Type 700 Precision Air Pressure Regulator

For applications that require high flow capacity

The Type 700 is designed for applications that require high flow capacity and accurate process control. A poppet valve balanced by a rolling diaphragm insures a constant output pressure even during wide supply pressure variations. Stability of regulated pressure is maintained under varying flow conditions through the use of an aspirator tube which adjusts the air supply in accordance with the flow velocity.

F E A T U R E S

- **High Flow Capacity**
  Allows flows up to 80 scfm
- **Sensitive**
  Controls output pressure to within 1/4 inch water column pressure
- **Stable Output**
  Dampening action of aspirator tube makes this regulator insensitive to changes in flow
- **On-line Maintenance**
  Can be serviced without removal from air line

Applications

The Type 700 is an ideal choice for any application that calls for accurately maintained output pressure under high flow conditions. This includes, but is not limited to such applications as:

Test Equipment	Laboratory Equipment
Roll Loading	Gas Mixing
Web Tensioning	Test Panels
Valve Operators	Clutch and Brake Controls
Actuators	Positioning Cylinders

Materials of Construction

Body	Diecast aluminum alloy
Internal Components	Stainless steel, brass, plated steel, acetal
Diaphragm	Buna-N elastomer, polyester fabric
Knob	Phenolic plastic

Type 700 Ordering Information

Model Number	Port Size (NPT)	Output Range (psi)	(kPa)
700-BA	1/4"	0-2	0-15
700-CA	3/8"	0-2	0-15
700-DA	1/2"	0-2	0-15
700-BC	1/4"	0-15	0-105
700-CC	3/8"	0-15	0-105
700-DC	1/2"	0-15	0-105
700-BD	1/4"	0-30	0-200
700-CD	3/8"	0-30	0-200
700-DD	1/2"	0-30	0-200
700-BE	1/4"	0-60	0-400
700-CE	3/8"	0-60	0-400
700-DE	1/2"	0-60	0-400
700-BF	1/4"	0-150	0-1000
700-CF	3/8"	0-150	0-1000
700-DF	1/2"	0-150	0-1000

Options

Add proper letter at end of model number.

E - Tapped Exhaust - allows captured exhaust. 1/4" NPT port

G - Pressure Gauge - Back mounted. Ranges include 0-15 psig (0-105 kPa), 0-30 psig (0-200 kPa), 0-60 psig (0-400 kPa), and 0-160 psig (0-1100 kPa). When specified with the regulator, the correct range will be supplied.

B - Mounting Bracket - zinc-plated steel bracket for side mounting

L - Low Bleed - reduces steady state air consumption by 50%

H - High Bleed - provides more dynamic performance at lower pressure and flow rates

C - Check Valve - integral safety device which quickly dumps output pressure when there is a loss of supply air.

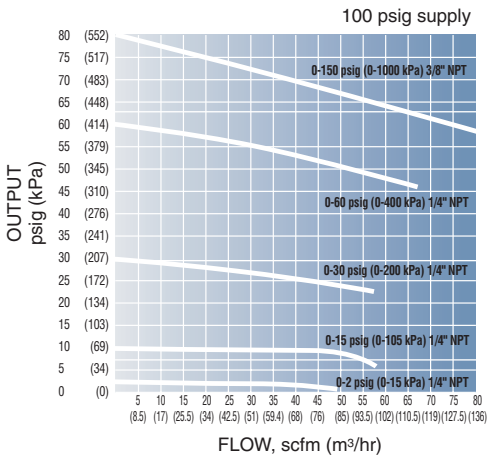
N - Non-Relieving - for constant flow or downstream pressure relief applications

T - Tamperproof Cover - prevents casual adjustment of output pressure.

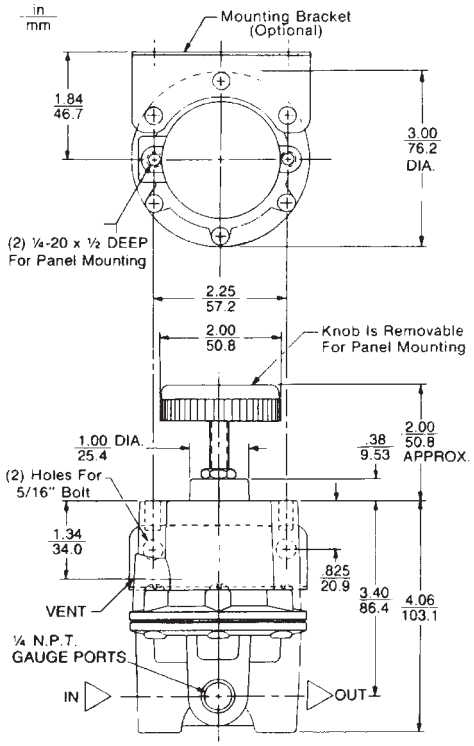
S - Stainless Steel Adjust Screw - hex head stainless steel adjust screw for maximum corrosion resistance

U - BSP Porting - 1/4" BSP porting

Flow Characteristics



Type 700 Dimensions



Type 700 Specifications

Flow Capacity	See performance curves
Exhaust Capacity	4 scfm (6.7 m³/hr) [downstream pressure 5 psi (35 kPa) above set pressure]
Sensitivity	1/4" (6.3 mm) water
Effect of Supply Pressure Variation on Output	Less than 0.1 psi for 100 psi change
Air Consumption, Maximum	Steady State: From 1.0 to 12.5 scfh (.03 to .35 M³/hr), depending on output pressure range
Supply Pressure	250 psig (1750 kPa) Maximum
Operating Temperature	-40°F to 160°F (-40°C to 71°C)
Weight	1 lb, 10 oz (.74 kg)
Mounting	Pipe, panel, or bracket
Port Sizes	1/4", 3/8" or 1/2" NPT
Output Pressure Ranges	0-2 psi, 0-15 psi, 0-30 psi, 0-60 psi, 0-150 psi

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