

## PR-15 Series

Adjustable Pressure Reducing Regulator



The PR-15 Series is a versatile pressure reducing regulator designed to meet the demands for outlet pressures up to 3000 psig while maintaining superior corrosion resistance in a compact package. This regulator features a piston sensing design which provides the operator with low adjusting torque when setting the outlet pressure and has an optional T-handle for easy adjustment in the field.

The regulator body and lower internals are based on the time proven PR-1 pressure reducing regulator, and is designed for gas applications but can also be used with liquids with the optional 70 micron filter screens.

The optional self-relieving feature provides an additional level of operational ease, as it allows for trapped downstream pressure to be safely vented to atmosphere through the cap.

Many features of the PR-15 make it ideal for a wide range of applications controlling pressures at low to moderate flow rates in gas or liquid service. The 316 stainless steel cap and adjusting screw prevent atmospheric corrosion and maintain appearance.

To prolong regulator life, this unit is equipped with an integral inlet filter, with 1/4" NPT ports, which protects the seat against foreign contamination introduced by the upstream supply.

### Features & Specifications

- Gas or liquid service
- 316L stainless steel, INCONEL®, PTFE, and PEEK® (or optional main seat material choice) only in flow stream
- 316L body with better than 25 Ra cavity surface finish
- Stainless steel cap with SS adjusting screw
- Inlet pressures of up to 6000 psi
- Adjustable outlet pressure ranges of 0–500, 0–750, 0–1000, 0–2000, and 0–3000 psig
- Operating temperatures of –40° F up to +500° F (–40° C up to +260° C)
- 20 micron filters on 1/4 NPT ports
- Bubble-tight shutoff under most conditions
- Cv flow coefficients 0.025, 0.06, 0.20, and 0.50 (0.06 standard)

### Options

- Wetted materials of construction: MONEL®, HASTELLOY®, Titanium and 6MO
- Panel mount (1 3/8" mounting hole)
- SS inlet pressure gauges
- SS outlet pressure gauges
- Base-mounting brackets
- Captured vent
- Self-relieving

pressure regulators

## How to Order

### PR15 –

#### BODY MATERIAL

- 1 316L stainless steel
- 4 MONEL®
- 6 HASTELLOY® C
- 7 Titanium
- B 254 SMO (6MO)
- F Duplex 2205 (DX3)
- D Super Duplex 2507 (D50)

#### PORT CONFIGURATION

- A Standard
- For more port configurations see page 37.

#### PROCESS PORT TYPES

##### (GAUGE PORT TYPES, IF SPECIFIED)

- 1 ¼" FNPT (¼" FNPT gauge ports), standard
- 4 ⅜" FNPT (¼" FNPT gauge ports)
- 5 ½" FNPT (¼" FNPT gauge ports), (2.6" Diameter Body)

#### SURFACE FINISH OF DIAPHRAGM CAVITY

- 1 < 25 Ra, standard

#### SEAT MATERIAL

- A Tefzel®
- B Ceramic Filled PTFE
- H PCTFE
- Q PEEK™

#### OPTIONS

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

#### CAP ASSEMBLY

- 1 Standard, stainless steel
- 2 T-Handle, stainless steel
- 3 T-Handle, Panel Mount, stainless steel
- 4 Panel mount, stainless steel
- 7 Captured vent, stainless steel
- 8 Tamper-proof, stainless steel
- C Metal Knob, Panel Mount, stainless steel
- D Captured Vent, Tamper Proof, stainless steel
- E Tamper-proof, Panel Mount, stainless steel
- G Metal Knob, stainless steel
- J Captured vent, panel mount, stainless steel
- K Captured vent, panel mount, Tamper Proof, stainless steel
- M Metal Knob, Captured Vent, stainless steel

#### PISTON O-RING MATERIAL

- 1 Viton® (FKM) (up to 400°F (204°))
- 6 Kalrez® (FKKM) (up to 500°F (260°))

#### PISTON TYPE

- 1 Non Self-Relieving
- 3 Self-relieving

#### OUTLET RANGE

- J 0–500 psig (0–34.5 bar)
- W 0–750 psig (0–52 bar)
- K 0–1000 psig (0–69 bar)
- L 0–2000 psig (0–138 bar)
- M 0–3000 psig (0–207 bar)

#### FLOW COEFFICIENT (Cv)

- 3 0.06, standard
- 5 0.2
- C 0.025
- H 0.5

NOTE: Contact the factory for any additional requirements.

## Maximum Temperature & Operating Inlet Pressures

SEAT MATERIAL	MAXIMUM TEMPERATURE*	@	MAXIMUM OPERATING INLET PRESSURE
Tefzel®	150° F (66° C)	@	3600 psig (24.82 MPa)
PCTFE	175° F (80° C)	@	6000 psig (41.37 MPa)
PEEK™	500° F (260° C)	@	3600 psig (24.82 MPa)
PEEK™	175° F (80° C)	@	6000 psig (41.37 MPa)
Ceramic Filled PTFE	175° F (80° C)	@	3600 psig (24.82 MPa)

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

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 Tefzel® is a registered trademark of the DuPont Company.  
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 Kel-F® is a registered trademark of 3M Company.  
 PEEK™ is a trademark of Victrex PLC.

## Outline and Mounting Dimensions

Panel mount option requires 1.390 (35.3mm) minimum diameter panel cut out. 0.150 maximum panel thickness.

Weight = 2.2 lbs (1.02 kg)

