

Model
80D

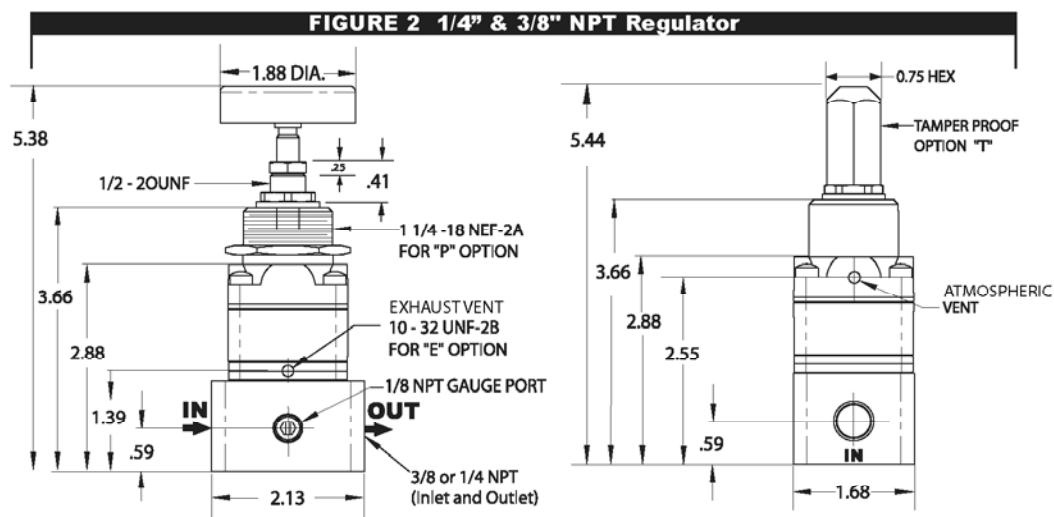
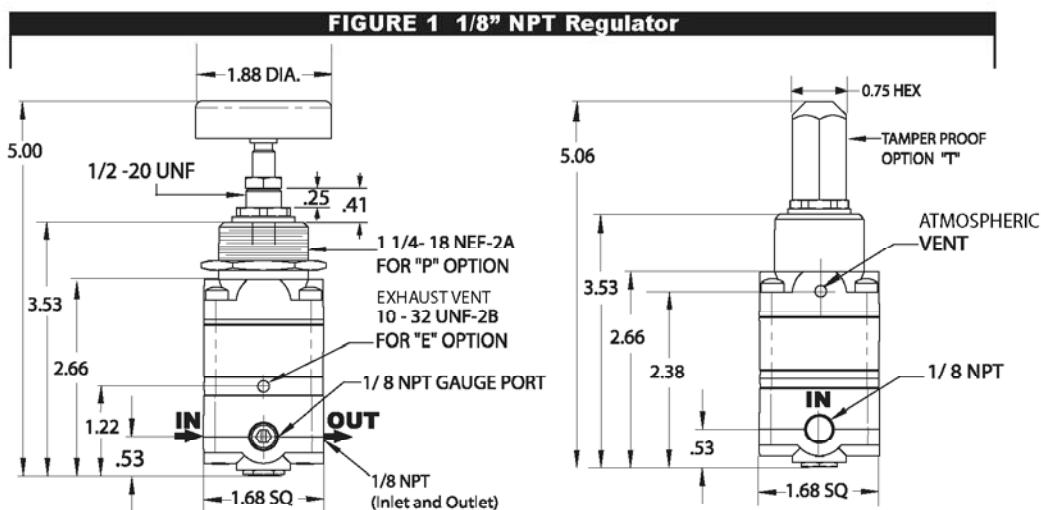
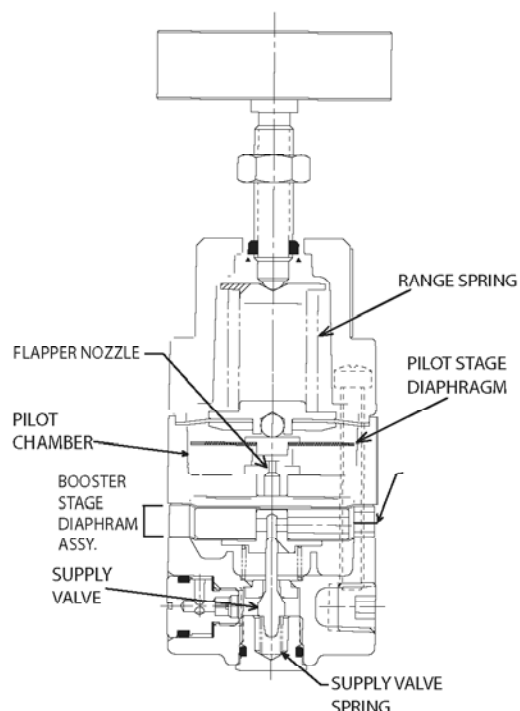


Features

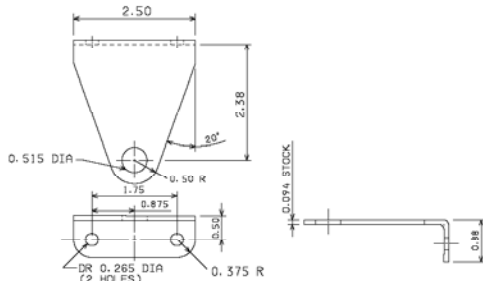
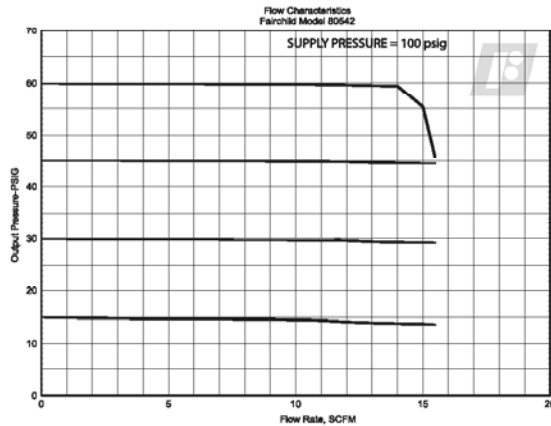
- Force balance and 2 stage pilot control to minimize droop.
- Excellent frequency response to eliminate output pressure excursions.
- Compact size for installation where space is limited.
- Sapphire Orifice provides precise control of pilot control air flow.
- Low air consumption for efficient operation.
- Available in 1/8", 1/4" and 3/8" NPT port sizes.

Operating Principles

The Model 80D is a precision two-stage device that incorporates a force balance design with pilot control. This compact, high quality unit combines the flow capacity of a process regulator with the precision of an instrument regulator.



Technical Information



Model 80D Regulator Kits & Accessories

Mounting Bracket Kit 11989 (sold separately)

Specifications

Flow Capacity

14 SCFM (23.8 m³/HR) (100 psig, [7.0 BAR], (700 kPa)
supply: 20 psig, [1.5 BAR], (150 kPa) setpoint

Exhaust Capacity

2.5 SCFM (4.25 m³/HR) where downstream pressure is
5 psig, [.35 BAR], (35 kPa) above 20 psig setpoint

Pressure Change under Flow Conditions

Less than 0.1 psig, [.007 BAR], (.7 kPa) from dead end
service to 10 SCFM (17 m³/HR)
(set pressure 10 psig, [0.7 BAR], (70 kPa) supply pressure
100 psig, [7.0 BAR], (700 kPa)

Air Consumption

Less than .1 SCFM (.17 m³/HR)

Sensitivity

Less than 0.1" (.254 cm) Water Column

Maximum Supply Pressure

150 psig, [10.0 BAR], (1000 kPa) for 20 psig,
[1.5 BAR], (150 kPa) range
250 psig, [17.0 BAR], (1700 kPa) for 60 - 100 psig,
[4.0 - 7.0 BAR], (400 - 700 kPa) ranges

Effect of Supply Pressure Variation

Less than .2 psig, [.0014 BAR], (1.4 kPa) for 100 psig,
[7.0 BAR], (700 kPa) change in supply pressure

Ambient Temperature Limits

-40°F to +200°F, (-40°C to +93.3°C)

Materials of Construction

Trim Zinc Plated Steel
Body Aluminum
Diaphragms Nitrile and Dacron
Orifice Sapphire

Catalog Information

Catalog Number **8 0 5**

Pressure Range

psig	[BAR]	(kPa)	
0-20	[0-1.5]	(0-150).....	3
1-60	[0.07-4]	(7-400).....	4
1-100	[0.07-7]	(7-700).....	5

Pipe Size

1/8" NPT ¹	1
1/4" NPT ²	2
3/8" NPT ²	3

¹ FIGURE 1 on Pg. 40 Shows 1/8" port body style

² FIGURE 2 on Pg. 40 shows 1/4 and 3/8" port body style

Options

Tapped Exhaust	E
Bonnet Mounting	P
Adjustment Screw	S
Tamper Proof	T
BSPT (Tapered)	U

Service Information

A service kit is available for the Model 80D. Refer to the *Fairchild Model 80D Pressure Regulator Installation, Operation and Maintenance Instructions*, IS-1000080D.