High Precision Regulator

P17

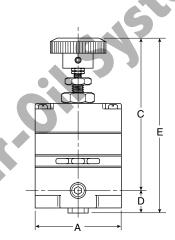




P17-02-F00

Features

- Accurate Pressure Regulation Controls Output Pressure to Within 0.1% Accuracy
- Multi-stage Regulation for Maximum Control and Stability
- Two Full Flow Gauge Ports
- Super Sensitive Relief. Downstream Pressure Buildup, Down to 0.005 PSIG Above the Set Pressure, is Automatically Vented through Internal Relief Valve
- P17 has High Exhaust Relief Capacity



Dimensions

| Models Inches (mm) | Α | С | D | E |
|--------------------|------|------|------|-------|
| Standard Unit | 2.06 | 3.82 | 0.43 | 4.35 |
| P17-02-F00 | (52) | (97) | (11) | (110) |

and diaphragms.

= "Most Popular"

Specifications

Flow Capacity at 100 PSIG (6.89 bar) Supply,

20 PSIG (1.38 bar) Outlet 14 SCFM (25m³/hr)

Constant Bleed Rate Less than 0.08 SCFM (0.15m³/hr) (Equals Bleed Rate plus other consumption)

Effect of Supply Pressure Variation of 25 PSIG (1.7 bar) on outlet: Less than 0.005 PSIG (0.0003 bar)

Exhaust (Relief) Canacity at 5 PSIG (0.34 har)

Exhaust (Relief) Capacity at 5 PSIG (0.34 bar) above 20 PSIG (1.38 bar) Setpoint

Standard Model 3 SCFM (3.4m³/hr) High-Relief Model 11 SCFM (17m³/hr)

Gauge Ports 1/4" NPTF (Can be used as additional full flow 1/4" outlet ports)

| Operating Pressure | Range – | | |
|-----------------------------|---------|------|-------|
| | | PSIG | bar |
| Primary – Maxir | mum | 150 | 10.34 |
| Secondary – Spring Pressure | | | |
| 40 PSIG | Minimum | 2 | 0.14 |
| | Maximum | 40 | 2.76 |
| 120 PSIG | Minimum | 2 | 0.14 |
| | Maximum | 120 | 8.27 |

Operating Temperature Range 0°F* to 150°F (-18°C * to 65°C) Temperatures below (0°C) 32°F require moisture free air.

| Port Threads | 1/4" |
|-----------------------------|----------------------------------------------------------|
| Repeatability / Sensitivity | 0.005 PSIG (0.0003 bar) Inches of Water Column = 1/8" |
| Total Air Consumption | 6 SCFH (0.21m ³ /hr.) |
| Weight | 1.4 lb (0.64 kg) |

Materials of Construction

| Adjusting Stem & Capsule | Stainless Steel | | |
|--------------------------|-----------------|--|--|
| Body | Zinc | | |
| Control Knob | Plastic | | |
| Diaphragm(s) | Buna-N | | |
| Seals | Buna-N | | |
| Springs | Stainless Steel | | |
| Valve Poppet | Stainless Steel | | |

The P17 is a high precision, multi-stage pressure regulator. This pressure controller provides the highest level of

regulation accuracy and repeatability available and is ideal for applications that call for the utmost in control and maximum stability under variable operating conditions. A stainless steel measuring capsule is used as a sensing element to activate the high gain servo balanced control mechanism in which the main valve is controlled by a pilot valve. This allows for greater accuracy and eliminates many of the problems associated with conventional regulators using range springs

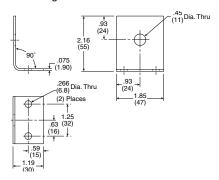
Regulator Kits

| Service Kits | |
|-----------------------------|----------|
| 2-40 PSIG | RKR210A* |
| 2-120 PSIG | RKR210C* |
| 2-120 PSIG (High Relieving) | RKR220C* |
| * Parts in Kit | |

Accessories

Mounting Bracket Kits

| Pipe Mounting | SA200YW57 |
|----------------------|--------------|
| Right Angle Mounting | .446-707-045 |



Mounting Bracket: 446-707-045

= "Most Popular"

⚠ WARNING

Product rupture can cause serious injury.

Do not connect regulator to bottled gas.

Do not exceed maximum primary pressure rating.

CAUTION:

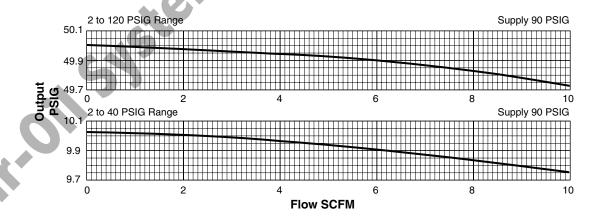
REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

Applications

The P17 regulators are well suited for any process that requires very precise regulation of air pressure in pipes and vessels. These regulators are often used, but not limited to the following applications:

- Air Gauging
- Gas Mixing
- Calibration Standards
- Air Hoists
- Web Tensioning
- **Gate Actuators**
- Roll Loading
- Valve Operators
- · Cylinder Loading



Ordering Information

| Relieving | | Reduced Pressure Range (PSIG) | | | |
|----------------|--------|-------------------------------|------------|----------------------|--|
| neile | evilig | 2 to 40 2 to 120 | | 2 to 120 High Relief | |
| In / Out Ports | 1/4" | P17-02-B00 | P17-02-F00 | P17-02-FH0 | |