

# numatics®

## Precision Regulators



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### 1. Economy Miniature Electro-Pneumatic Transducer – R84 Series

- I/P and E/P Versions
- Magnet Coil Technology

### 2. High Flow Precision Regulator – R88 Series

- R880 High Flow Regulator
- R881 Back Pressure Precision Regulator

### 3. Ratio Relay Volume Booster – R87 Series

- Precision Air Pilot Regulator
- 1:1 and 1:6 Ratios Available

### 4. Instrument Air Regulator – R89 Series

- Precision Regulator
- Integral 5 Micron Filter – Manual Drain

### 5. Electro-Pneumatic Transducer – R83 Series

- I/P and E/P Versions
- Magnet Coil Technology

### 6. Precision Regulator – R80 Series

- R800 Standard Series
- R820 High Relief Series

### 7. Miniature Electro-Pneumatic Transducer – R85 Series

- I/P and E/P Versions
- Piezo Electric Technology

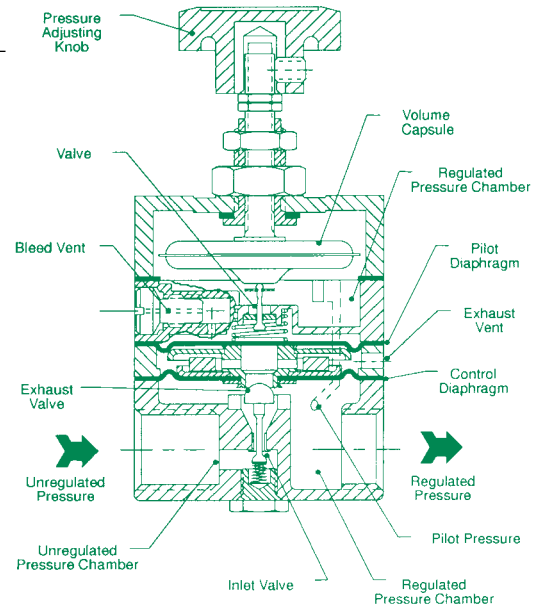
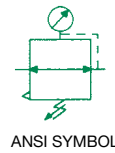
**R80/82 Series**

**Application**

The 80 and 82 Series regulators are high-precision, multi-stage pressure regulators. The highest degree of regulation and repeatability are achievable by reacting to downstream pressure fluctuations as small as 0.01 PSIG (.07 kPa). Action occurs as downstream pressure is piloted to the control chamber to act on a finely tuned stainless steel volume capsule. A continuous bleed of less than 0.08 SCFM (.15 m<sup>3</sup>/hr) adjusts the pilot diaphragm causing appropriate movement of the supply valve or relief valve. Relief flows of up to 10 SCFM can be achieved through the large exhaust port located in the control diaphragm. Exhaust is achieved through the exhaust vents located in the side of the body.

**Recommended Uses**

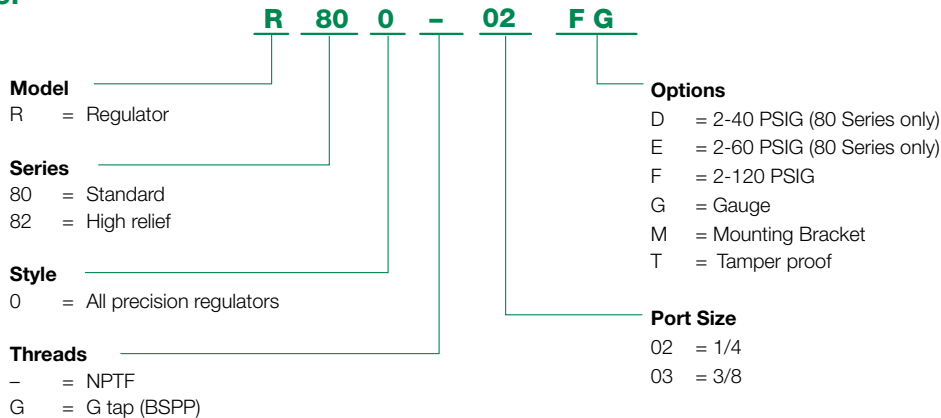
- Air Gauging
- Gas Mixing
- Web Tensioning
- Roll Loading
- Air Hoists



**Specifications**

	<b>Precision Regulator R80/82 Series</b>
Flow Capacity	14 SCFM (25m3/hr)
Exhaust Capacity	Model 80 - 2 to 3 SCFM (3.4 m3/hr) Model 82 - 10 to 11 SCFM (17.0 m3/hr)
Sensitivity	.125 inches (3.2 mm) water
Pilot Bleed Rate	.08 SCFM (.15 m3/hr)
Supply Pressure Variation	Less than .005 PSI (.03 kPa)@25 PSI variance
Maximum Supply Pressure	150 PSIG (1050 kPa)
Temperature Range	0° F to + 150° F (-18° C to +65° C)
Weight	1.4 lbs (.64 kg)
Materials	Body: Die Cast Zinc Diaphragms: Buna - N Knob: Phenolic Plastic

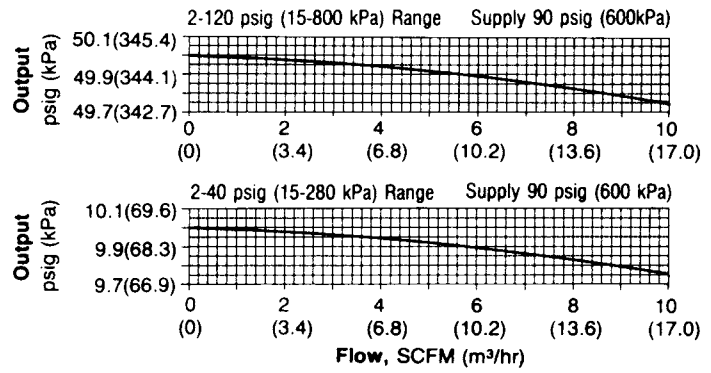
**How To Order**



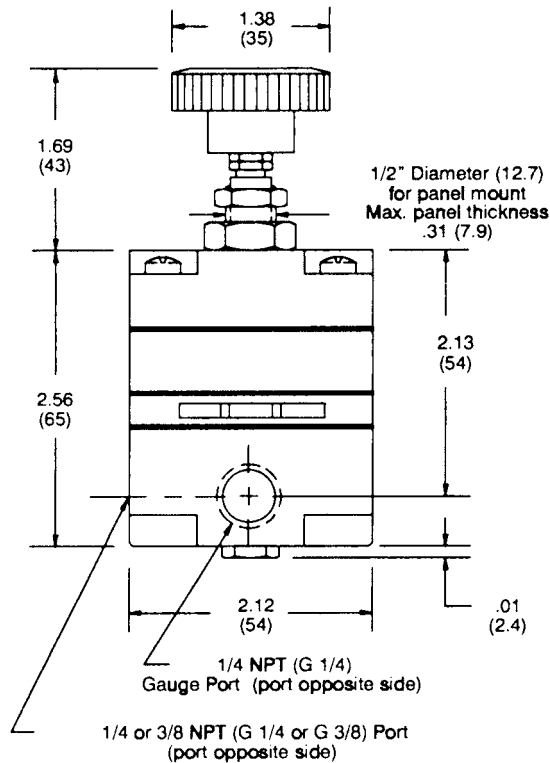
### Flow Ratings (based on 100 PSIG inlet)



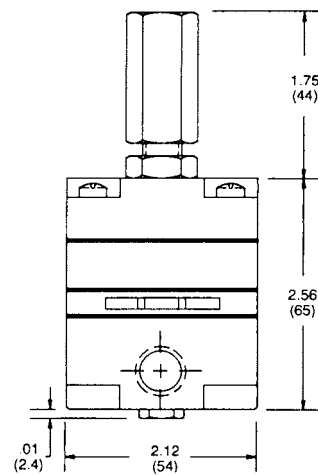
R800-02D pictured



### Dimensions: Inches (mm)



### Tamperproof Model



**Precision Regulators**

<b>Precision Regulator Repair Kits</b>	
<b>Kit #</b>	<b>Description</b>
RKR800D	for 2-40 pressure range models
RKR800E	for 2-60 pressure range models
RKR800F	for 2-120 pressure range models
RKR820F	for 2-120 pressure range models

<b>Replacement Adjustment Knob Kits</b>	
<b>Kit #</b>	<b>Description</b>
RP8002	for R800 and R820 models

**Electropneumatic Transducers**

<b>Electropneumatic Transducer Repair Kits</b>	
<b>Kit #</b>	<b>Description</b>
RKR831BC	for 3-15 and 3-27 pressure range models
RKR831EF	for 2-60 and 3-120 pressure range models

**High Flow Precision Regulators**

<b>Regulator Repair Kits</b>	
<b>Kit #</b>	<b>Description</b>
RKR880A	for 0-2 pressure range models
RKR880B	for 0-15 pressure range models
RKR880C	for 0-30 pressure range models
RKR880E	for 1-60 pressure range models
RKR880F	for 2-150 pressure range models
RKR881	for back pressure regulator

<b>Replacement Adjustment Knob Kits</b>	
<b>Kit #</b>	<b>Description</b>
RP81	for R880 models

**Mounting Brackets**

<b>High Flow Precision Regulator</b>	
<b>Kit #</b>	<b>Description</b>
PK80	80 & 82 Series Bracket
PK88	87 & 82 Series Bracket
PK89	89 Series Bracket

**Instrument Air Regulators**

<b>Instrument Air Regulator Repair Kits</b>	
<b>Kit #</b>	<b>Description</b>
RKR89	for all models



World Class Supplier of Pneumatic Components



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