Super-mini Signal Conditioners M80 Series

POTENTIOMETER TRANSMITTER

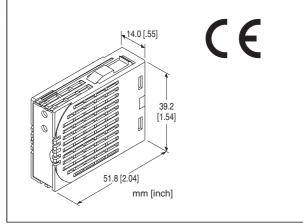
Functions & Features

• Applying constant voltage to the sensor which outputs a signal propotional to a resistance value

• Amplifying the input from the sensor and providing it as an isolated DC

• Mutual isolation (input to output)

• Space-saving, easyto-maintain, multi-channel installation base



MODEL: M80MS-6-R

ORDERING INFORMATION

Code number: M80MS-6-R

INPUT

Total resistance 100 Ω – 10 $k\Omega$

OUTPUT

Voltage **6**: 1 – 5 V DC (Load resistance 10 k Ω min.)

POWER INPUT

DC Power **R**: 24 V DC (Operational voltage range 24 V ±10 %, ripple 10 %p-p max.)

RELATED PRODUCTS

Installation Base (model: M80BSx)
 This unit must be mounted on a dedicated base.

GENERAL SPECIFICATIONS

Construction: Plug-in **Housing material**: Flame-resistant resin (gray) Power supply: Via the Installation Base terminals (model: M80BSx)
Isolation: Input to output to power
Zero adjustment: 0 – 20 % of total resistance (front)
Span adjustment: 80 – 100 % of total resistance (front)

INPUT SPECIFICATIONS

Minimum span: 80 % of total resistance Excitation: 0.5 V DC

INSTALLATION

Current consumption: Approx. 70 mA Operating temperature: -5 to +55°C (23 to 131°F) Operating humidity: 5 to 95 %RH (non-condensing) Mounting: Multi-channnel Installation Base (model: M80BSx) Weight: 20 g (0.71 oz)

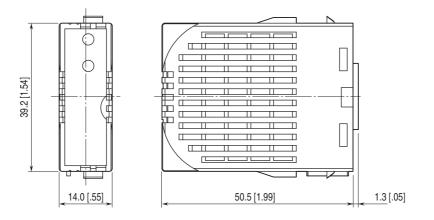
PERFORMANCE in percentage of span

Accuracy: $\pm 0.3 \%$ Temp. coefficient: $\pm 0.015 \%/^{\circ}C (\pm 0.008 \%/^{\circ}F)$ Response time: $\leq 15 \text{ msec.} (0 - 90 \%)$ Line voltage effect: $\pm 0.1 \%$ over voltage range Insulation resistance: $\geq 100 \text{ M}\Omega$ with 500 V DC Dielectric strength: 1000 V AC @1 minute (input to output to power to ground)

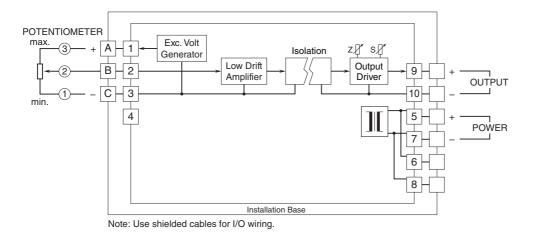
STANDARDS & APPROVALS

EU conformity: EMC Directive EMI EN 61000-6-4 EMS EN 61000-6-2 RoHS Directive

EXTERNAL DIMENSIONS unit: mm [inch]



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.

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