GO REGULATOR

DL-56

Dome Loaded Pressure Regulator

The DL-56 is a compact and robust design which employs a unique “Dual Piston” set up that enables the users to control pressures up to 6,000 psig with as little as 40 psig 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.

Features & Specifications

- Gas or liquid service
- Brass (alloy 360) construction
- Better than 25 Ra finish in diaphragm cavity
- Stainless steel piston sensor
- 20 micron inlet filter
- Bubble tight shutoff
- Dome ratios 11:1, 20:1, 43:1, 56:1, 76:1, 108:1, 122:1 and 172:1
- C_V flow coefficients 0.05, 0.20
- Inlet/outlet ports 1/4” FNPT (standard)
- Remote dome loading
- Outlet pressures up to 6000 psig

Applications

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

405 Centura Court
PO Box 4866
Spartanburgn,SC 29303
tel 864.574.7966
fax 864.587.5608
www.goreg.com
sales@goreg.com

DL-56

Dome Loaded Pressure Regulator

How to Order

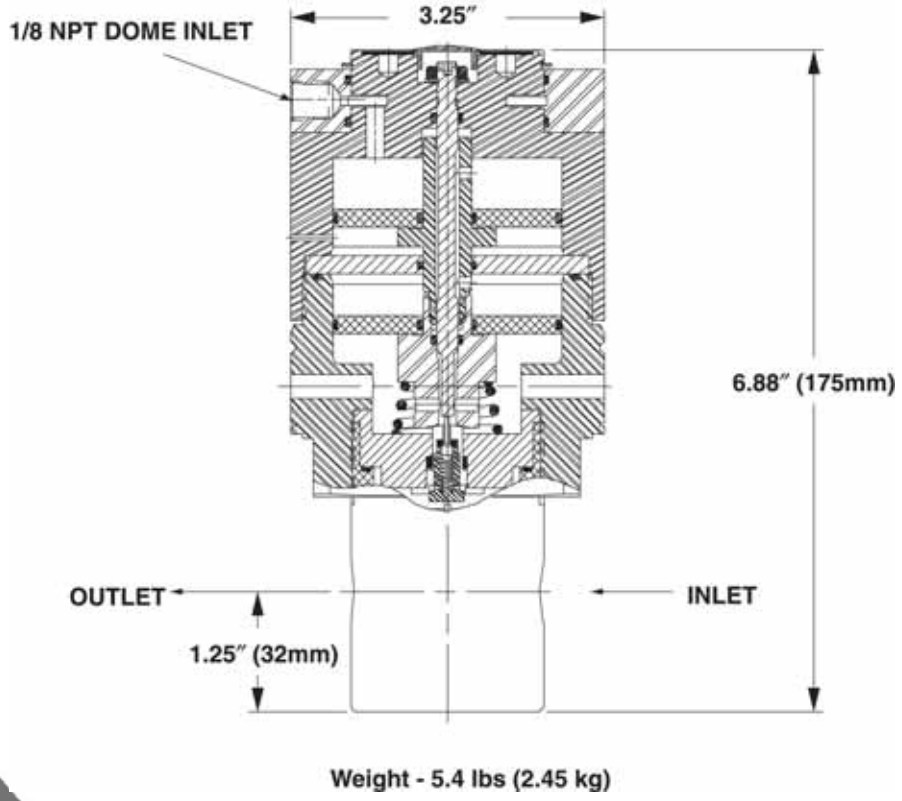
See page 3 for standard configurations. For additional configurations, consult factory.
See page 4 for port locations.

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	175° F (80° C)	@	6000 psig (41.37 MPa)
PEEL	175° F (80° C)	@	6000 psig (41.37 MPa)

Tefzel® and Teflon® are registered trademarks of Dupont.

Outline and Mounting Dimensions



Weight - 5.4 lbs (2.45 kg)

For flow curve charts, go to www.goreg.com/catalog/pr/dome/dl56/dl56_flow.htm.

DL-56 Series - Pressure Reducing Regulator

Material of Body

2	Brass

Port Configuration (see page 13)

STANDARD BODY "A" (ONE INLET PORT AND ONE OUTLET PORT)

A	

Process port types (gauge port type, if specified)

1	1/4" FNPT (1/4" FNPT Gauge Ports)
4	3/8" FNPT (1/4" FNPT Gauge Ports)
7	AN 10050-4 (1/4" FNPT Gauge Ports)
8	SAE J514 (1/4" FNPT Gauge Ports)
9	M/S 33649 (1/4" FNPT Gauge Ports)
F	1/4" Aminco (1/4" FNPT Gauge Ports)

Surface Finish of Diaphragm Cavity

1	<25 Ra
5	<25 Ra with 10-32 Mounting Holes

Seat Material

A	Tefzel
C	Polyimide
H	PCTFE (formerly Kel-F 81)
I	High Density Teflon
Q	PEEK

Flow Coefficient (Cv)

2	0.05
5	0.2

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

Piston Type

1	Non Self Relieving / Viton Cavity O-Ring
2	Non Self Relieving / Teflon Cavity O-Ring
3	Self Relieving / Viton Cavity O-Ring
4	Self Relieving / Teflon Cavity O-Ring

Piston Material

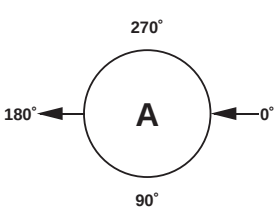
1	Stainless Steel

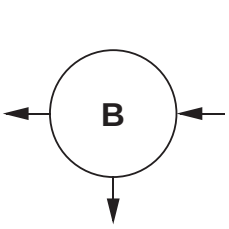
Dome Material

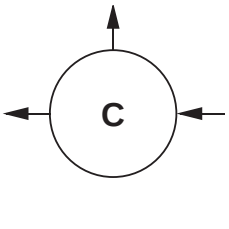
1	Standard, Aluminum
2	Captured Vent, Aluminum
3	S.S.
4	Captured Vent, S.S.

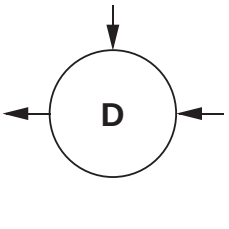
D L 5 6 -									
	Material	Port Config.	Port Style	Cavity Finish	Seat Material	Flow (Cv)	Dome Ratio	Piston Type	Piston Material	Dome Material

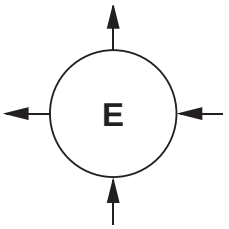
SINGLE STAGE
PRESSURE REDUCING & BACK PRESSURE
PORTING CONFIGURATIONS

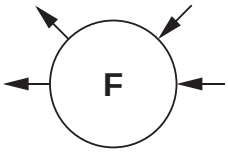


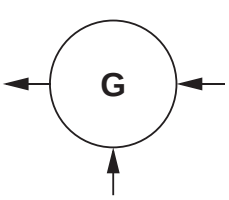


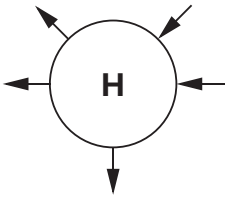


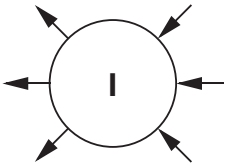


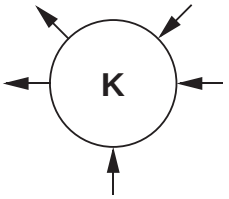


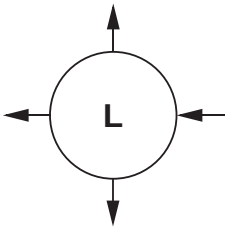


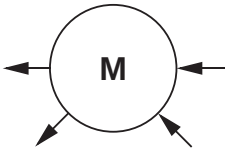


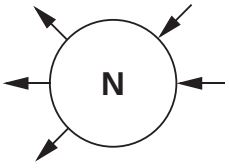


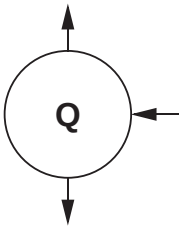


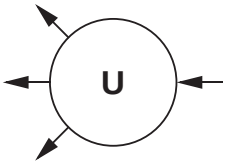


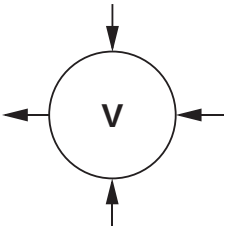


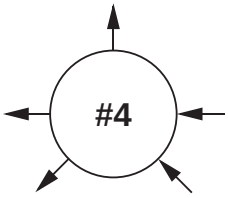












ARROW POINTING TOWARD BODY IS INLET
ARROW POINTING AWAY FROM BODY IS OUTLET