

R-7000 Series Precision Pressure Regulator



FEATURES

- Modular Dovetail Design
- Excellent Repeatability
- Miniature Size
- Non-Rising Stem
- Automatic Relief
- Low Cost

The **Modular Subminiature Precision Pressure Regulator** is designed for precise regulation of pressure. It is ideal for instrumentation and industrial applications. The pressure regulator has a 20 turn adjustment range from 0.5 to 100 PSI. Maximum supply is 150 PSI. Four adjustment ranges are available: 10 PSI, 30 PSI, 60 PSI and 100 PSI. The standard device is furnished with an adjustment knob and is also available with an extended 1/4" shaft to accept an adjustment knob or furnished with an exposed screwdriver adjustment by which the pressure range can be adjusted.

The **Unique Modular Dovetail** design allows the regulator to be used individually or assembled into a modular combination of pneumatic components.

Port Connections Available

- Threaded Port
- Connector
- Union
- Gauge Port
- Blank Slides
- Push-in Fitting

Patent numbers 5,217,260 & 5,261,447



Unique Modular Dovetail Design

SPECIFICATIONS

Adjustment Range: 0.5 to 100 PSI

Maximum Supply: 150 PSI

Operating Temperature: 40° to 150° F (4° to 66°C)

Recommended Filtration: 5 Micron

Effect of Supply Variation: Within .1 PSI output change with 10 PSI supply change

Flow Regulator: Maximum flow 5 SCFM with 100 PSI supply

Repeatability: Within .1 PSI when the supply pressure is turned off and on

Drift: At 75°F. 0.1 PSI total drift

Supply Consumption: Within 400 cc/m at 100 PSI supply, with a deadend output

MATERIALS

Housing: Glass filled Celcon

Adjustment Screw: Carbon Filled Nylon

Retaining Ring: Carbon Spring Steel

Stem Assembly: Celcon

Diaphragm: Buna N, Polyurethane

Diaphragm Assembly: Celcon

Springs: Stainless Steel

O-Rings: Buna N, Silicone Nitrile

Valve Seat: PVC

Filter: Stainless Steel 304, Micron size 380

Manifold Mount Screws: Zinc

PORT CONNECTIONS

Threaded Dovetail: A Modular Dovetail Slide with 10-32 UNF, 1/8-27 NPT, 1/4-18 NPT thread sizes. The 1/8" and 1/4" NPT contain a brass hoop ring insert. The 1/8" and 1/4" gauge port is available. During assembly fittings should be finger tight plus one turn.

Union Dovetail: A Modular Dovetail Slide with a thru hole joining two units together with a common air supply.

Connecting Dovetail: A Modular Connecting Dovetail Slide with no hole joining two units together with no common air supply.

Gauge Dovetail: A Modular Dovetail Slide with 1/8-27 NPT or 1/4-18 NPT thread sizes. The Dovetail Slide has the word "gauge" molded into the slide.

Blank Dovetail: 2 Blank Dovetail Slides are supplied as standard.

Push-in Fitting Dovetail: Available for 5/32", 3/16", 1/4", 5/16", 4mm and 6mm O.D. Tubing.

MOUNTING

Panel Mount: 9/16" hole for panel mounting, mounting nut furnished. Panel mounting nut should be finger tight plus 1/4 turn.

Base mounting: .115 diameter mounting holes, use 4-40 mounting screws.

Wall Mount: Modular Dovetail wall mount.