

## DL-56 Series

### Dome-loaded Pressure Regulator

The DL-56 is a compact and robust design which employs a unique “Dual Piston” set up that enables the user to control pressure up to 6000 psig (414 bar) with as little as 40 psig (3 bar) of dome pressure. All of this is accomplished within the smallest envelope the industry has to offer.

The regulator portion of this unit was patterned after the time tested PR-56 Series, which is widely recognized as a benchmark of performance and quality. Offering the utmost in economy and safety, this unit is constructed from brass alloy 360. A carefully engineered all 316L stainless steel piston sensor unit offers good sensitivity and repeatability. An independent test was run and showed that the unit’s ability to repeat to a set point and low operating hysteresis is unsurpassed through out the industry.

Completing this design is the addition of an anodized aluminum (316 stainless steel optional) dome unit. The inlet ring to the dome is freely rotating and captured by a high tensile snap ring. This feature allows easy positioning and alignment of the dome gas line within a customer’s system while maintaining excellent leak integrity.



pressure regulators

### Typical Applications

- Pilot plant
- Off-shore oil and gas rigs
- Pneumatic test benches
- Component testing
- R & D systems
- High pressure booster systems

### Features & Benefits

- Gas or liquid service
- Better than 25 Ra finish in diaphragm cavity
- Stainless steel piston sensor
- 20 micron inlet filter
- Bubble-tight shutoff
- Remote dome-loading

### Technical Data

CONSTRUCTION	Brass (alloy 360)
DOME RATIOS	11 : 1, 20 : 1, 43 : 1, 56 : 1, 76 : 1, 108 : 1, 122 : 1 and 172 : 1
INLET/OUTLET PORTS	¼" FNPT (standard)
OUTLET PRESSURES	up to 6000 psig (414 bar)
Cv COEFFICIENTS	0.05, 0.20

# DL-56 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

Standard items in bold.

**DL56 – 2 A 1 1 A 2 0 1 6 1 A**

### BODY MATERIAL

**2 Brass**

### PORT CONFIGURATIONS

**A Standard**

For more port configurations, see page 9.

### PROCESS PORT TYPES

(GAUGE PORT TYPE, IF SPECIFIED)

- 1 ¼" FNPT (¼" FNPT gauge ports)**
- 4 ¾" FNPT (¼" FNPT gauge ports)**

### SURFACE FINISH OF DIAPHRAGM CAVITY

- 1 < 25 Ra**
- 5 < 25 Ra with 10-32 mounting holes**

### SEAT MATERIAL

- A Tefzel®**
- H PCTFE (formerly Kel-F® 81)**
- Q PEEK™**

### OPTIONS

- A** EB33 (oxygen cleaning)
- B** EB5 cleaning
- D** Helium leak test
- E** Pressure test certificate
- F** Certificate of Conformity
- G** CMTR

### DOME STYLE

- 1 Standard, aluminum**
- 2 Captured vent, aluminum**
- 3 Stainless steel**
- 4 Captured vent, stainless steel**

### PISTON MATERIAL

- 1 Stainless steel**

### PISTON TYPE

- 1 Non-self-relieving, Viton® cavity O-ring**
- 2 Non-self-relieving, PTFE cavity O-ring**
- 3 Self-relieving, Viton® cavity O-ring**
- 4 Self-relieving, PTFE cavity O-ring**

### DOME RATIO

- 0 11 : 1**
- 1 43 : 1**
- 2 56 : 1**
- 3 76 : 1**
- 4 108 : 1**
- 5 122 : 1**
- 6 172 : 1**
- 7 20 : 1**

### FLOW COEFFICIENT (Cv)

- 2 0.05**
- 5 0.2**

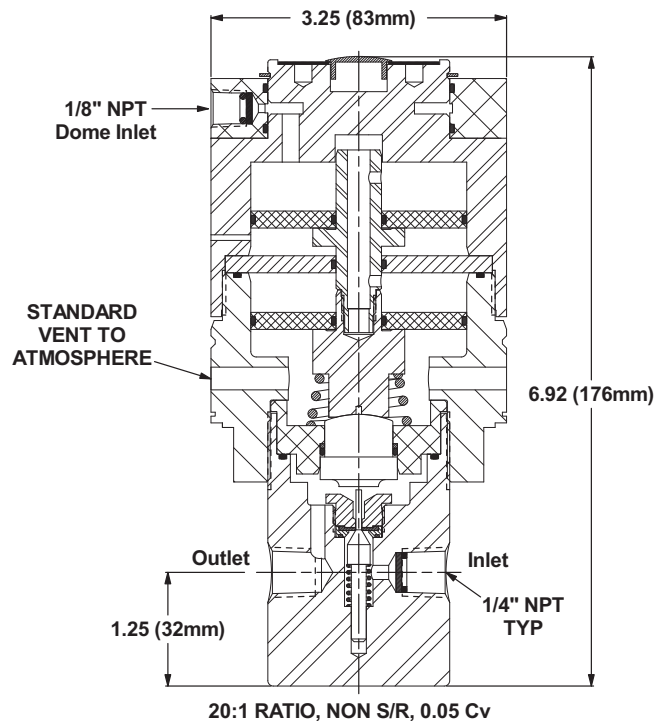
NOTE: Contact the factory for any additional requirements.

## Maximum Temperature & Operating Inlet Pressures

SEAT MATERIAL	MAXIMUM TEMPERATURE	@	MAXIMUM OPERATING INLET PRESSURE
Tefzel®	150° F (66° C)	@	3600 psig (248 bar)
PCTFE (formerly Kel-F®) 81	175° F (80° C)	@	6000 psig (414 bar)
PEEK™	175° F (80° C)	@	6000 psig (414 bar)

## Outline and Mounting Dimensions

Weight = 5.4 lbs (2.45kg)



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.  
 Viton® is a registered trademark of DuPont Dow Elastomers.