

GO REGULATOR, INC.

A division of CIRCOR International, Inc.



MV-1 Series Miniature Vaporizing Pressure Regulators

The MV-1 Series Miniature Vaporizing Regulator is the smallest envelope the industry has to offer. Weighing in at a scant 0.86 pounds, the MV-1 is designed to supply heat to samples entering instrumentation systems where space is at a premium and quality cannot be compromised. It can be used to preheat liquids, to prevent condensation of gases or to vaporize liquids prior to gas analysis.

The pressure control section of the MV-1 is patterned after the time tested design of our CPR-1 and provides the same excellent outlet pressure stability. The heating plate utilizes GO Regulator's unique *Spiro-Wind* heating element and incorporates an optional *Thermal Cutout Device* (TCO). This device prevents any exposed surface of the unit from exceeding 200° C under normal or fault conditions and is exclusive to GO Regulator's line of electrically heated vaporizing regulators. Offered in both 12 VDC and 24 VDC, the MV-1 Series offers the utmost in unequalled system safety and performance.

Features & Specifications

- 316L stainless steel construction
- Electro polished body with better than 25 Ra finish in diaphragm cavity
- Operating temperatures up to 380° F (193° C)
- Bubble tight shutoff
- Outlet pressure ranges are 0–10, 0–25, 0–50, 0–100, 0–250 and 0–500 psig
- Unique *Spiro-Wind* heating element provides exceptionally even heating
- Available in 12 VDC and 24 VDC
- Heating capacity ranges are 40 & 100 watts
- Optional TCO heating cartridge and proportional controller

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MV-1 Series

Miniature Vaporizing Pressure Regulators

How to Order

See page 3 for standard configurations. Consult factory for additional configurations. Port locations, see page 4.

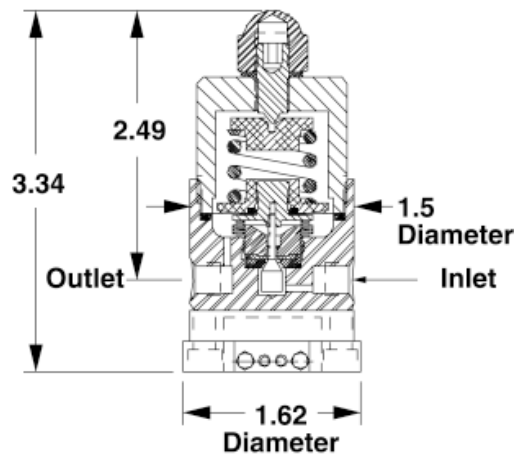
Maximum Temperature & Operating Inlet Pressures

Seat Material	Maximum Temperature	@	Maximum Operating Inlet Pressure
Tefzel®	Up to 175° F (Up to 80° C)	@	3600 psig (24.82 MPa)
	176° F to 300° F (80° C to 148° C)	@	1000 psig (6.90 MPa)
	301° F to 380° F (148° C to 193° C)	@	400 psig (2.76 MPa)
High Density Teflon®	Up to 175° F (Up to 80° C)	@	3600 psig (24.82 MPa)
	176° F to 300° F (80° C to 148° C)	@	1000 psig (6.90 MPa)
	301° F to 380° F (148° C to 193° C)	@	400 psig (2.76 MPa)
PCTFE (formerly Kel-F 81)	Up to 380° F (up to 193° C)	@	3600 psig (24.82 MPa)
Polyimide	Up to 380° F (up to 193° C)	@	3600 psig (24.82 MPa)
PEEK	Up to 380° F (up to 193° C)	@	3600 psig (24.82 MPa)

Tefzel® and Teflon® are registered trademarks of Dupont.

Outline and Mounting Dimensions

Panel mount option requires
1.390 (35.3mm) minimum
diameter panel cut out

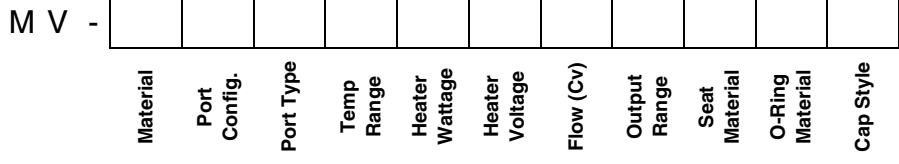


Weight = 0.86 lbs

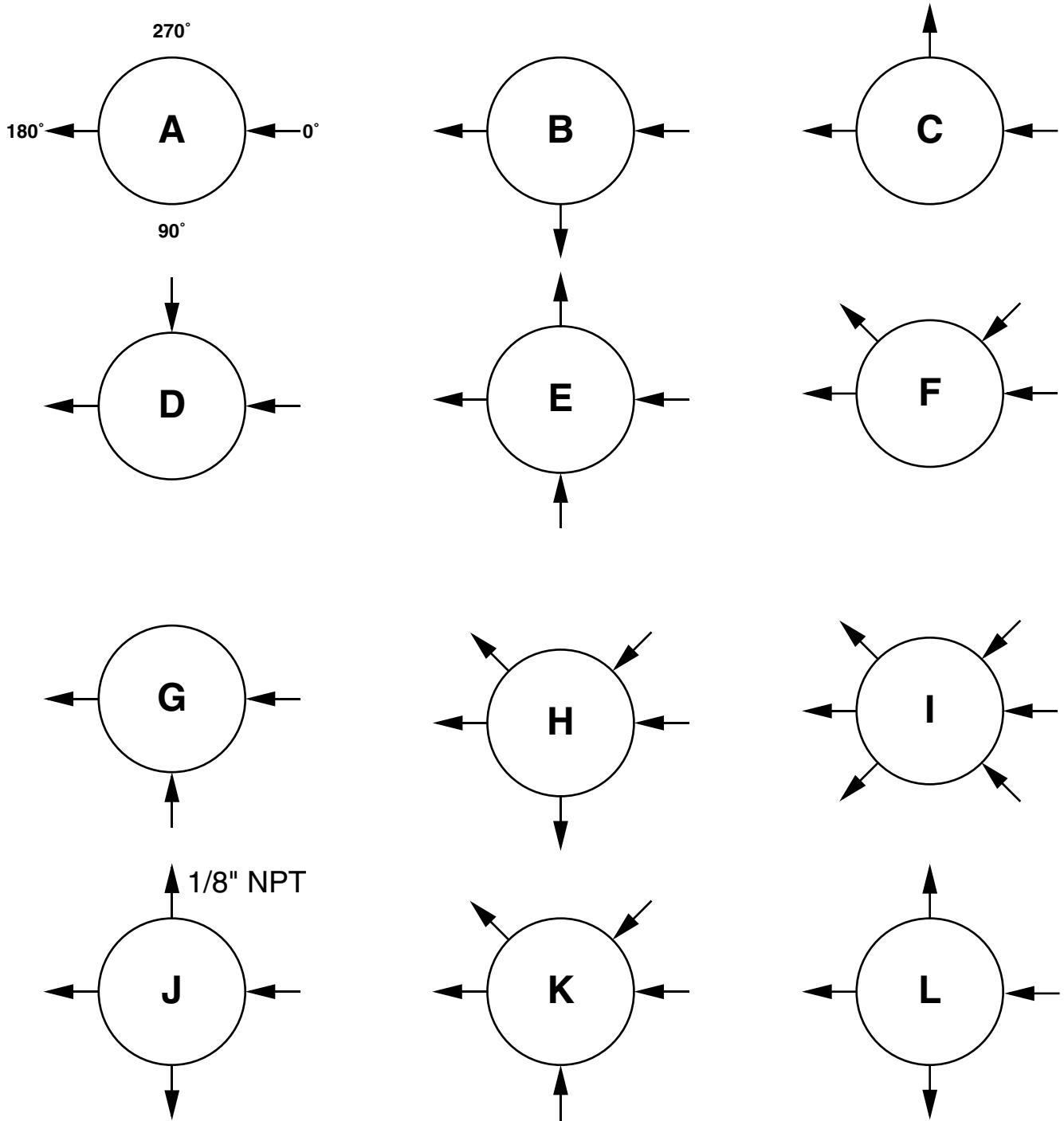
Electrical lead
length is 6" ±.25

MV Miniature Vaporizing Regulator

Material of Body	
1	SS 316L
4	Monel
Port Configuration (page 35) STANDARD BODY "A" (ONE INLET PORT AND ONE OUTLET PORT)	
Port Type	
A	
0	1/8" FNPT (All Ports)
A	1/16" FNPT (All Ports)
B	1/8" FNPT Inlets; 1/16" FNPT Outlets
Temperature Range	
1	55° F - 85° F
2	75° F - 175° F
3	130° F - 300° F
4	260° F - 380° F
Heater Wattage	
1	40W
2	40W with Thermal Cutout
3	100W
4	100W with Thermal Cutout
Heater Voltage	
B	12 VDC
C	24 VDC
Flow Coefficient (Cv)	
3	0.06
C	0.025 (Standard)
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
Seat Material	
A	Tefzel
B	CF Teflon
C	Polyimide
H	PCTFE (formerly Kel-F 81)
Q	PEEK
Cavity O-Ring Material	
D	Viton (Standard)
I	Teflon
Cap Style	
1	Tamper Proof, Standard, S.S.
4	Tamper Proof, Panel Mount, S.S.



PORTING CONFIGURATIONS FOR MV-1



LOCATION OF PORTS FROM TOP VIEW
ARROW POINTING TOWARD BODY IS INLET
ARROW POINTING AWAY FROM BODY IS OUTLET