

Type 700 Precision Air Pressure Regulator

For applications that require accurate pressure control

The Type 700 is designed to provide 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.

Features

- 1/4", 3/8", 1/2" NPT/BSP Porting
- High Flow Capacity Allows flows up to 80 scfm (2,264 Nl/min)
- Sensitive Senses output pressure deviations to within 1/8 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

Specifications

Flow Capacity	See performance curves	
Exhaust Capacity	4 scfm (120 Nl/min) [downstream pressure 5 psi (.35 BAR) above set pressure]	
Sensitivity	1/8" (3.2 mm) water	
Effect of Supply Pressure Variation on Output	Less than 0.1 psi (.007 BAR) for 100 psi (6.7 BAR) change	
Air Consumption, Maximum	Steady State: From 1.0 to 12.5 scfh (30 to 375 NI/hr), depending on output pressure range	
Supply Pressure	250 psig (17.5 BAR) 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	Inlet/Outlet: 1/4", 3/8" or 1/2" NPT/BSP Gauge (2): 1/4" NPT/BSP	
Output Pressure Ranges	0-2 psi (0-0.15 BAR), 0-15 psi (0-1.0 BAR) 0-30 psi (0-2.0 BAR), 0-60 psi (0-4.0 BAR) 0-100 psi (0-7.0 BAR), 0-150 psi (0-10 BAR)	

Materials of Construction

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

Actual size

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Dimensions



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Ordering Use this coding system to order

Model 700 –		_	Pptions Check Valve: integral safety device
Port Size (NPT/BSP) B 1/4" C 3/8" D 1/2"	Range A 0-2 psi (0-1 C 0-15 psi (0 D 0-30 psi (0 E 0-60 psi (0 G 0-100 psi (F 0-150 psi (E 0.15 BAR) 0-1.0 BAR) 0-2.0 BAR) 0-7.0 BAR) 0-7.0 BAR) 10-10 BAR) 10-10 BAR 10 10 10 10 10 10 10 10 10 10 10 10 10	which quickly dumps output pressure when there is a loss of supply air

Accessories

Mounting Bracket (zinc plated steel): P/N 446-707-025 Gauges: 1/4" NPT back mount, 2" face, dual scale

Range PSI (BAR)	Part Number
0-15 (0-1.0)	446-725-003
0-30 (0-2.0)	446-725-004
0-60 (0-4.0)	446-725-001
0-160 (0-11)	446-725-002

Flow Characteristics





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