

Model M11BP Low Pressure Back Pressure Pneumatic Regulator



Model M11BP

The Model 11BP Pneumatic Precision Regulator is a regulator that precisely controls a set pressure.

Features

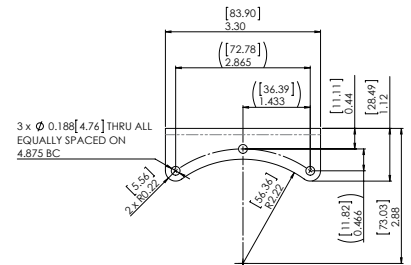
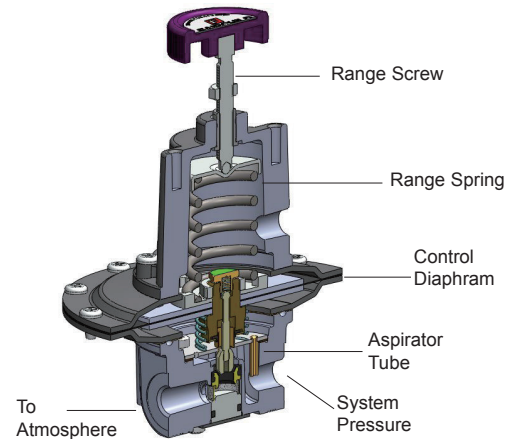
- Sensitivity of 0.05" WC for Precision Control in low pressure applications.
- An Aspirator Tube compensates upstream pressure build up under flow conditions.

Operating Principles

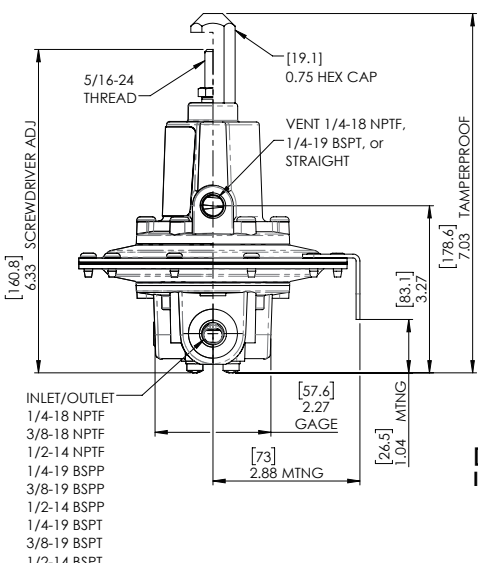
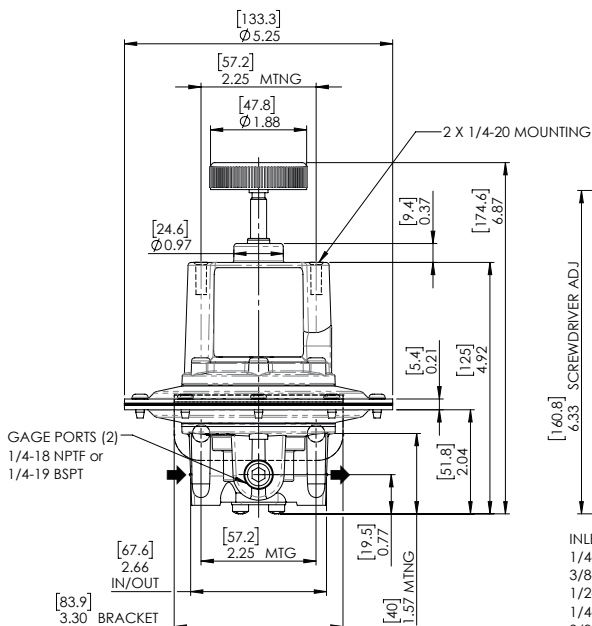
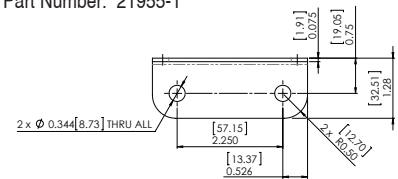
The Model 11BP Regulator uses the force balance principle to open the Relief Valve and vent system pressure when the set point is exceeded.

Upstream pressure is transmitted through the Aspirator Tube to the bottom of the Diaphragm Assembly. When you adjust the range screw for a specific set point, the Range Spring compresses and exerts a force on the top of the Diaphragm Assembly. As long as the pressure acting on the bottom of the Diaphragm Assembly produces a force less than the spring force acting on the top of the Diaphragm Assembly, the Relief Valve remains closed. When system pressure increases, the force on the bottom of the Diaphragm Assembly increases until it reaches the set point. When system pressure increases beyond the set point, the assembly moves upward, lifting the Relief Valve from its seat and vents the upstream air.

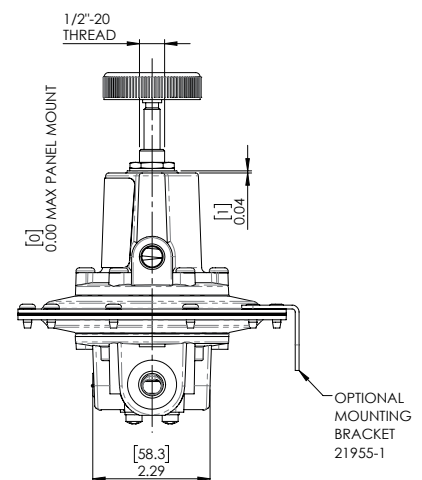
If upstream pressure decreases below the set point, the assembly moves downward closing the Relief Valve.



Mounting Bracket
Part Number: 21955-1



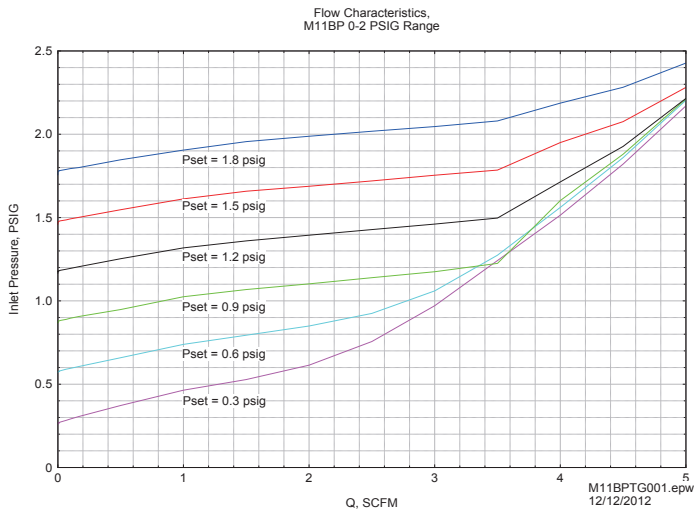
[MM]
INCH



Model M11BP Low Pressure Back Pressure Pneumatic Regulator

Technical Information

Catalog Information



Specifications

Flow Capacity

3 SCFM (5.1 m³/HR) @ 1.0 psig, [0.07 BAR], (7.0 kPa) system pressure

Maximum System Pressure

60 psig, [4 BAR], (400 kPa)

Sensitivity

0.05" Water Column

Ambient Temperature

-40°F to +200°F, (-40°C to 93.3°C)

Materials of Construction

Body and Housing.....Aluminum
Diaphragm.....Nitrile or Fluorocarbon
Trim.....Zinc Plated Steel, Stainless Steel

Catalog Number

11 **BP**

Pressure Ranges:

0-0.5 psi.....
0-2 psi.....
0-4 psi.....
0-6 psi.....
0-12 psi.....

Inlet/Outlet Port Size:

1/4".....
3/8".....
1/2".....

Port Thread:

NPTF.....
BSPT.....
BSPP.....

Elastomer

Nitrile.....
Fluorocarbon.....

Actuator

Knob.....
Screw Adjust.....
Tamper Proof.....

Vent

Straight.....
Tapped (1/4" NPT, BSPT).....

Mounting

Bonnet (2 X 1/4-20 UNC).....
Panel (1/2-20 UNF).....