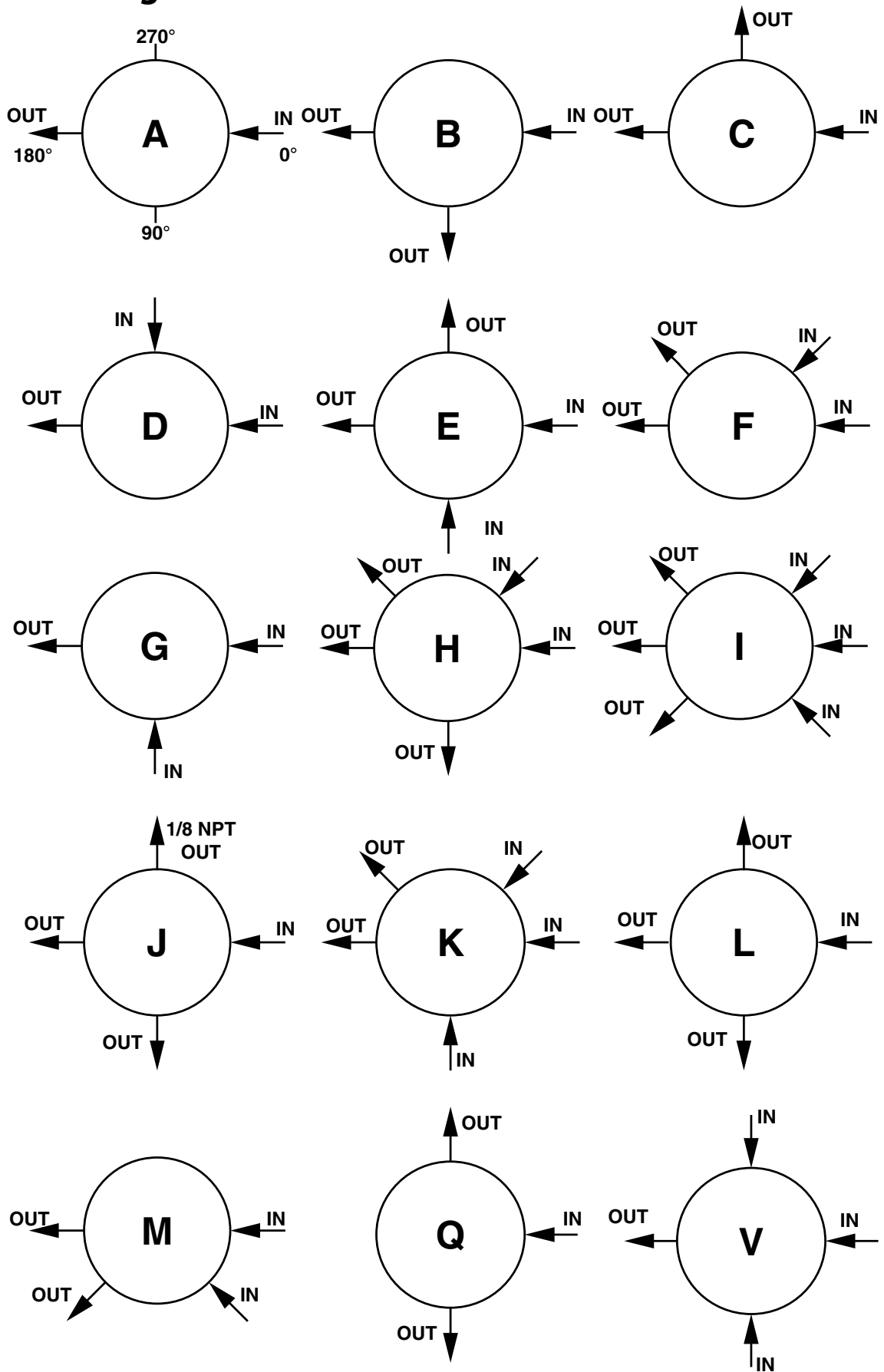
## Outline & Mounting Dimensions

Weight = 3.9 lbs (1.77 kg)



Teflon® and Tefzel® are registered trademarks of the DuPont Company.  
Inconel® is a registered trademark of Special Metals Corporation.  
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



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