

DL-50 Series Dome Loaded High Pressure Regulators



Responding to the needs of the industry for a simple, safe and effective way to remotely load high pressure regulators, GO Inc. designed and developed a line of low profile dome loading units.

This compact and robust design employs a unique "Dual Piston" set up which enables the users to control pressures up to 6,000 psig with as little as 100 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-50 Series, which is widely recognized as a benchmark of performance and quality. Offering the utmost in safety and corrosion prevention, this unit is constructed from 316L stainless steel. A carefully engineered diaphragm sensing unit offers good sensitivity and repeatability.

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.

Typically, the low pressure gas to the dome is controlled by the GO Inc. PR-11 (optional) with a range of 0-250 psig and self-relieving option.

- Gas or liquid service
- 316L stainless steel construction
- Better than 25 Ra finish in diaphragm cavity
- 20 micron inlet filter
- Bubble tight shutoff
- Dome ratios are 11.5:1 and 20:1
- Proof pressure is 2 times maximum working pressure
- Burst pressure is 4 times maximum working pressure
- Weight: 5.1 lbs (2.31 kg)
- Mounting style is in line or panel (see Outline and mounting dimensions)

Maximum Temperature & Operating Inlet Pressures

Nylon Diaphragm Backing

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

Teflon® Diaphragm Backing

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	175° F (80° C)	@	6000 psig (41.37 MPa)
Polyimide	350° F (177° C)	@	6000 psig (41.37 MPa)
PEEK	350° F (177° C)	@	6000 psig (41.37 MPa)