



# 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.

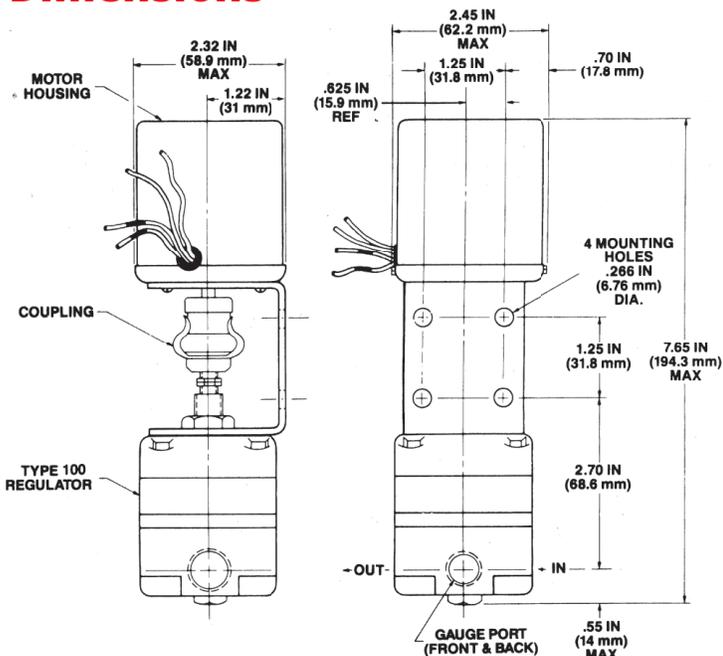
## Applications

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.



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## Dimensions

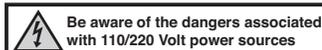
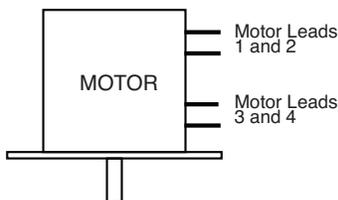


## Type 100M Motor Connection Matrix

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
A	2 RPM, 110 VAC	3 & 4	1 & 2
B	6 RPM, 110 VAC	1 & 2	3 & 4
C	6 RPM, 220 VAC	3 & 4	1 & 2
F	6 RPM, 24 VDC	BLK (+), RED (-)	RED (+), BLK (-)
G	6 RPM, 12 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.



**Warranty** ControlAir, Inc. products are warranted to be free from defects in materials and workmanship for a period of eighteen months from the date of sale, provided said products are used according to ControlAir, Inc. recommended usages. ControlAir, Inc.'s liability is limited to the repair, purchase price refund, or replacement in kind, at ControlAir, Inc.'s sole option, of any products proved defective. ControlAir, Inc. reserves the right to discontinue manufacture of any products or change products materials, designs or specifications without notice. Note: ControlAir does not assume responsibility for the selection, use, or maintenance of any product. Responsibility for the proper selection, use, and maintenance of any ControlAir product remains solely with the purchaser and end user. Drawing downloads available at [www.controlair.com](http://www.controlair.com)

## Specifications

### Regulator

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

Refer to Type 100 regulator literature for more performance specifications.

### Motor

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

### Regulator / Motor

<b>Weight</b>	2.75 lb.
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### Pressure Range

Pressure Range psig	Bar	Approximate time to cover full range (seconds)	
		2 RPM	6 RPM
2-40	0.14 - 2.7	120	40
2-60	0.14 - 4	90	30
2-120	0.14 - 8	150	50

## Ordering Use this coding system to order

### Model

130 -



### Motor Specifications

- A** 2 RPM, 110 VAC, 60 Hz, 4 Watts
- B** 6 RPM, 110 VAC, 60 Hz, 6 Watts
- C** 6 RPM, 220 VAC, 50 Hz, 6 Watts
- F** 6 RPM, 24 VDC
- G** 6 RPM, 12 VDC

### 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.



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