

## PM-4 DIGITAL PRESSURE INDICATOR



- 4 1/2 digit display
- LED is visible in almost any application environment
- Compatible with Proportion-Air electro-pneumatic valves and transducers.

### DESCRIPTION

The PM-4 is a 4 1/2 digit, high accuracy LED panel meter designed to work with Proportion-Air's QB/BB electro-pneumatic control valves and transducers. The meter is capable of receiving single ended voltage, differential voltage, and sinking current input. It features a large LED display that is visible in virtually any light or industrial environment.

### CONNECTION PROCEDURE

See Figure 1 for connectors location

#### PM-4-E Voltage signal unit:

- Connect +8 to +18Vdc to "Vcc" connector.
- Connect power supply common to "Gnd" connector.
- Connect signal input to "+Input" connector.

#### PM-4-D Differential voltage signal unit:

- Connect +8 to +18Vdc to "Vcc" connector.
- Connect power supply common to "Gnd" connector.
- Connect signal positive to "+Input" connector.
- Connect signal negative to "-Input" connector.

#### PM-4-I Sinking Current Input unit:

- Connect +8 to +18Vdc to "Vcc" connector.
- Connect power supply common to "Gnd" connector.
- Connect signal to "+Input" connector.

**NOTE: A robust ground is required on the PM-4-D**

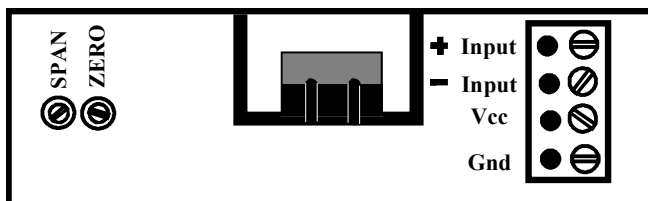


Figure 1

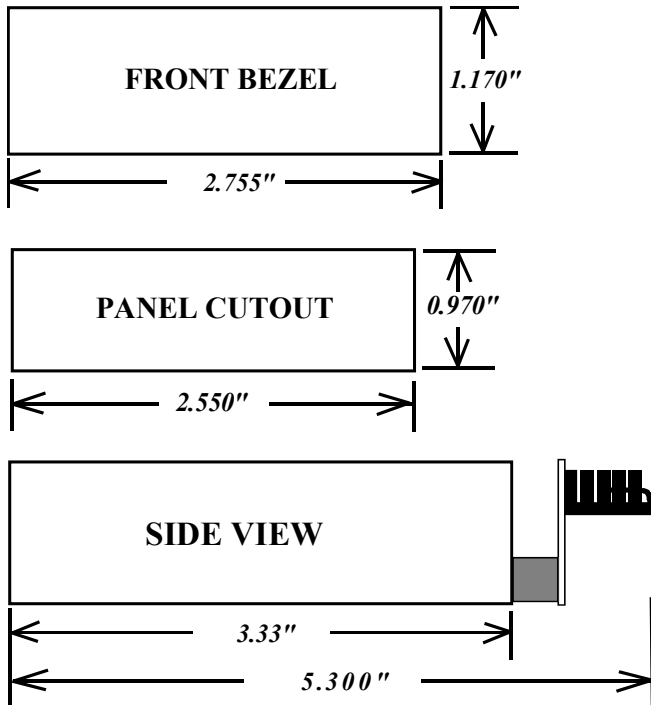
### SPECIFICATIONS

<b>Input Impedance:</b>	>1 megohm
<b>Normal Mode Rejection:</b>	120dB at multiple of 50/60Hz
<b>Common Mode Rejection:</b>	86dB at DC; greater than
<b>Common Mode Voltage:</b>	Depends on range of 20dB at multiples of 50/60Hz unit, but is typically $\pm 10$ VDC
<b>Accuracy:</b>	0.1 percent of reading
<b>Zero Stability:</b>	Autozeroed $\pm 10$ $\mu$ V at all ranges; $\pm 1$ $\mu$ V/ $^{\circ}$ C typical
<b>Conversion Rate:</b>	2.5 readings per second
<b>Polarity:</b>	Automatic
<b>Overload Indication:</b>	When input exceeds full scale on any range, the most significant "1" digit and "+" or "-" symbol is with all other digits blank.
<b>Power Requirements:</b>	+8 to +18VDC at 225mA
<b>Warmup Time:</b>	10 seconds to specified accuracy

### DECIMAL POINT ADJUSTMENT

By desoldering one jumper and soldering another, the PM-4 decimal point can be adjusted. Decimal point jumpers are located on the back of the panel meter to the immediate upper right of the zero potentiometer. There are four options each clearly marked. Identify the jumper that corresponds to the present decimal configuration. Desolder jumper between solder pads. Select new decimal solder pads and solder between them. Recalibrate as required.

## DIMENSIONS



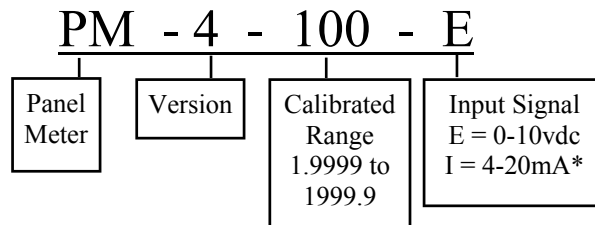
## CALIBRATION PROCEDURE

The PM-4 is factory calibrated. Should further calibration be required, please follow these procedures.

Connect your panel meter as described in "CONNECTION PROCEDURE" Section. With zero signal input, turn zero potentiometer all the way clockwise (clock wise increases output and counter clock wise decreases output). Apply maximum signal input to unit and adjust span potentiometer until the maximum desired number is achieved.

**NOTE:** Zero offset is not available

## HOW TO ORDER



\*NOTE Current indicators are available for use with the DSI. If current indicator is desired for use with a BB or QB unit, a sourcing output option must be incorporated in the model number, S216 for BB series or S589 for QB series.

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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