

Features

1/4" & 3/8" Ports

Precision/Air regulators are high precision, multi-stage pressure regulators. The highest degree of regulation and repeatability are achievable by reacting to down stream pressure fluctuations as small as 0.01 PSIG (0.07 KPA) above set pressure. Action occurs as downstream pressure is piloted to the control chamber to act on a finely tuned stainless steel measuring capsule. **A continuous bleed of less than 0.08 SCFM (0.15 m³/hr.) works on the pilot diaphragm causing appropriate movement of the supply valve or the relief valve.** Movements as small as .0001 inches (.0025mm) will cause the main valve to correct to the proper position. Relief flows of up to 10 SCFM can be achieved on the high relief model (-100 models). Exhaust is achieved through the exhaust vents located in the side of the body.

- The Precision/Air Regulator controls output pressure with an accuracy of 0.1%, and has very low sensitivity to changes in supply pressure and flow.
- This regulator has been designed to eliminate need for any readjustment of the regulated pressure after long "down time." At start-up, the regulated pressure will return to its output setting.
- The regulated pressure is held constant over substantial changes in flow due to the high-gain pneumatic servoamplifier. Particularly good from dead end to 203.4 m³/hr. (12 SCFM).
- The unit may be installed in any position. It can be panel mounted or supported by in-line plumbing.



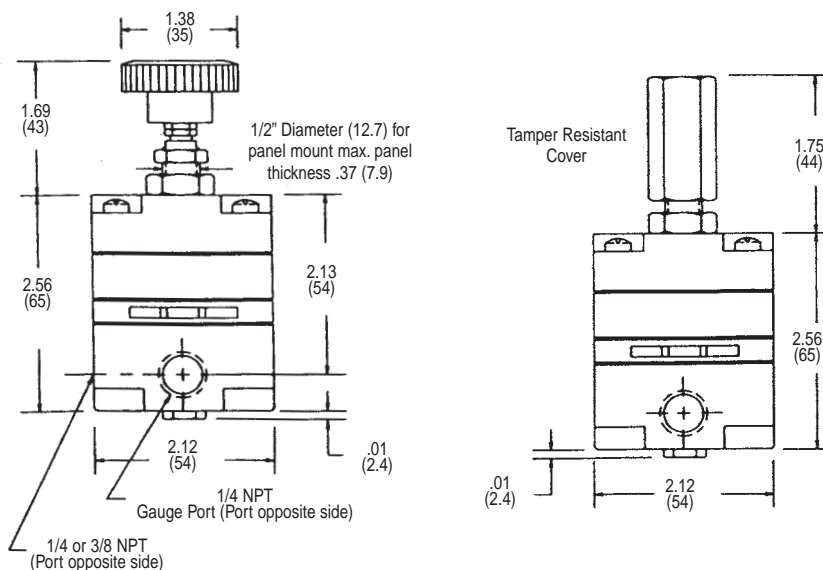
APPLICATIONS

- Air gauging
- Gas mixing
- Web tensioning
- Roll loading
- Air hoists

Performance Specifications

Models & Dimensions, in. (mm)

Body:	Zinc die-cast
Diaphragm:	Buna N
Metering Capsule:	Stainless Steel
Knob:	Phenolic Plastic
Flow Capacity:	14 SCFM (25 m ³ /hr.)
Exhaust Capacity:	Up to 10 SCFM
Sensitivity:	.125 Inches (3.2 mm) Water Column
Total Air Consumption:	6 SCFH (.17 m ³ /hr.)
Pilot Bleed Rate:	0.08 SCFM (0.15 m ³ /hr.)
Supply Pressure Variation:	Less than .005 PSIG (.03 kpa) @ 25 PSIG variance
Maximum Supply Pressure:	150 PSIG (1050 kpa) A filter with 5 micron element should be installed ahead of unit.
Operating Temperature Range:	20° to 150°F (-7° to 66°C)



Ordering

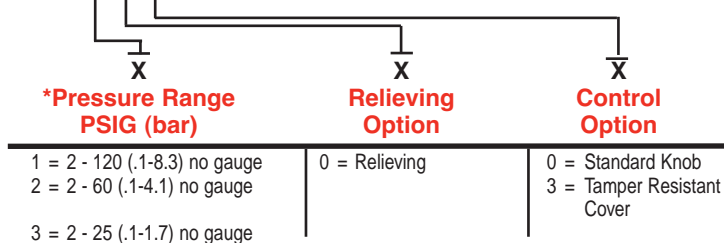
1/4" & 3/8" Ports

PORT SIZE NPT	FLOW 2 to 120 PSIG (.4-8.6 bar)	MODELS Spring Range 2 to 60 PSIG .4-4.1 bar	2-25 PSIG .4-1.7 bar	WEIGHT lbs. (kg)
1/4"	PR4021-100	PR4021-200	PR4021-300	1.4 (.64)
3/8"	PR4031-100	PR4031-200	PR4031-300	1.4 (.64)

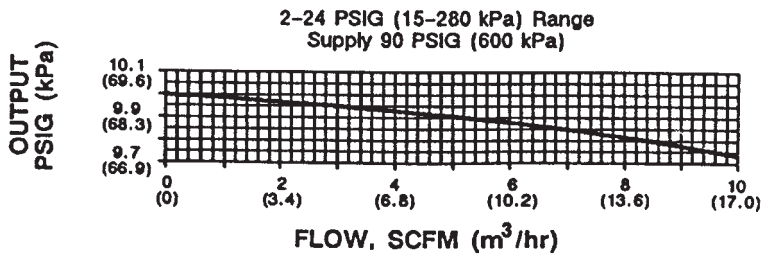
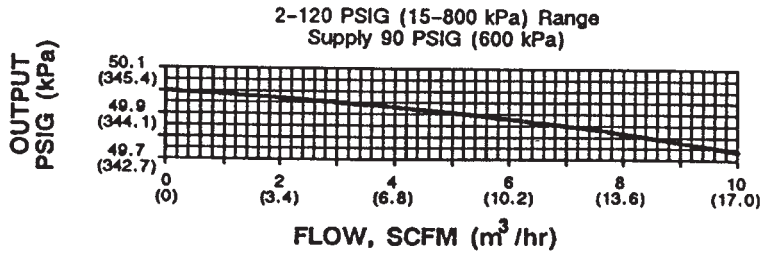
Additional Models Available

Port Size Basic Model

1/4" PR4021 - X X X
3/8" PR4031 - X X X

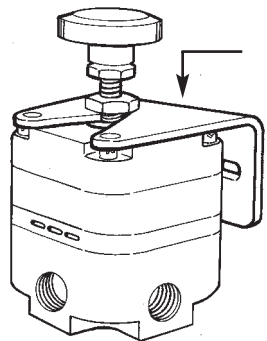


Flow Characteristics



Accessories

Precision/Air Regulators



Wall Mount
Bracket
P/N 29077

See Page 54
For Bracket
Dimensions

Service Kit: 100207-1 2 - 25 lb. or 2 - 60 lb. Spring Range
100207-2 2 - 120 lb. Spring Range

