

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 PTFE, 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, PTFE 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®, PTFE & Tefzel® in contact with operating media only
- Stainless steel caps & adjusting screws
- Bubble-tight shutoff
- CGA fitting for cylinder connection
- 2" diameter 316 stainless steel gauges
- Maximum inlet pressure: 6000 psig
- Outlet pressure ranges of 0-10 psig, 0-25 psig, 0-50 psig, 0-100 psig, 0-250 psig and 0-500 psig
- PTFE lined INCONEL® diaphragm standard
- 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

- Captured vent
- Shutoff valve
- 3/8" FNPT

pressure regulators

CYL-20 Series

To Order, contact your local Distributor Link below:
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

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** **A**

BODY MATERIAL

- 1** 316L stainless steel, stainless steel diaphragm
- C** **316L stainless steel, INCONEL® diaphragm**

PORT CONFIGURATION

- F** **Standard**
- For more port configurations, see page 19.

PROCESS PORT TYPES (GAUGE PORT TYPE, IF SPECIFIED)

- 1** 1/4" FNPT (1/4" gauge ports)
- 4** 3/8" FNPT (1/4" 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**
- 8** Tefzel® ring/metal backing
- 7** Liquid service

DIAPHRAGM TYPE, 2ND STAGE

- 1** **Standard diaphragm**
- 3** Self-relieving
- 8** Tefzel® ring/metal backing
- 7** Liquid service

OPTIONS

- A** EB33 (oxygen cleaning)
 - B** EB5 cleaning
 - D** Helium leak test
 - E** Pressure test certificate
 - F** Certificate of Conformity
 - G** CMTR
- ### 2ND STAGE Cv FLOW
- 3** **0.06**
 - 5** 0.2
 - C** 0.025
 - H** 0.5
- ### 2ND STAGE SEAT MATERIAL
- A** **Tefzel®**
 - B** CF PTFE
 - H** PCTFE (formerly Kel-F® 81)
 - P** PEEK™, high temperature service (metal knob, standard)
 - Q** PEEK™, low temperature service, plastic knob

1ST STAGE Cv FLOW

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

1ST STAGE SEAT MATERIAL

- A** **Tefzel®**
- B** CF PTFE
- H** PCTFE (formerly Kel-F® 81)
- 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
- 7** Captured vent, stainless steel
- 8** Tamper proof
- J** Captured vent, panel mount, stainless steel

CAP ASSEMBLY, 1ST STAGE

- 1** **Tamper-proof**
- 4** Tamper proof, panel mount
- 7** Tamper proof, captured vent, stainless steel
- J** Tamper proof, captured vent, panel mount, stainless steel

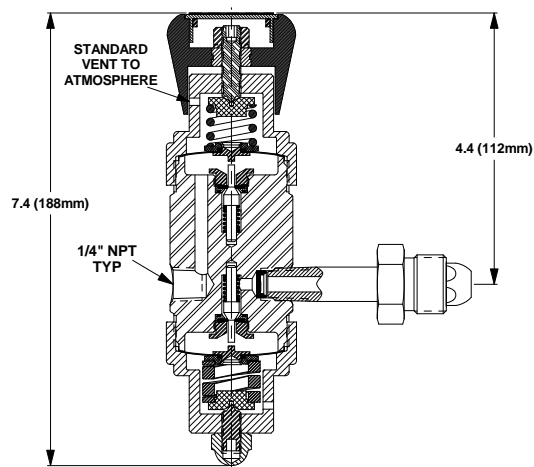
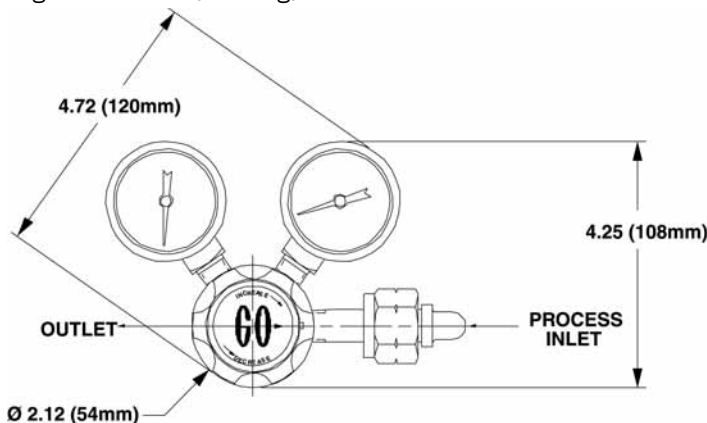
NOTE: Contact the factory for any additional requirements.

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)

Outline & Mounting Dimensions

Weight = 3.9 lbs (1.77 kg)



Tefzel® is a registered trademark 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.