

Back Pressure Regulators

BPR-1 Series Back Pressure Diaphragm Regulators

Features

- ⦿ Metal-to-metal seal with convoluted diaphragm
- ⦿ Close pressure differential between crack and reseal
- ⦿ Panel mounting available

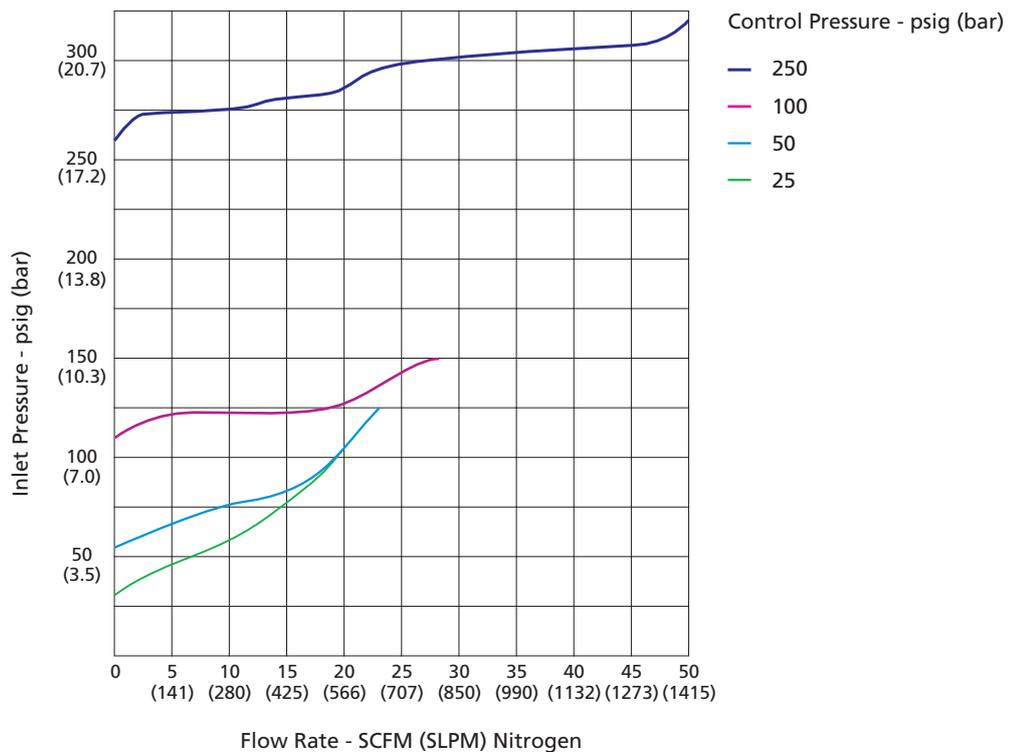
Technical Data

- ⦿ Maximum control pressure: 250 psig
- ⦿ Pressure control range: 0~25, 0~50, 0~100 or 0~250 psig
- ⦿ Material of the main components:
 - Seat: PCTFE
 - Diaphragm: Hastelloy
- ⦿ Temperature: -40°F~+140°F (-40°C~+60°C)
- ⦿ Leak rates:
 - Internal: Bubble-tight
 - External: $\leq 1 \times 10^{-9}$ mbar · l/s helium
- ⦿ Flow coefficient (Cv): 0.3
- ⦿ Weight: ≈ 1.98 lbs (0.9 kg)
- ⦿ Body ports: 1/4" female NPT for inlet, outlet and gauge



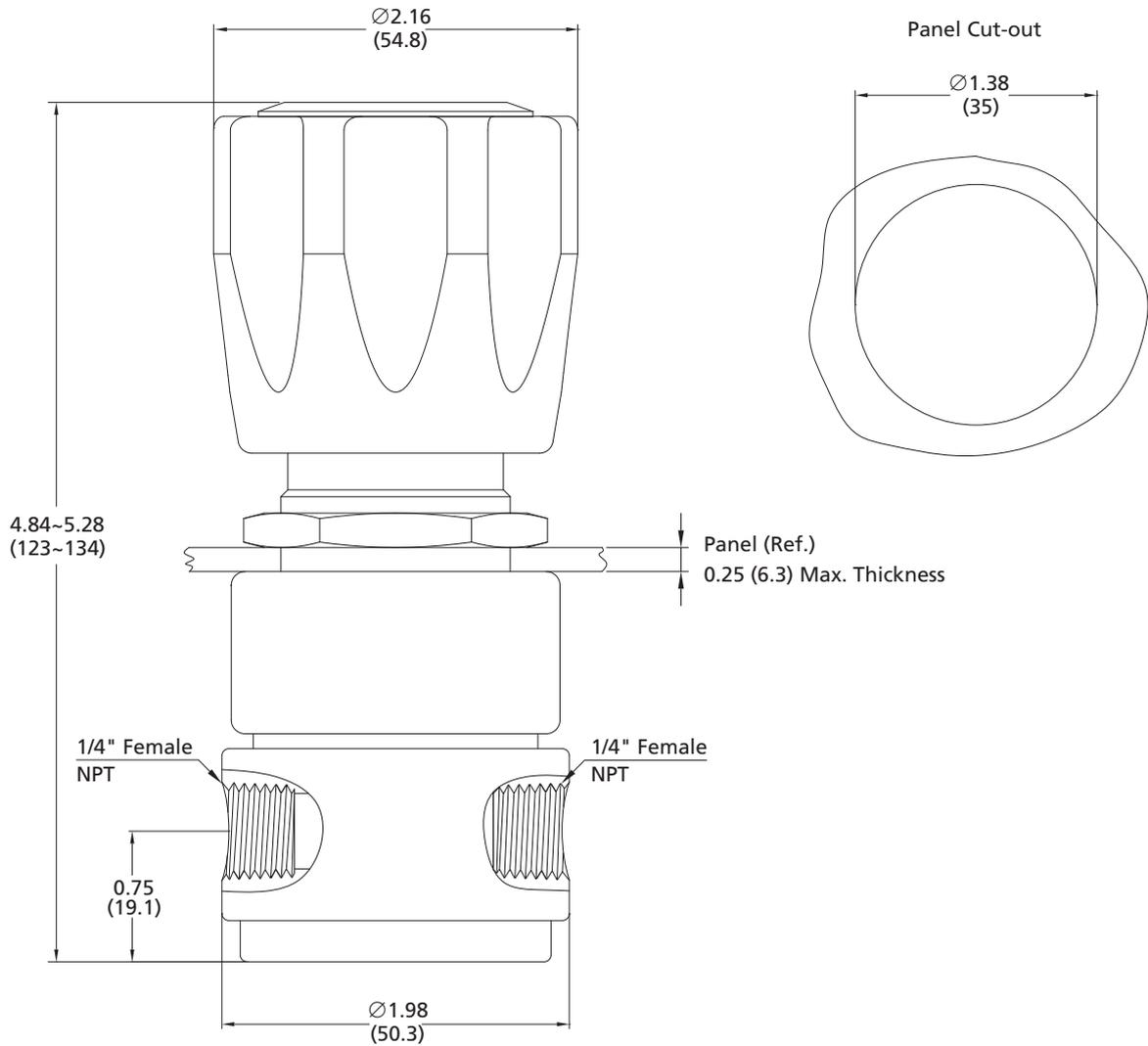
Model: BPR-16L-250-00-00-Z

Typical Flow Chart

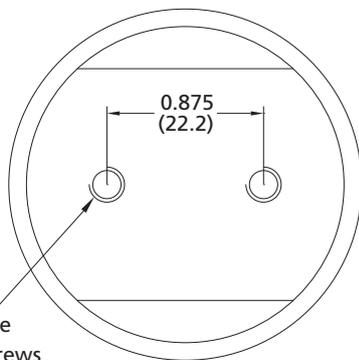


Dimensions

Dimensions, in inches (millimeters), are for reference only.

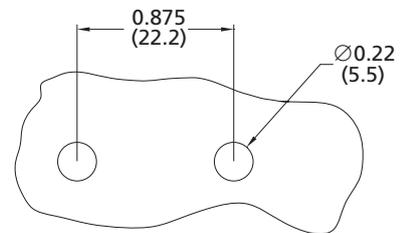


Bottom View

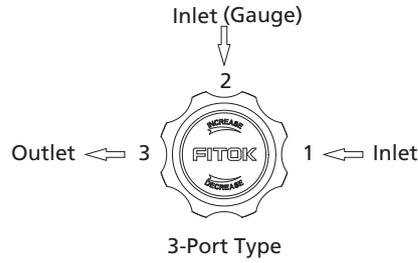


2xM5x0.8-6H thread
The holes are compatible with 10-32 mounting screws

Bottom Panel Cut-out

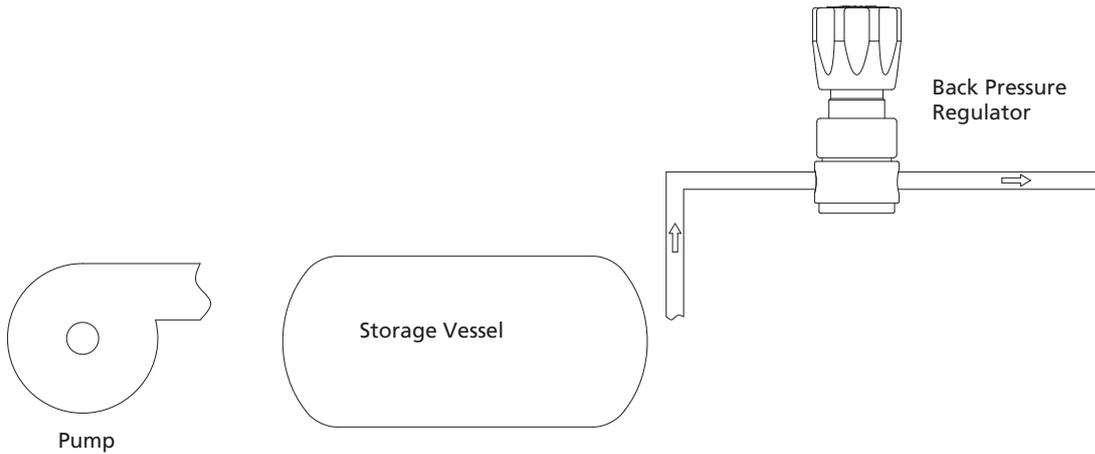


Port Configurations



Typical Application

When the system pressure is lower than the set pressure, the diaphragm obstructs the flow by the force of spring. When the system pressure is higher than the set pressure, the diaphragm compresses the inner spring to connect the flow so as to allow the fluid to pass through the back pressure regulator to keep the pressure of the Storage Vessel stable.



Part Number Description

BPR - 16L - 100 - 10 - M - 11 - Z

Body Material	Control Pressure Range P	Connection 1	Connection 2	Connection 3	Installation Type
6L 316L SS	25 0~25 psig	00 1/4" Female NPT	B With Gauge (psi/bar)	Same as Connection 1	Not Required
SS 316 SS	50 0~50 psig	01 1/4" Male NPT	M With Gauge (MPa)		Z Installed with One Panel Nut
B Brass (Nickel-plated)	100 0~100 psig	10 1/4" Tube Fitting	P Plug	Same as Connection 1	N Installed with Screws at the Bottom
		11 3/8" Tube Fitting	00 1/4" Female NPT		
		20 6 mm Tube Fitting	01 1/4" Male NPT		
	250 0~250 psig	21 8 mm Tube Fitting	10 1/4" Tube Fitting		
		Other connections are available upon request	Other connections are available upon request		

Examples of part number:
a. 2-port type (1 in, 1 out): BPR-16L-25-00-00