



Type 100M

Motorized Air Pressure Regulator

Precise pneumatic control by use of an electronic signal

The ControlAir Type 100M Motorized Air Pressure Regulator is designed to provide precise pneumatic control by use of an electrical signal. This highly accurate device is well suited for pneumatic control of a system from a remote location. Utilizing two tandem synchronous AC Motors, each having its own set of leads, but operating through a single output shaft, direction of rotation is dependent of which set of leads power is applied to. The motor is coupled to ControlAir's Type-100, which is a high precision, multi-stage air pressure regulator with low power requirements.

Features

- **Maintains Setting**
Maintains pressure setting in the event of a power failure
- **Low Power Consumption**
- **No Pre-regulation of Supply Pressure Necessary**
- **Mountable at Any Angle**
- **Adjustable Mechanical Stop Limits Maximum Output Pressure**
- **Flexible Range Options**
A variety of motor voltages, pressure change rates, pressure output ranges and ports sizes are available
- **Compact size**

Operation

When no electrical power is supplied the regulator maintains a precise set point despite variable supply pressure conditions and flow rates. When power is applied to the motor the regulator pressure output changes at approximately a constant rate until power is removed.

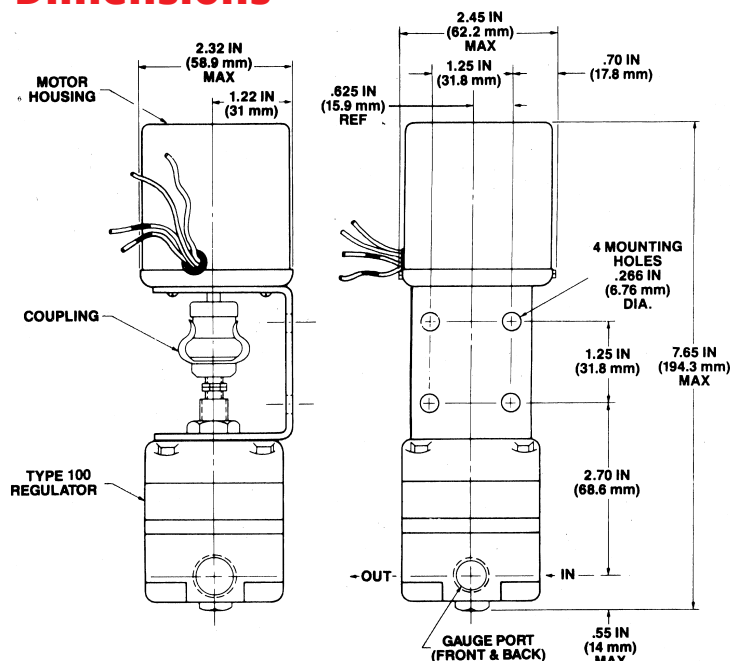
Applications

The Motorized Type-100M is well suited for a variety of applications. It can be used in a centrally controlled system, or in areas not easily accessible to the operator such as ventilation systems. It can be incorporated into open or closed loop process control systems and may be used with programmable controllers.



Type 100M Motorized Air Pressure Regulator

Dimensions

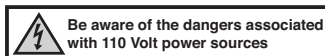
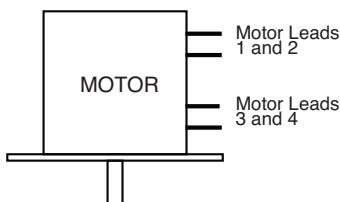


Type 100M Motor Connection Matrix

ControlAir Motor Code Letter	Motor Specification	For CW Rotation Connect Motor Leads Shown Below to Power Source	For CCW Rotation Connect Motor Leads Shown Below to Power Source
B	6 RPM, 110 VAC	1 & 2	3 & 4
F	6 RPM, 24 VDC	BLK (+), RED (-)	RED (+), BLK (-)

Notes:

1. CW (Clockwise) rotation increases pressure.
2. CW and CCW shaft rotation are as viewed looking at the motor shaft.
3. If motor leads are not marked, see diagram for motor lead designations.



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Specifications

Regulator

Flow Capacity	14 scfm (25 m ³ /hr) at 100 psig (7 bar) supply; 20 psig (1.4 bar) outlet
Exhaust Capacity	[5 psig (.35 bar) above set point] Standard Regulator: 2 scfm (3.4 m ³ /hr) High Relief Regulator: 10 scfm (17.0 m ³ /hr)
Total Air Consumption	0.10 scfm
Maximum Supply Pressure	150 psig (10.5 bar)
Temperature Range	0° F to 140° F (-18° C to 60° C)
Available Port Sizes and Output Ranges	See ordering information

Refer to Type 100 regulator literature for more performance specifications.

Motor

Motor Type	Reversible, synchronous motor with gear drive and slip clutch.
Torque	Approximate 8 in. oz.
Operating Voltage/Frequency/Speeds/Power Consumption	See ordering information

Regulator / Motor

Weight	2.75 lb.
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Pressure Range

Pressure Range		Approximate time to cover full range (seconds)
psig	Bar	6 RPM
2-40	0.14 - 2.7	40
2-60	0.14 - 4	30
2-120	0.14 - 8	50

Ordering Use this coding system to order

Model

130 -

Port Size (NPT)

- A 1/8" NPT
- B 1/4" NPT
- C 3/8" NPT

Pressure Range PSI (bar)

- A 2-40 (0.14-2.7)
- B 2-60 (0.14-4)
- C 2-120 (0.14-8)
- D 0.5-25 (0.03-1.7) L.R.
(Note: 50 psig max. supply)
- E 2-120 (0.14-8) H.R.

Motor Specifications

- B 6 RPM, 110 VAC, 60 Hz, 6 Watts
- F 6 RPM, 24 VDC



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