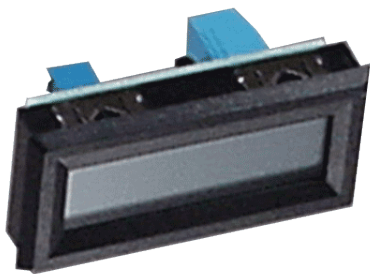


# PROPORTION-AIR

## PM-3 DIGITAL PRESSURE INDICATOR



- 3 1/5 digit display
- LCD display
- Compatible with Proportion-Air electro-pneumatic valves and transducers.

### DESCRIPTION

The PM-3 is an enhanced-contrast LCD voltmeter. It has been calibrated to provide a direct pressure display from any input or output line from Proportion-Air's line of Electro-pneumatic regulators and transducers. It is useful as an actual pressure monitor and features low power requirements, extremely long life and easy viewing.

The PM-3 employs a dual slope integrating A/D converter and operates from an internal 100 mV reference via a precision DC/DC converter. Measuring only 2.3" x 1.1" x .04", the PM-3 will fit virtually anywhere.

Overall accuracy of 0.5%, automatic changeover, auto-zero and over-range indication, and easy installation means you can upgrade an entire monitoring system. The PM-3 can be used in pairs, with "command input" and "analog out" signals most frequently monitored.

### CONNECTION PROCEDURE

#### Terminal locations on Figure 1

PM-3-E Voltage Signal 0-10vdc

- Connect the Supply Power screw terminal to power supply
- Signal and Supply Common screw terminal to DC Common
- Signal screw terminal to the signal output of Proportion-Air electro-pneumatic control or transducer.

PM-3-I Current Signal 4-20mA

- Connect the Supply Power screw terminal to an isolated power supply
- Signal and Supply Common screw terminal to the negative side of the loop and DC common
- Signal screw terminal to signal output of Proportion-Air electro-pneumatic control valve\* or transducer.

\*The Proportion-Air electro-pneumatic control valve 4-20mA analog monitor output must be Sourcing (S in part number) for proper interface to a PM3-I.

### SPECIFICATIONS

#### Input

Configuration:	Bipolar, fully differential
Full Scale Input:	+/- 20 VDC
Sampling Interval:	3x second
Input Offset Adjustment:	Auto Zero
Input Impedance:	> 1M $\Omega$

#### Performance

Accuracy:	+/- 0.5%
Over voltage Protection:	+/- 350 VDC (on input)
Input Current:	100pA
Display Type:	3 1/2 Digit LCD (.35 in/9mm)
Over voltage Indication:	Blanking Display

#### Environmental

Storage Temperature:	-10 to 60 Deg C
Operating Temperature:	0 to 50 Deg C
Relative Humidity:	0 to 95% (non-condensing)
Required Power:	8 to 24 VDC @ 5mA max

### CALIBRATION INFORMATION

The meter is normally pre-calibrated at the factory, and the need for further calibration upon installation is unlikely. However, for periodic recalibration the following information is provided.

Locate the potentiometers in the rear of the unit (see Figure 1). The potentiometers are OFFSET for zero adjustment, SPAN for span adjustment. The OFFSET adjustment will not allow display of negative values.

# DIMENSIONS

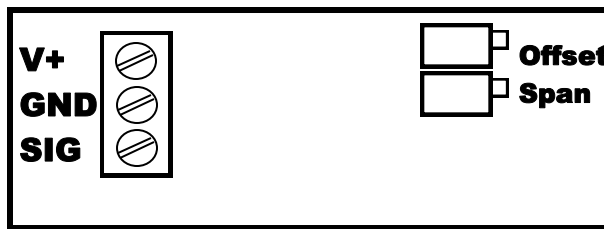
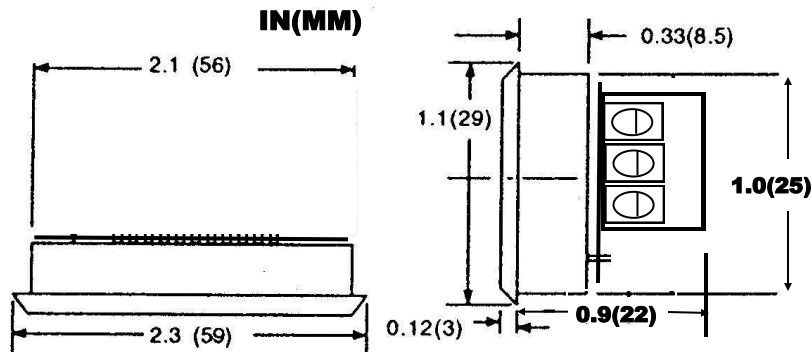
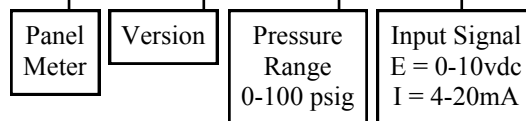


FIGURE 1

## HOW TO ORDER

PM - 3 - 100 - E



Proportion-Air products are warranted to the original purchaser only against defects in material or workmanship for one (1) year from the date of manufacture. The extent of Proportion-Air's liability under this warranty is limited to repair or replacement of the defective unit at Proportion-Air's option. Proportion-Air shall have no liability under this warranty where improper installation or filtration occurred.

All specifications are subject to change without notice. **THIS WARRANTY IS GIVEN IN LIEU OF, AND BUYER HEREBY EXPRESSLY WAIVES, WARRANTIES OR LIABILITIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY OBLIGATION OF PROPORTION-AIR WITH REGARD TO CONSEQUENTIAL DAMAGES, WARRANTIES OF MERCHANTABILITY, DESCRIPTION, AND FITNESS FOR A PARTICULAR PURPOSE.**

WARNING: Installation and use of this product should be under the supervision and control of properly qualified personnel in order to avoid the risk of injury or death.

**PROPORTION-AIR, INC.**

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