**Features**

- Sensitivity of 0.05" WC for Precision Control in low pressure applications
- Relief Valve provides high exhaust flows.
- Optional Low Bleed seat minimizes air consumption.
- An Aspirator Tub compensates for downstream pressure droop under flow conditions.

**Operating Principles**

When you adjust the Range Screw to a specific setpoint, the Range Spring exerts a downward force against the top of the Control Diaphragm. This downward force opens the Supply Valve. Output pressure flows through the Outlet Port and the Aspirator Tube to the Control Chamber where it creates an upward force on the bottom of the Control Diaphragm.

When the setpoint is reached, the force of the Range Spring that acts on the top of the Control Diaphragm balances with the force of output pressure that acts on the bottom of the Control Diaphragm and closes the Supply Valve.

When the output pressure increases above the setpoint, the Diaphragm Assembly moves upward to close the Supply Valve and open the Exhaust Valve, and output pressure exhausts through the Vent on the side of the unit until it reaches the setpoint.
Specifications

Flow Capacity
20 SCFM (34 m³/H) @ 100 psig, [7 BAR], (700 kPa) supply and 1.0 psig setpoint

Exhaust Capacity
0.5 SCFM (0.85 m³/H) where downstream pressure is 0.1 psig, [0.007 BAR], (0.7 kPa) above 1.0 psig setpoint

Maximum Supply Pressure
150 psig, [10 BAR], (1000 kPa)

Supply Pressure Effect
<0.01 psig for 100 psig change in supply

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 Information

Catalog Number 11
Pressure Ranges:
0-0.5 psi........................................1
0-2 psi........................................2
0-4 psi........................................3
0-6 psi........................................4
0-12 psi........................................5

Inlet/Outlet Port Size:
1/4”........................................2
3/8”........................................3
1/2”........................................4

Port Thread:
NPTF ..................................N
BSPT ..................................U
BSPP ..................................H

Elastomer
Nitrile ........................................N
Fluorocarbon ................................J

Actuator
Knob ........................................K
Screw Adjust ..................................S
Tamper Proof ..................................T

Relief
Low Bleed ....................................B
Non Relieving ..................................N
Relieving, Normal Bleed ......................R
Relieving, No Bleed ..........................S

Vent
Straight ........................................S
Tapped (1/4” NPT, BSPT) .....................E

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

Flow Characteristics
Model 11, 0-2 PSI Range

Model M11 Low Pressure Pneumatic Regulator
Technical Information
Catalog Information