

Back Pressure Regulators



Back Pressure Regulators

BPR1 Series Back Pressure Diaphragm Regulators

Features

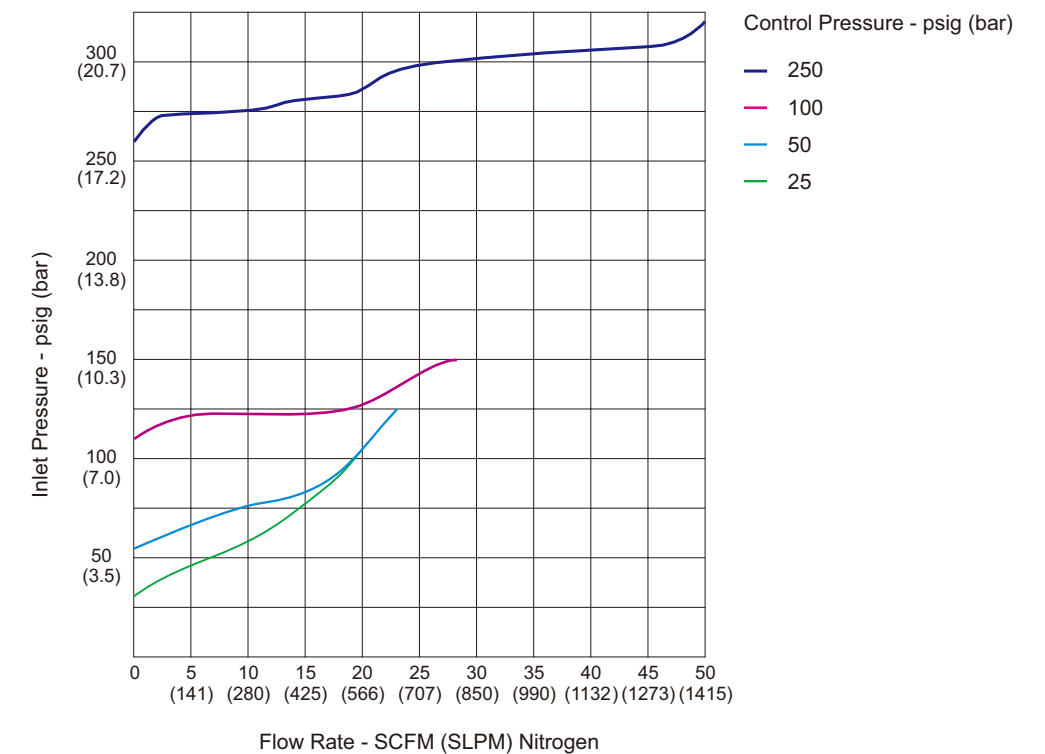
- Metal-to-metal seal with convoluted diaphragm
- Close pressure differential between crack and reset
- Panel mounting available

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 (-40C ~+60C)
- 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

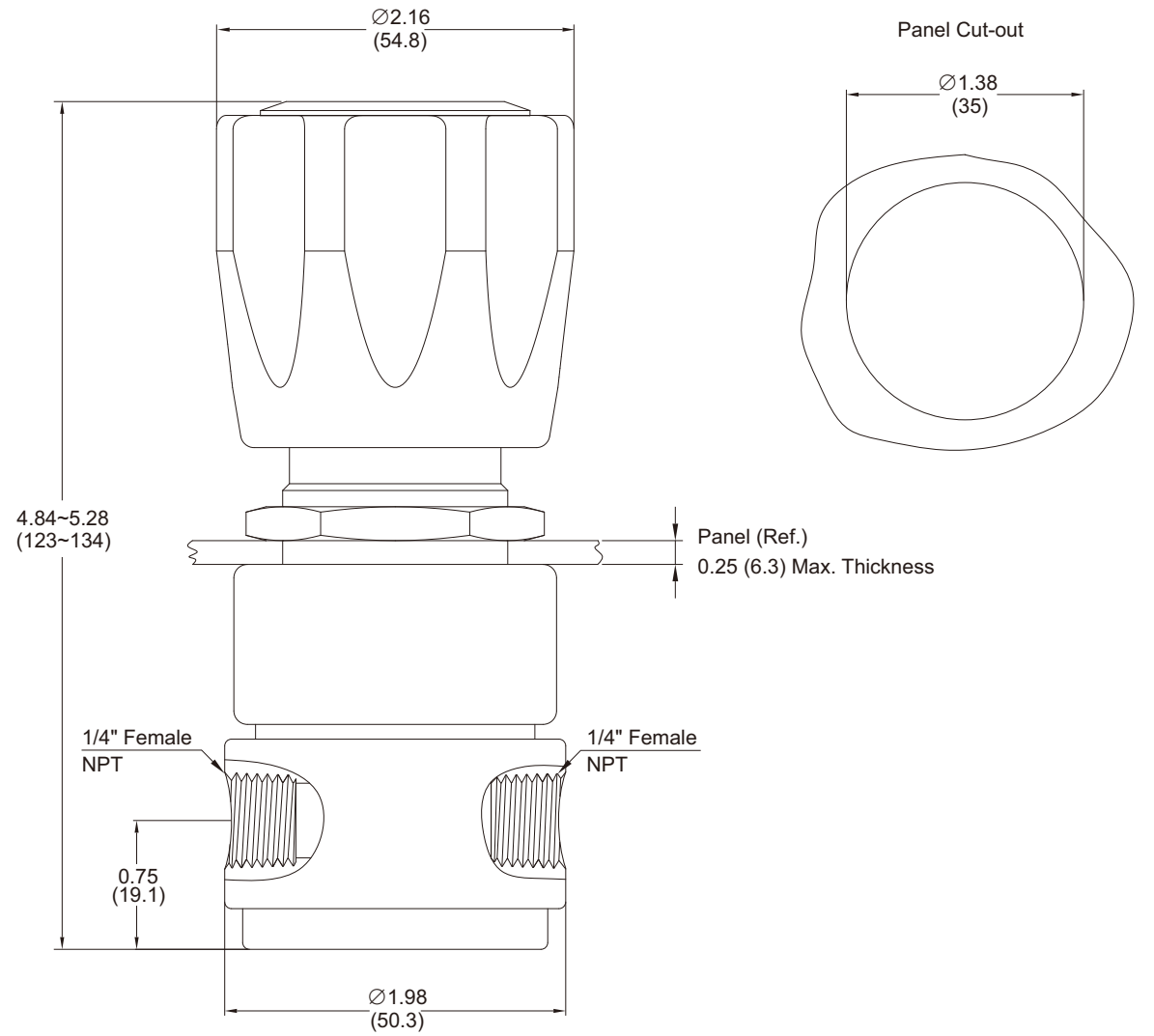


Typical Flow Chart

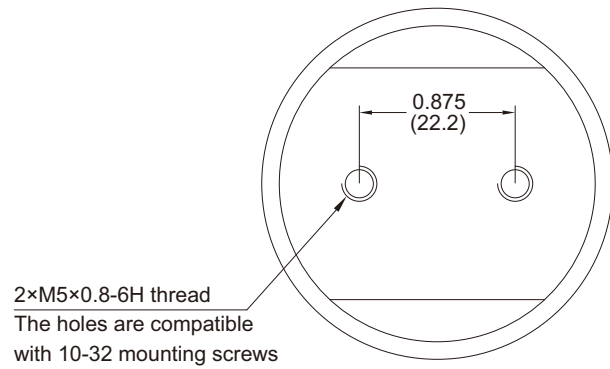


Dimensions

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

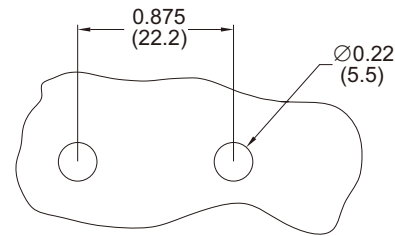


Bottom View

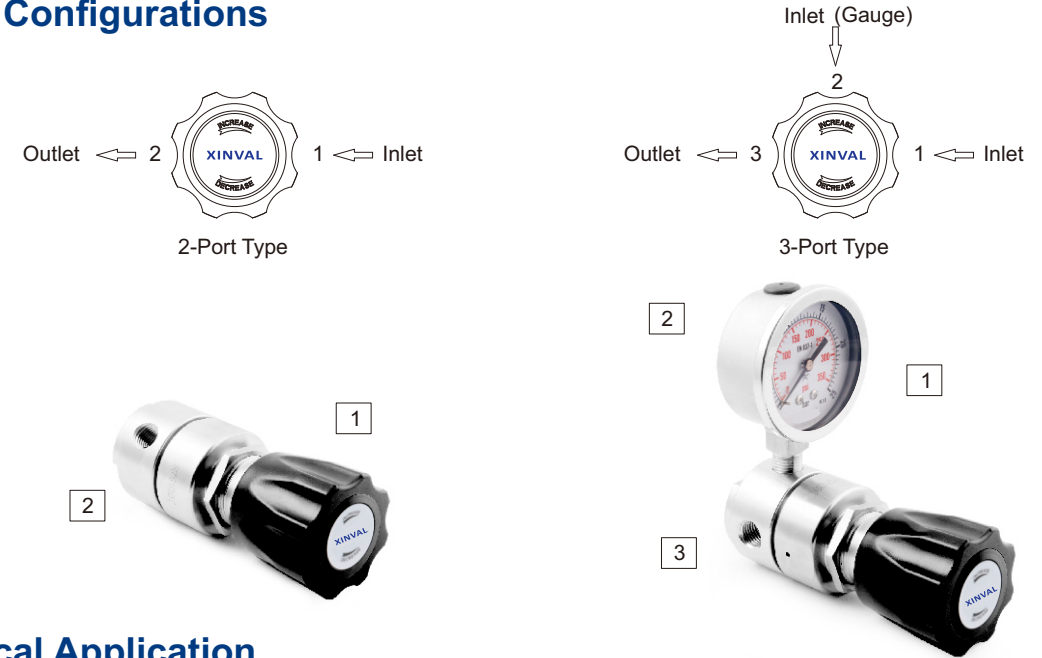


2×M5×0.8-6H thread
The holes are compatible with 10-32 mounting screws

Bottom Panel Cut-out

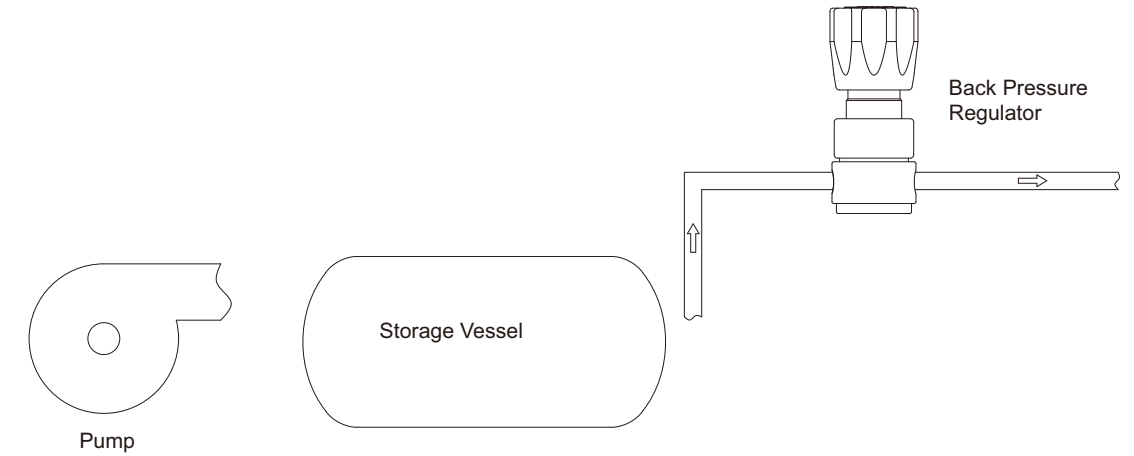


Port Configurations



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

316L - BPR1 - 100 - 10 - M - 11 - Z

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

Back Pressure Regulators

BPR2 Series Back Pressure Piston Regulators

Features

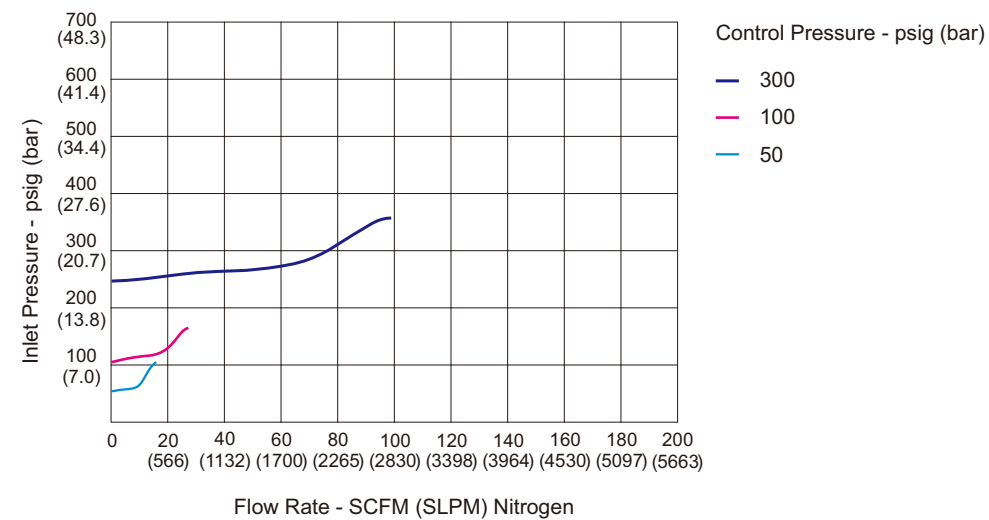
- Durable piston-sensed design
- Bubble-tight shutoff at all reseating pressure
- Low operating torque
- Panel mounting available
- With special cleaning and packaging, applicable to oxygen-enriched environments

Technical Data

- Maximum control pressure: 1000 psig
- Pressure control range: 10~300, 10~500 or 10~1000 psig
- Material of the main components:
 Seat: PCTFE
 Piston: 316L
 O-rings: Viton
- Temperature: -15°F~+165°F (-26°C~+74°C)
- Leak rates:
 Internal: Bubble-tight
 External: Bubble-tight
- Flow coefficient (Cv): 0.3
- Weight: ≈1.98 lbs (0.9 kg)
- Body ports: 1/4" female NPT for inlet, outlet and gauge

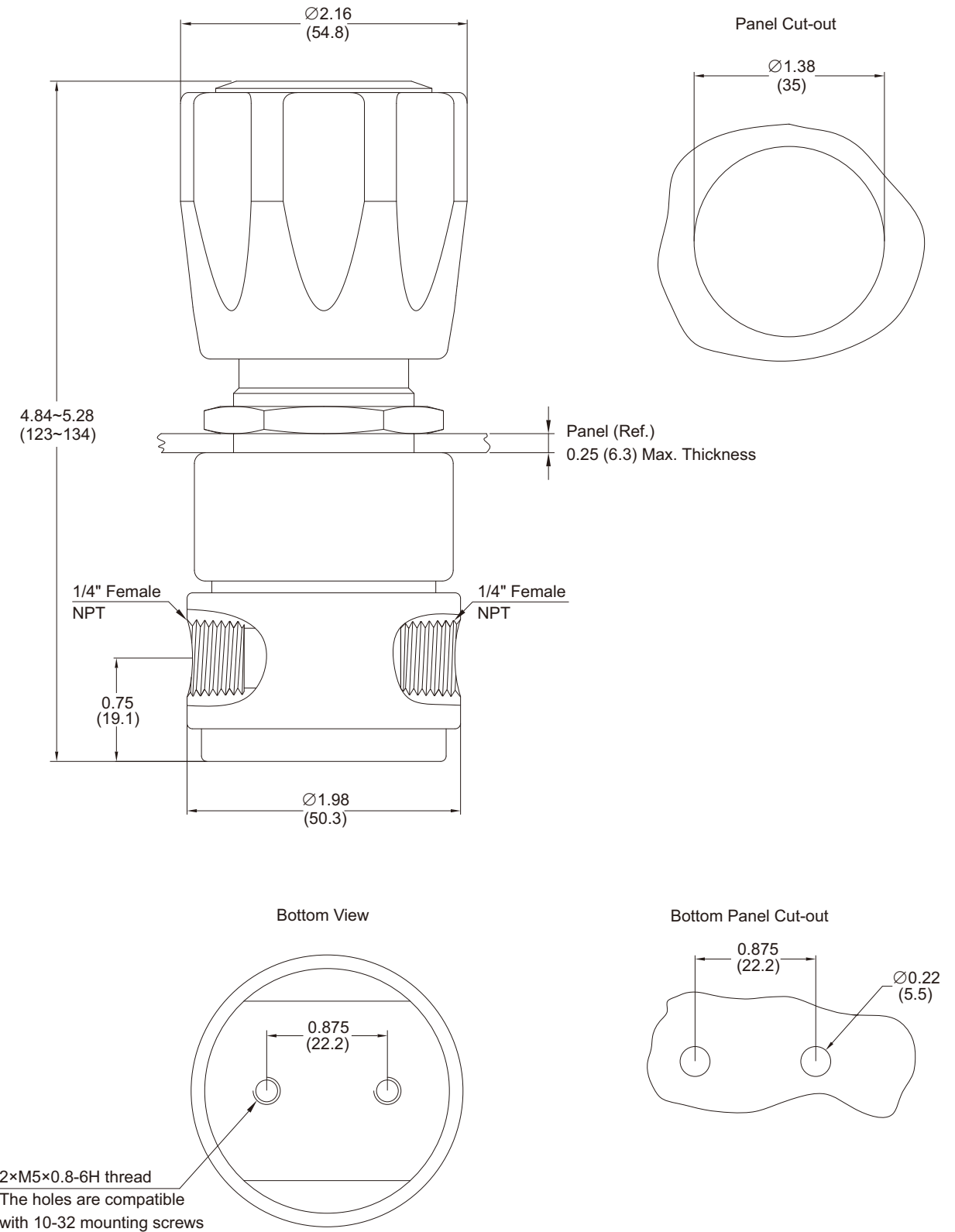


Typical Flow Chart

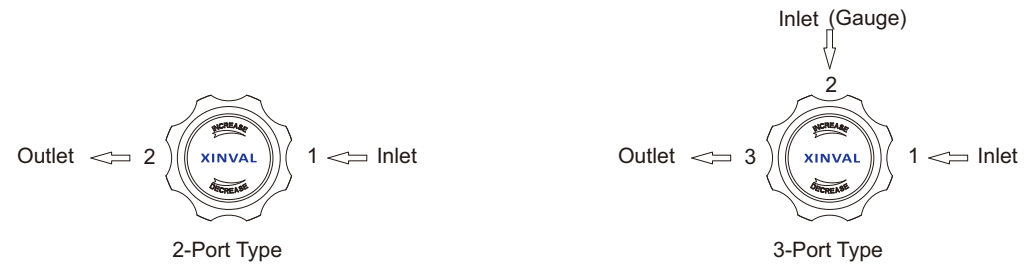


Dimensions

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



Port Configurations



Part Number Description

316L - BPR2 - 300 - 10 - M - 11 - Z

Body Material	Control Pressure Range P	Connection 1	Connection 2	Connection 3	Installation Type
6L 316L SS	300 10~300 psig	00 1/4" Female NPT	B With Gauge (psi/bar)	Same as Connection 1	Not Required
SS 316 SS	500 10~500 psig	01 1/4" Male NPT	M With Gauge (psi/MPa)		Z Installed with One Panel Nut
B Brass (Nickel-plated)	1000 10~1000 psig	10 1/4" Tube Fitting	P Plug	Other connections are available upon request	N Installed with Screws at the Bottom
		11 3/8" Tube Fitting	00 1/4" Female NPT		
		20 6mm Tube Fitting	01 1/4" Male NPT		
		21 8mm Tube Fitting	10 1/4" Tube Fitting		

Typical Application

BPR-2 Series Back Pressure Regulators maintain the required pipeline pressure to ensure the Pump to output fluid stably when system pressure fluctuates.

