

GO REGULATOR

Dome Loaded Pressure Regulators

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pressure regulators

GO Regulator

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www.goreg.com • sales@goreg.com

GO REGULATOR

DL-50 Series

Dome-loaded Pressure Regulator

The DL-50 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 100 psig(7 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-50 Series, which is widely recognized as a benchmark of performance and quality. Offering the utmost in economy and safety, this unit is constructed from 316L stainless steel. A carefully engineered diaphragm/piston sensor unit offers good sensitivity and repeatability.

Completing this design is the addition (steel optional) dome unit. The inlet captured by a high tensile snap ring, alignment of the dome gas line within excellent leak integrity.



of an anodized aluminum (316 stainless steel optional) dome unit. The inlet captured by a high tensile snap ring, alignment of the dome gas line within excellent leak integrity.

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
- 20 micron inlet filter
- Bubble-tight shutoff
- Diaphragm type sensing
- Remote dome-loading

Technical Data

CONSTRUCTION	316L stainless steel construction (brass and Monel® optional)
DOME RATIOS	11.5 : 1, 20 : 1
INLET/OUTLET PORTS	¼" FNPT (standard)
OUTLET PRESSURE	up to 2000 psig (138 bar)
Cv COEFFICIENTS	0.025, 0.06, 0.2

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pressure regulators

DL-50 Series

How to Order

Standard items in bold.

DL50 - 1 A 1 1 C 3 1 1 6 1

BODY MATERIAL

- 1 316L stainless steel**
- 2 Brass
- 4 Monel®

PORT CONFIGURATIONS

A Standard

For more port configurations, see page 9.

PROCESS PORT TYPES

(GAUGE PORT TYPE, IF SPECIFIED)

- 1 1/4" FNPT (1/4" FNPT gauge ports)**
- 2 1/4" tube stub, 2" long (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)
- K 1/4" sch 40 pipe stub, 4" long (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™

NOTE: The choices above represent an abbreviated list of the more commonly ordered options. For a complete listing of all available options, please see the Selection Wizard on the GO website at www.goreg.com or contact the factory.

DOME STYLE

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

DIAPHRAGM FACING/BACKING MATERIAL

	Facing	Backing	O-rings	Actuator
1	St. steel	Nylon	Viton®	St. steel
2	—	Nylon	Teflon®	St. steel
3	Polyimide	Nylon	Viton®	St. steel
4	St. steel	Nylon	Teflon®	St. steel
5	—	Nylon	Teflon®	Monel®
6	Polyimide	Nylon	Teflon®	St. steel
7	Inconel®	Nylon	Viton®	Monel®
8	Inconel®	Nylon	Teflon®	Monel®
B	—	Nylon	Viton®	Monel®
H	—	Nylon	Viton®	St. steel
Q	St. steel	Teflon®	Teflon®	St. steel
V	Inconel®	Teflon®	Teflon®	Monel®

DIAPHRAGM TYPE

- 1 Non-self-relieving**
- 3 Self-relieving

DOME RATIO

- 1 11.5 : 1
- 2 20 : 1

FLOW COEFFICIENT (CV)

- 3 0.06**
- 5 0.2
- C 0.025

Maximum Temperature & Operating Inlet Pressures

Nylon Diaphragm Backing

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

Teflon® Diaphragm Backing

SEAT MATERIAL	MAXIMUM TEMPERATURE	@	MAXIMUM OPERATING INLET PRESSURE
Tefzel®	150° F (66° C)	@	3600 psig (248 bar)
High density Teflon®	150° F (66° C)	@	3600 psig (248 bar)
PCTFE (formerly Kel-F®) 81	175° F (80° C)	@	6000 psig (414 bar)
Polyimide	350° F (177° C)	@	6000 psig (414 bar)
PEEK™	350° F (177° C)	@	6000 psig (414 bar)

Monel® is a registered trademark of Special Metals Corporation.

Teflon® and Tefzel® are registered trademarks of the DuPont Company.

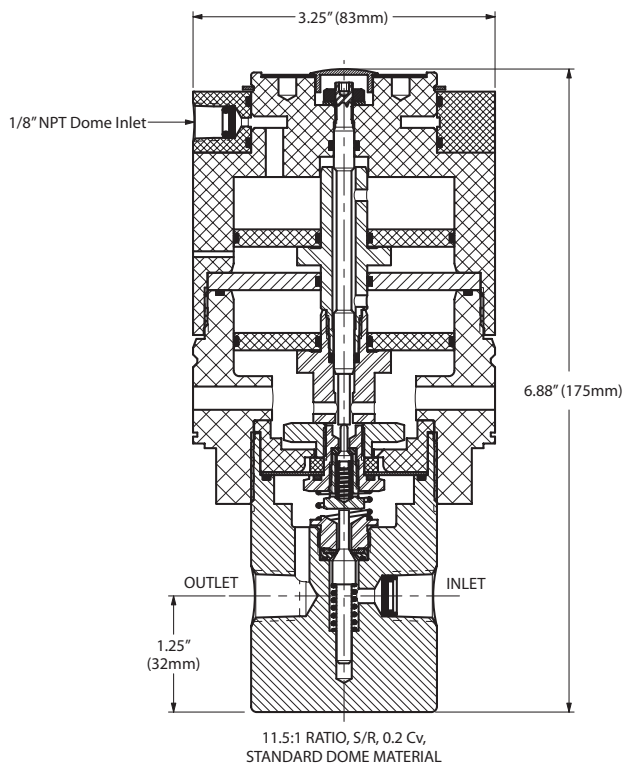
Kel-F® is a registered trademark of 3M Company.

PEEK™ is a trademark of Victrex PLC.

Viton® is a registered trademark of DuPont Dow Elastomers.

Outline and Mounting Dimensions

Weight = 5.1 lbs (2.31kg)



GO REGULATOR

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 and alloy 316L stainless steel piston sensor 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 throughout the industry.

Completing this design is the addition of an anodized aluminum (316 stainless steel optional) dome unit. The inlet is captured by a high tensile snap ring. alignment of the dome gas line within excellent leak integrity.



of an anodized aluminum (316 stainless steel optional) dome unit. The inlet is captured by a high tensile snap ring. This feature allows easy positioning and a customer's system while maintaining

of an anodized aluminum (316 stainless steel optional) dome unit. The inlet is captured by a high tensile snap ring. This feature allows easy positioning and a customer's system while maintaining

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

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pressure regulators

DL-56 Series

How to Order

Standard items in bold.

DL56 - 2 A 1 1 A 2 0 1 1 1

BODY MATERIAL

2 Brass

PORT CONFIGURATIONS

A Standard

For more port configurations, see page 9.

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™**

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, Teflon® cavity o-ring**
- 3 Self-relieving, Viton® cavity o-ring**
- 4 Self-relieving, Teflon® 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**

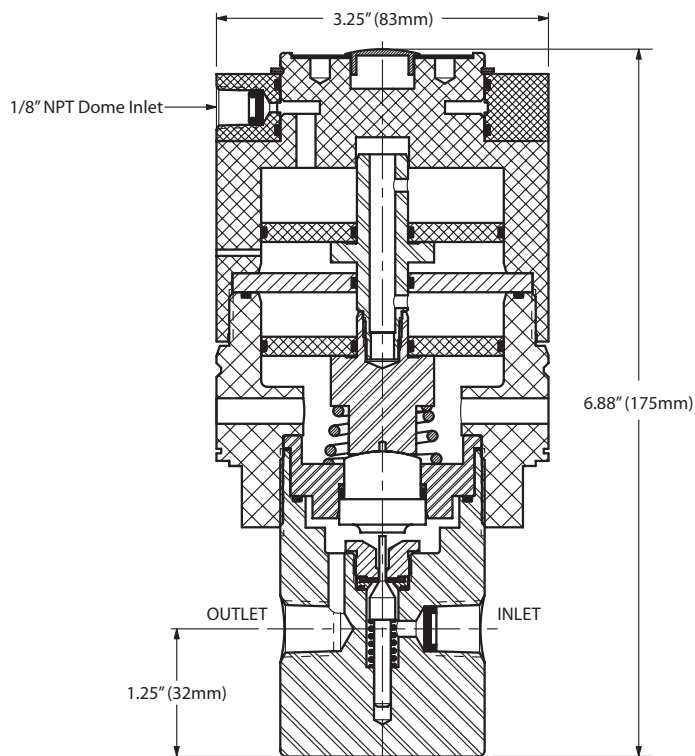
NOTE: The choices above represent an abbreviated list of the more commonly ordered options. For a complete listing of all available options, please see the Selection Wizard on the GO website at www.goreg.com or contact the factory.

Maximum Temperature & Operating Inlet Pressures

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



Teflon® and Tefzel® are registered trademarks 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.

DL-57 Series

Dome-loaded Pressure Regulator

The DL-57 is a compact and robust design which employs a unique “Dual Piston” set up that enables the user to control pressure up to 10,000 psig (689 bar) with as little as 58 psig(4 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 Series, which is widely recognized quality. Offering the utmost in safety constructed from 316L stainless steel. unit offers good sensitivity and run and showed that the unit’s ability hysteresis is unsurpassed through out

Completing this design is the addition steel optional) dome unit. The inlet captured by a high tensile snap ring. alignment of the dome gas line within excellent leak integrity.



patterned after the time tested PR-57 as a benchmark of performance and and corrosion prevention, this unit is A carefully engineered piston sensor repeatability. An independent test was to repeat to a set point and low operating the industry.

of an anodized aluminum (316 stainless ring to the dome is freely rotating and This feature allows easy positioning and a customer’s system while maintaining

Typical Applications

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

Features & Specifications

- 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	316L stainless steel construction (Monel® optional)
DOMES 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 10,000 psig (689 bar)
Cv COEFFICIENTS	0.05, 0.20

GO Regulator

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pressure regulators

DL-57 Series

How to Order

Standard items in bold.

DL57 - 1 A 1 1 Q 2 3 1 1 1

BODY MATERIAL

- 1 316L stainless steel**
- 4 Monel®

PORT CONFIGURATIONS

A Standard

For more port configurations, see page 9.

PROCESS PORT TYPES

(GAUGE PORT TYPE, IF SPECIFIED)

- 1 1/4" FNPT (1/4" FNPT gauge ports)**
- 2 1/4" tube stub, 2" long (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)
- K 1/4" sch 40 pipe stub, 4" long (1/4" FNPT gauge ports)

SURFACE FINISH OF DIAPHRAGM CAVITY

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

SEAT MATERIAL

- C Polyimide
- Q PEEK™

DOMESTYLE

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

PISTON MATERIAL

- 1 Stainless steel
- 4 Monel®

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

DOMERATIO

- 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

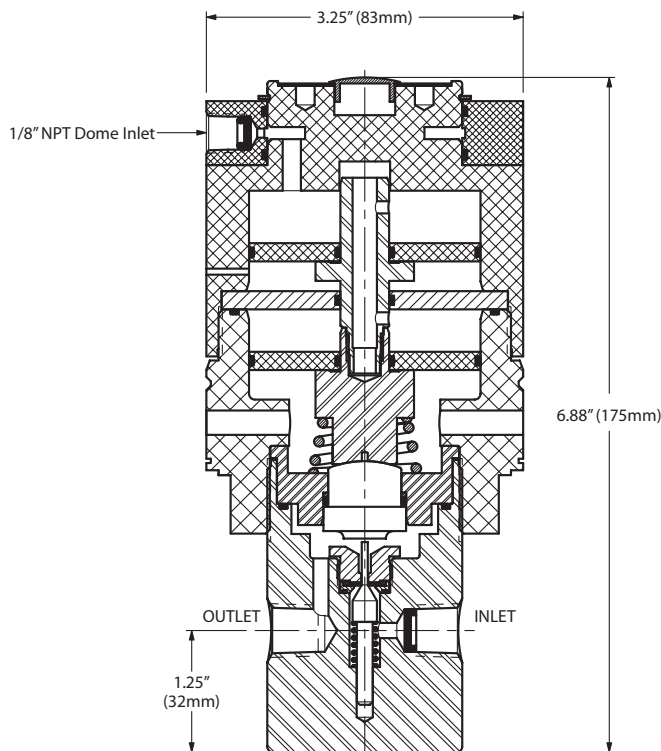
NOTE: The choices above represent an abbreviated list of the more commonly ordered options. For a complete listing of all available options, please see the Selection Wizard on the GO website at www.gore.com or contact the factory.

Maximum Temperature & Operating Inlet Pressures

SEAT MATERIAL	MAXIMUM TEMPERATURE	@	MAXIMUM OPERATING INLET PRESSURE
Polyimide	150° F (66° C)	@	10,000 psig (689 bar)
PEEK™	150° F (66° C)	@	10,000 psig (689 bar)

Outline and Mounting Dimensions

Weight = 5.4 lbs (2.45kg)



20:1 RATIO, NON S/R, 0.05 Cv, STANDARD DOME MATERIAL

Monel® is a registered trademark of Special Metals Corporation.
 PEEK™ is a trademark of Victrex PLC.
 Viton® is a registered trademark of DuPont Dow Elastomers.
 Teflon® is a registered trademark of the DuPont Company.

DL-59 Series

Dome-loaded Pressure Regulator

Responding to the needs of the industry for a simple, safe and effective way to remotely load high pressure regulators, GO Regulator 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 user to control pressure up to 4000 psig (276 bar) with as little as 36 psig (2 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-59 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 piston sensor unit offers good sensitivity and repeatability. This is coupled with the large Cv of the PR-59 of 1.20.

Completing this design is the addition of an optional dome unit. The inlet ring to the a high tensile snap ring. This feature allows dome gas line within a customer's system



anodized aluminum (316 stainless steel dome is freely rotating and captured by easy positioning and alignment of the while maintaining excellent leak integrity.

Typical Applications

- Pilot plant
- Pneumatic high flow test benches
- Bulk gas delivery
- R & D systems

Technical Data

CONSTRUCTION	316L stainless steel construction (brass and Monel® optional)
DOMES RATIOS	11:1, 20:1, 43:1, 56:1, 76:1, 108:1, 122:1, and 172:1
OUTLET PRESSURES	up to 4000 psig (276 bar)
Cv COEFFICIENTS	1.2 (standard)

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

pressure regulators

GO Regulator

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 www.goreg.com • sales@goreg.com

DL-59 Series

How to Order

Standard items in bold.

DL59 - 1 A A 1 H 9 0 1 5 1

BODY MATERIAL

- 1** 316L stainless steel
- 2 Brass
- 4 Monel®

PORT CONFIGURATIONS

A Standard

For more port configurations, see page 9.

PROCESS PORT TYPES

(GAUGE PORT TYPE, IF SPECIFIED)

- 5 ½" FNPT (¼" FNPT gauge ports)
- A ¾" FNPT (¼" FNPT gauge ports)
- K ¾" ISO 7 parallel (¼" FNPT gauge ports)

SURFACE FINISH OF DIAPHRAGM CAVITY

- 1** < 25 Ra

SEAT MATERIAL

- H** PCTFE (formerly Kel-F® 81)
- I Teflon®

DOME STYLE

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

PISTON MATERIAL

- 5 Stainless steel
- B Monel®

PISTON TYPE

- 1 Non-self-relieving
- 3 Self-relieving

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)

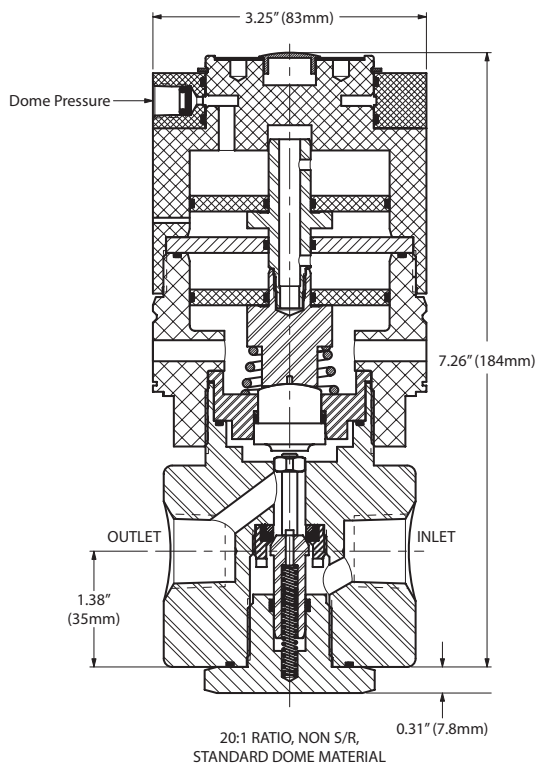
- 9** 1.2

Maximum Temperature & Operating Inlet Pressures

SEAT MATERIAL	MAXIMUM TEMPERATURE	@	MAXIMUM OPERATING INLET PRESSURE
PCTFE (formerly Kel-F®) 81	175° F (80° C)	@	4000 psig (276 bar)
Teflon®	150° F (66° C)	@	1000 psig (69 bar)

Outline and Mounting Dimensions

Weight = 8.4 lbs (3.8kg)

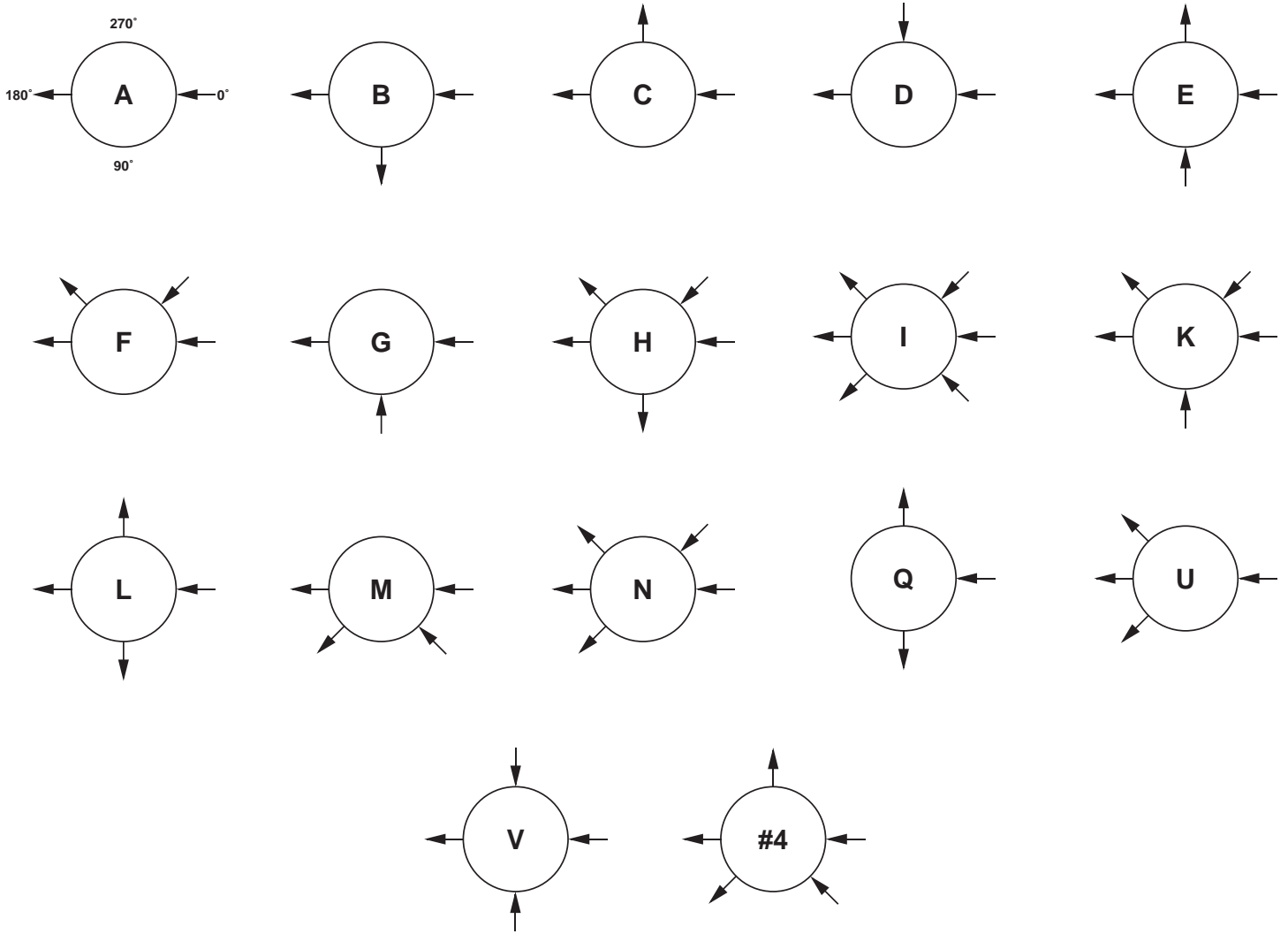


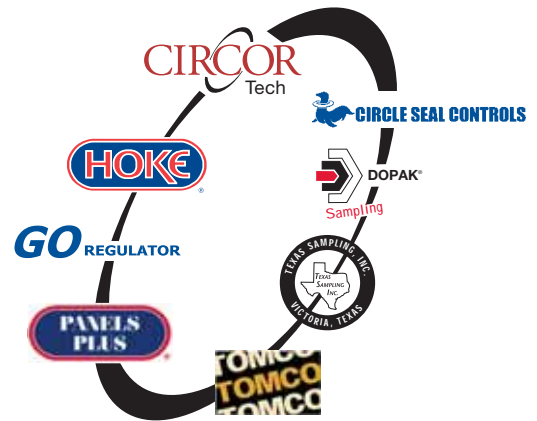
Monel® is a registered trademark of Special Metals Corporation.

Kel-F® is a registered trademark of 3M Company.

Teflon® is a registered trademark of the DuPont Company.

Porting Configurations for Dome-loaded Pressure Regulators





Hoke • GO Regulator • Tomco • CIRCOR Tech

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CIRCOR Instrumentation Technologies

CIRCOR Instrumentation Technologies (CIT) is a product group of CIRCOR International (NYSE: CIR), specializing in fluid process control solutions with orifice sizes typically up to 1". Our main product lines include ball, needle, packless, diaphragm, solenoid, and metering valves, pressure regulators, quick couplers, Gyrolok® compression tube fittings, and fully integrated sampling systems.

CIT markets primarily to the petrochemical, refining, power generation, food and beverage, semiconductor, and pharmaceutical industries, and to OEM's. CIT separates itself from the competition by offering highly engineered components manufactured to exacting standards and a variety of custom options.