

Plug-in Signal Conditioners M-UNIT

2-WIRE POTENTIOMETER TRANSMITTER

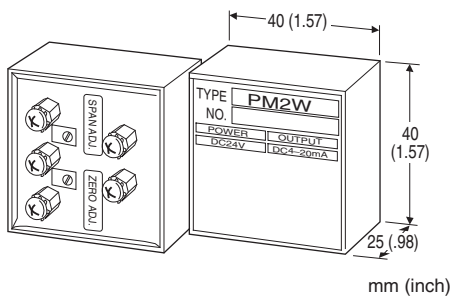
(molded)

Functions & Features

- Providing a 4 – 20 mA DC signal proportional to a potentiometer or slidewire position input
- Constant voltage excitation allows use with pots with total resistances from 100 Ω – 2 kΩ without affecting accuracy
- Small, molded unit is suitable for being incorporated into another device

Typical Applications

- Tank levels
- Positions



MODEL: PM2W

ORDERING INFORMATION

- Code number: PM2W

RELATED PRODUCTS

- Current loop supply (model: YVD)
- Mounting Frame (model: PM2W-FR)

GENERAL SPECIFICATIONS

Construction: Molded

Connection: M3 screw terminals (torque 0.5 N·m)

Screw terminal: Nickel-plated brass

Housing material: Flame-resistant resin (black)

Zero adjustment: 0 to 10 % of total resistance

Span adjustment: (of total resistance)

135 Ω or above: 50 – 100 %

Below 135 Ω: 70 – 100 %

INPUT SPECIFICATIONS

Potentiometer: 100 Ω – 2 kΩ

Minimum span: 50 % of total resistance ($\geq 135 \Omega$); 70 % of total resistance ($< 135 \Omega$)

Excitation: 0.2 V DC

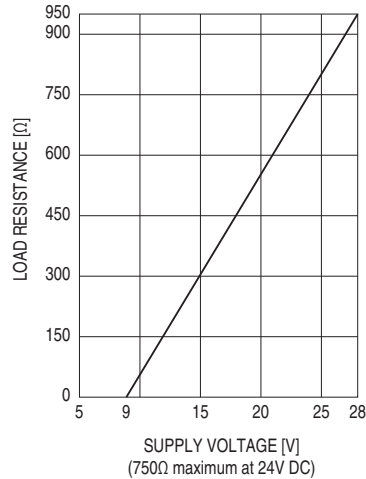
OUTPUT SPECIFICATIONS

Output range: 4 – 20 mA DC

Load resistance vs. supply voltage:

Load Resistance (Ω) = (Supply Voltage (V) – 9 (V)) ÷ 0.02 (A)

(including leadwire resistance)



INSTALLATION

Supply voltage: 9 – 28 V DC

Operating temperature: -5 to +60°C (23 to 140°F)

Operating humidity: 30 to 90 %RH (non-condensing)

Mounting: Surface with the Mounting Frame (model: PM2W-FR)

Weight: 90 g (0.2 lb)

PERFORMANCE in percentage of span

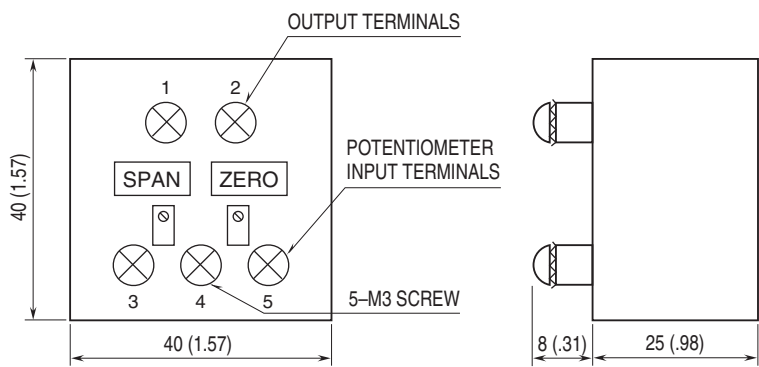
Accuracy: $\pm 0.2 \%$

Temp. coefficient: $\pm 0.015 \%/^{\circ}\text{C}$ ($\pm 0.008 \%/^{\circ}\text{F}$)

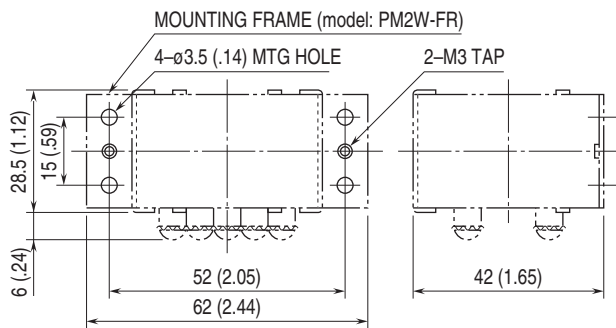
Response time: $\leq 0.1 \text{ sec.}$ (0 – 90 %)

Dielectric strength: 2000 V AC @1 minute (input or output to ground)

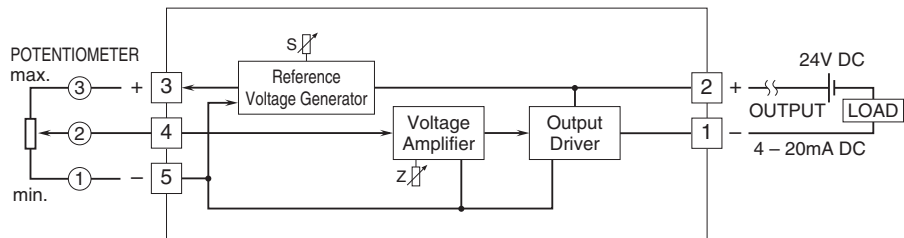
EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



MOUNTING REQUIREMENTS unit: mm (inch)



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.