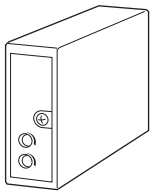
**Dual Output Super-mini Signal Conditioners Pico-M Series**

## POTENTIOMETER CONVERTER

Functions & Features

• Providing two isolated DC outputs proportional to a potentiometer or slidewire position input
• Constant voltage excitation
• Space-saving, easy-to-maintain, multi-channel installation base
• Four-way isolation (input to output 1 to output 2 to power)



## MODEL: M8MS-[1]-R[2]

## ORDERING INFORMATION

• Code number: M8MS-[1]-R[2]
Specify a code from below for each of [1] and [2].
(e.g. M8MS-6A-R/Q)
• Specify the specification for option code /Q
(e.g. /C01 /V01)

## INPUT POTENTIOMETER

Total resistance 100 Ω – 10 kΩ

## [1] OUTPUT 1 / OUTPUT 2

**6A**: 1 – 5 V DC (Load resistance 2500 Ω min.)
/ 4 – 20 mA DC (Load resistance 300 Ω max.)
**44**: 0 – 10 V DC (Load Resistance 5000 Ω min.)
/ 0 – 10 V DC (Load Resistance 5000 Ω min.)
**55**: 0 – 5 V DC (Load resistance 2500 Ω min.)
/ 0 – 5 V DC (Load resistance 2500 Ω min.)
**66**: 1 – 5 V DC (Load resistance 2500 Ω min.)
/ 1 – 5 V DC (Load resistance 2500 Ω min.)

## POWER INPUT

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

## [2] OPTIONS

**blank**: none
**/Q**: Options other than the above (specify the specification)

### SPECIFICATIONS OF OPTION: Q (multiple selections)

**COATING (For the detail, refer to M-System's web site.)**
**/C01**: Silicone coating
**/C02**: Polyurethane coating
**/C03**: Rubber coating
**ADJUSTMENT**
**/V01**: Multi-turn fine adjustment

## RELATED PRODUCTS

• Installation Base or Single Mount Base Socket (model: M8BSx)
This unit must be mounted on dedicated base or socket.

## GENERAL SPECIFICATIONS

**Construction**: Plug-in
**Mounting screw**: M3 screw (torque 0.3 N·m)
**Housing material**: Flame-resistant resin (black)
**Power supply**: Via the Installation Base terminals (model: M8BSx)
**Isolation**: Input to output 1 to output 2 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

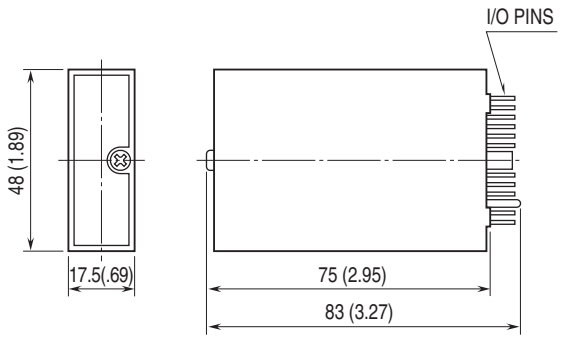
**Current consumption**: Approx. 30 mA (50 mA for current output)
**Operating temperature**: 0 to 55°C (32 to 131°F)
**Operating humidity**: 30 to 95 %RH (non-condensing)
**Mounting**: Installation Base (model: M8BSx)
**Weight**: 70 g (2.5 oz)

## PERFORMANCE in percentage of span

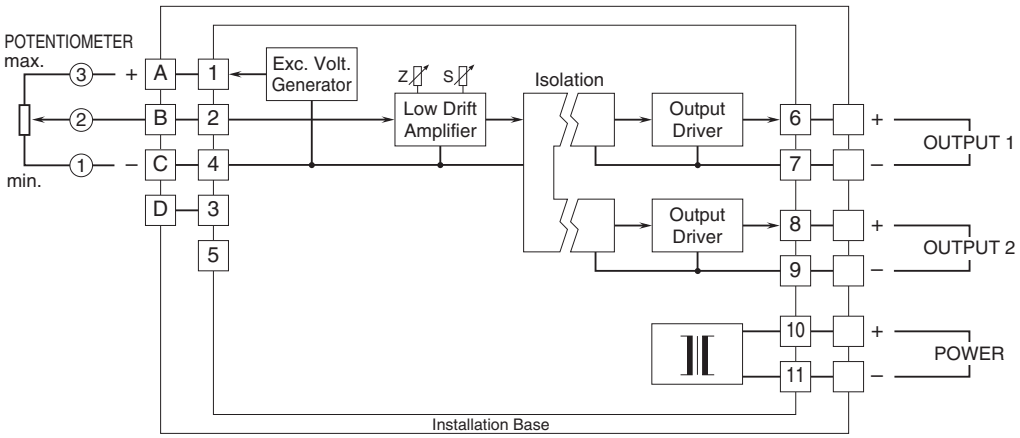
**Accuracy**: ±0.1 %
**Temp. coefficient**: ±0.02 %/°C (±0.01 %/°F)
**Response time**: ≤ 0.2 sec. (0 – 90 %)
**Line voltage effect**: ±0.1 % over voltage range
**Insulation resistance**: ≥ 100 MΩ with 500 V DC
**Dielectric strength**:
1500 V AC @1 minute (input to output 1 or output 2 or power to ground)
500 V AC @1 minute (output 1 to output 2 to power)

**SWC test**: ANSI/IEEE-C37.90.1-1989

## EXTERNAL DIMENSIONS unit: mm (inch)




## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM




⚠ Specifications are subject to change without notice.