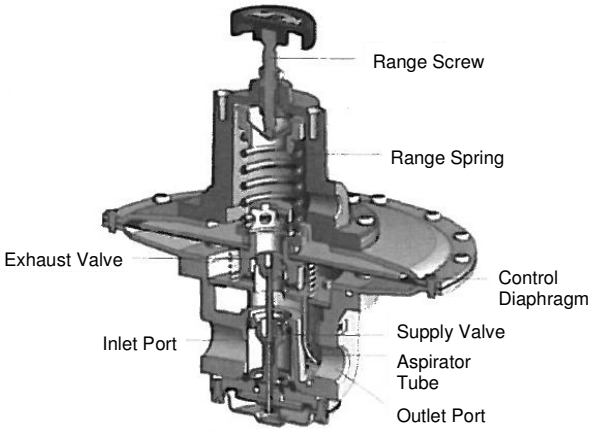
M4100 Low Pressure Pneumatic Regulator

Features

- Sensitivity of 0.05” WC for Precision Control in low pressure applications.
- Large Relief Valve provides exhaust Flows.
- Soft Valve seat minimizes air
- consumption.
- An Aspirator Tube compensates upstream upstream pressure build up under flow conditions.

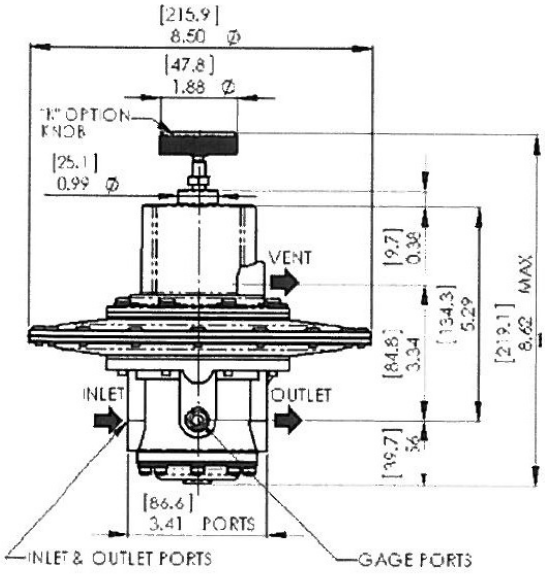


Operating Principles

When you adjust the Range Screw to a specific setpoint, the Range Spring exerts a download 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 the 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 exhaust through the Vent on the side of the unit until it reaches the setpoint.



Specifications

Supply Pressure (Psig)
20 psig to 150 psi max.

Output Ranges
0-0.7 psi [0-0.48 BAR]; up to 0-5.0 psi [0-0.35 BAR]

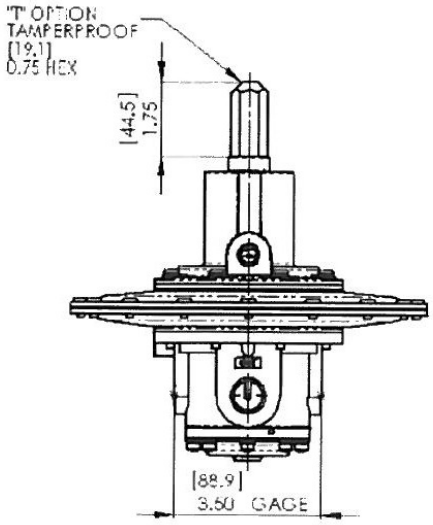
Consumption
None Detected

Sensitivity
Low as 0.05” Water Column

Supply Pressure Effect
None Detected

Ambient Temperature
-40° F to +200° F, (-40° C to +93° C)

Hazardous Locations
Acceptable for use in Zones 1 and 2 for gas atmosphere; Groups IIA and IIB and Zones 21 and 22 for dust atmospheres



Materials of Construction
Body and Housing . . . . . Aluminum
Trim . . . . . Zinc Plated Steel, Brass
Diaphragms and seals . . . . . Nitrile on Dacron