

PR-5 Series

High Flow Adjustable Pressure Reducing Regulator



The PR-5 Series pressure regulator is designed for service at high flows with good sensitivity and regulation. While the design was originated for gas systems, this valve is perfectly suitable for liquid systems that are compatible with the materials of construction. The PR-5 also performs well with just a few liters per minute of flow.

This series is a variation of the time proven PR-1 Series which has been used for many applications in systems requiring stainless steel construction. The exact package size of the PR-1 has been retained making it convenient for the user to interchange these units if better control at high flow rates is required.

Features & Specifications

- High flow capability in compact size
- Minimum droop with large flow increases
- Bubble-tight shutoff
- Stainless steel cap & adjusting screw
- Materials of construction: stainless steel, Brass, MONEL®, HASTELLOY® C, Brass chrome plated
- 20 micron inlet filter
- Operating temperatures up to +400° F (+204° C)
- Ideal for line regulator applications
- PTFE/Viton diaphragm standard up to 50 psig
- Inlet pressure 300 psig
- Adjustable outlet ranges 0–10, 0–25, 0–50, 0–100, & 0–250 psig
- Cv flow coefficient 0.20

Options

- Panel mount (requires 1 $\frac{3}{8}$ " mounting hole)
- Extra ports
- Pressure gauges
- Captured vent

pressure regulators

How to Order

PR5 –

BODY MATERIAL

- 1 316L stainless steel, stainless steel diaphragm
- 2 Brass, stainless steel diaphragm
- 4 MONEL®, INCONEL® diaphragm
- 6 HASTELLOY® C, INCONEL® diaphragm
- 8 Brass, chrome plated, stainless steel diaphragm
- A Brass, electroless nickel plated, stainless steel diaphragm
- C SS 316L, INCONEL® diaphragm

PORT CONFIGURATION

- A Standard
- For more port configurations, see page 33.

PROCESS PORT TYPES

(GAUGE PORT TYPES, IF SPECIFIED)

- 1 ¼" FNPT (¼" FNPT gauge port)
- 4 ⅜" FNPT (¼" FNPT gauge port)

SURFACE FINISH OF DIAPHRAGM CAVITY

- 1 < 25 Ra, standard

SEAT MATERIAL

- D Viton® (standard)
- J Buna N
- K Kalrez®

FLOW COEFFICIENT (Cv)

- 5 0.2

OUTLET RANGE

- C 0–10 psig
- D 0–25 psig
- E 0–50 psig
- G 0–100 psig
- I 0–250 psig
- R 0–150 psig
- Y 0–15 psig

OPTIONS

- A EB33
- B EB5
- D Helium leak test
- E Pressure test certificate
- F Certificate of Conformity
- G CMTR
- S 70 Micron inlet filter screen for liquid app.

OPTIONAL CAP MATERIAL/FINISH

- 0 Standard materials with options
- 1 Aluminum, chrome-plated (brass body only)
- 2 Aluminum, electroless nickel-plated (brass body only)
- 3 Aluminum, black anodized (brass body only)

CAP ASSEMBLY

- 1 Standard, stainless steel
- 4 Panel mount, stainless steel
- J Captured vent, panel mount, stainless steel
- 7 Captured vent, stainless steel
- 8 Tamper Proof, stainless steel

DIAPHRAGM FACING/BACKING MATERIAL

- 2 PTFE/Viton®
- 1 PTFE/metal backing
- 6 Tefzel® ring/metal backing

DIAPHRAGM TYPE

- 1 Standard diaphragm
- 3 Self-relieving
- 7 Liquid service

NOTE: Contact the factory for any additional requirements.

Maximum Temperature & Operating Inlet Pressures

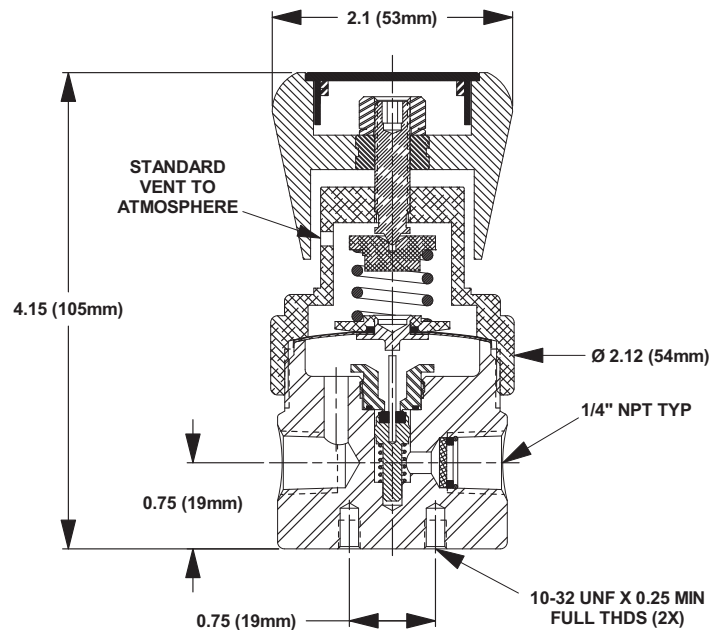
SEAT MATERIAL	MAXIMUM TEMPERATURE*	@	MAXIMUM OPERATING INLET PRESSURE
Viton®	400° F (204° C)	@	300 psig (2.07 MPa)
Buna N	150° F (66° C)	@	300 psig (2.07 MPa)
Kalrez®	400° F (204° C)	@	300 psig (2.07 MPa)

* Temperatures in excess of 175° F (80° C) require a metal knob or the tamper-proof option.

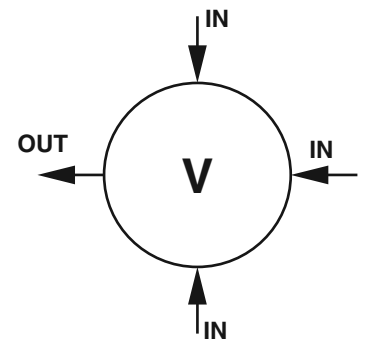
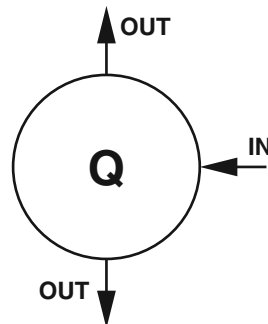
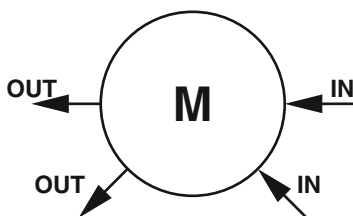
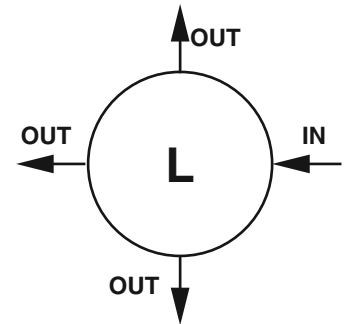
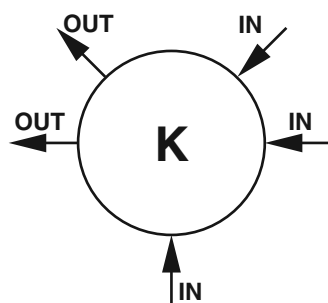
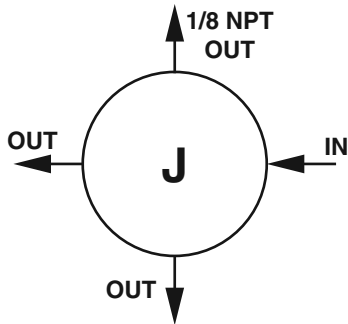
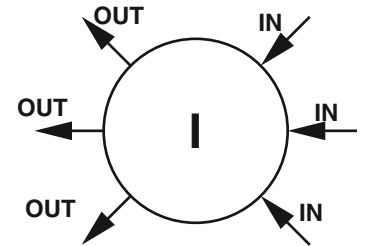
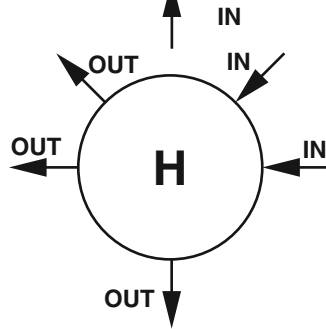
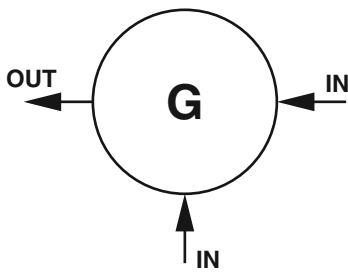
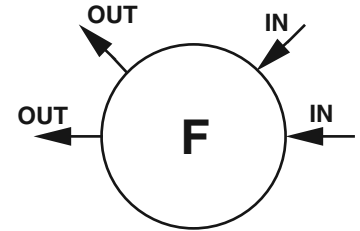
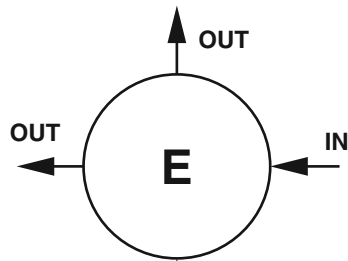
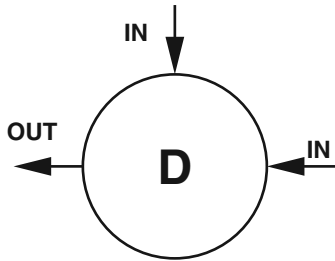
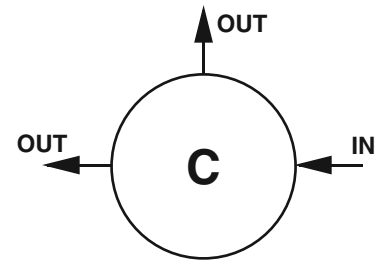
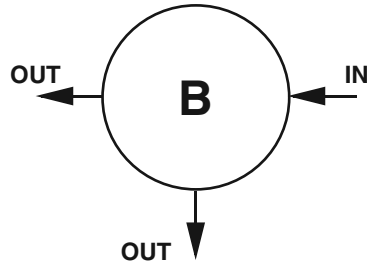
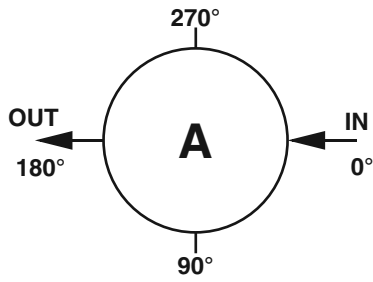
MONEL® is a registered trademark of Special Metals Corporation.
 Kalrez® and Viton® are registered trademarks of DuPont Dow Elastomers.
 HASTELLOY® is a registered trademark of Haynes International, Inc.

Outline and Mounting Dimensions

Weight = 1.9 lbs (0.86 kg)



Port Locations (Back Pressure Regulators)



LOCATION OF PORTS FROM TOP VIEW