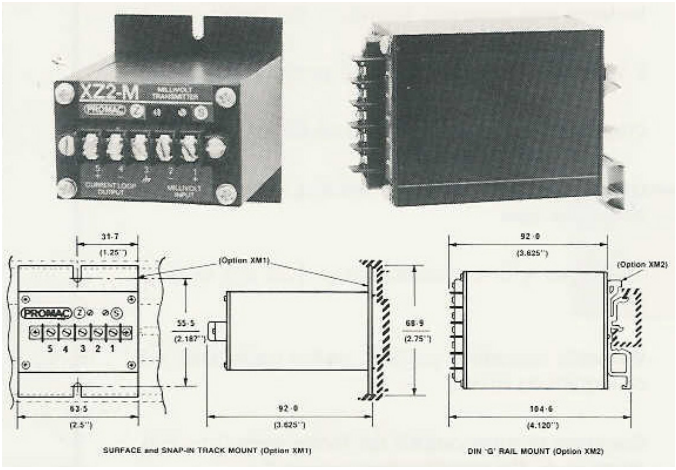
XZ2-M

MILLIVOLT TRANSMITTER

A fully isolated 2 wire, low drift, DC millivolt amplifier transmitter with universal application flexibility

- **Wide ranging DC millivolt inputs (dip switch select)**
- **Spans from 2.6mV to 80mV (for spans above 80mV - see XZ2-D)**
- **High common mode rejection**
- **Input-output isolation**
- **Rugged shielded housing**
- **Grounded or ungrounded input and output compatibility**
- **Reversed output option**



The XZ2-M 2-wire DC millivolt to current transmitter is designed using highly stable state of the art electronics to accept all DC millivolt signals and to power a fully isolated current output proportional to the applied millivolt signal.

The universality of this transducer is achieved by enabling the input range to be both factory or field selected to suit the application – and of course you the user can re-specify and change the range when necessary.

The 12-60Vdc power needed to operate any XZ2-M 2-wire transmitter is obtained from the output current loop and is supplied from the load source or a separate DC power supply source. The recommended output wiring is standard twisted or shielded copper wires.

All XZ2-M transmitters undergo stringent factory tests to ensure their correct specifications. Circuit boards are conformally coated and enclosed in a rugged compact aluminum housing, which can be surface, track or DIN 'G' rail mounted for location in controlled environments. Industrial or explosion proof enclosures are also available for harsh or restricted environments.

Represented By:

INPUT
DC millivolt type signals
Span: 2.6 to 80mV in 6 span ranges – dip switch selectable and adjustable with 22 turn potentiometer
Zero: -20 to 20mV in 7 Zero ranges – dip switch selectable and adjustable with 22 turn potentiometer
Bias Current: 25 nanoAmps max.

OUTPUT
Range: 4-20mA standard
(10-50mA optional)
Load Resistance (R_L)

$$R_L = \frac{\text{Supply Voltage} - 12V}{20mA\ (50mA)}$$

Current Limit:
34mA for input overrange
(85mA for 10-50mA)

PERFORMANCE
Accuracy: (Linearity & Repeatability)
±0.1% of span
±0.25% of span for spans less than 5mV
Temperature Effect: (-20°C to 70°C)
0.01% of span/°C + 1uV/°C
Operating Temperature: -40°C to 85°C
Response Time: 0.5 seconds for 98% change
Common Mode Rejection:
Better than 120dB at 60Hz

POWER
Range: 12 – 60Vdc (max. dissipation 1.2W)
Supply Voltage Effect:
0.002% of span/volt

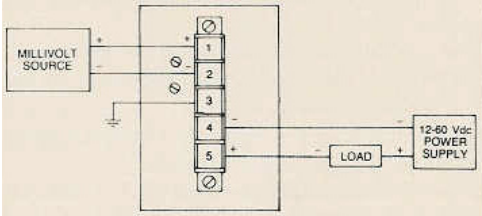
ISOLATION
Input/Output: Transformer isolated to 500Vrms (tested to 1KVrms)

CLASSIFICATION
(General purpose)
Designed for non-incendive use in Class 1, Div. 2 Groups A, B, C, D and suitable for use in Class II, Div. 2 Group G and Class III, Divs. 1 & 2 Hazardous Areas

ELECTRICAL OPTIONS (applicable)
ZJ Reversed Output
ZO 10-50mA Output

MOUNTING BRACKET OPTIONS
XM1 Standard surface/Snap-in track
XM2 DIN 'G' rail
XM4 Explosion proof

Typical Application Wiring Diagram



ORDER INFORMATION
Please specify the following:
1. Model Number XZ2-M
2. Input range
3. Output range
4. Z options
5. X options

Model No. Examples:
XZ2-M/0-5/4-20/XM1
XZ2-M/0-3/10-50/ZO/XM2
XZ2-M/10-20/20-4/ZJ/XM1

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