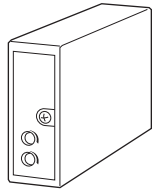


## Dual Output Super-mini Signal Conditioners Pico-M Series

### MILLIVOLT CONVERTER

#### Functions & Features

- Converting a narrow span voltage into two isolated process signals
- Space-saving, easy-to-maintain, multi-channel installation base



### MODEL: M8VS-[1][2]-R-[3]

#### ORDERING INFORMATION

- Code number: M8VS-[1][2]-R[3]  
Specify a code from below for each [1] through [3].  
(e.g. M8VS-26A-R/Q)
- Special input range (For code 0)
- Specify the specification for option code /Q  
(e.g. /C01 /V01)

#### [1] INPUT

##### Voltage

- 1: 0 - 10 mV DC (Input resistance 1 MΩ min.)
- 15: 0 - 50 mV DC (Input resistance 1 MΩ min.)
- 16: 0 - 60 mV DC (Input resistance 1 MΩ min.)
- 2: 0 - 100 mV DC (Input resistance 1 MΩ min.)
- 0: Specify voltage (See INPUT SPECIFICATIONS)

#### [2] 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.)

#### [3] OPTIONS

##### Other Options

blank: none

/Q: Option 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: -2 to +2 % (front)

Span adjustment: 98 to 102 % (front)

#### INPUT SPECIFICATIONS

■ DC Voltage: Less than 0 - 1 V DC

Minimum span: 3 mV

Offset: Max. 1.5 times span

Input resistance: 1 MΩ min.

(10 kΩ min. at loss of power)

#### 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



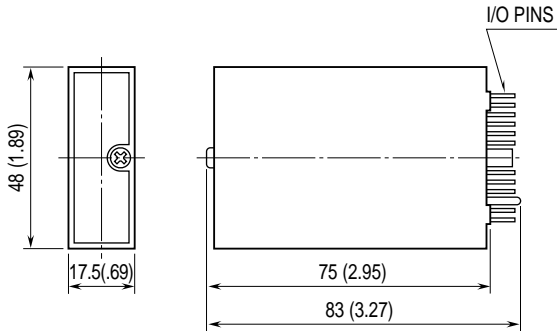
**Dielectric strength:**

1500 V AC @1 minute (input to output 1 or output 2 or power to ground)

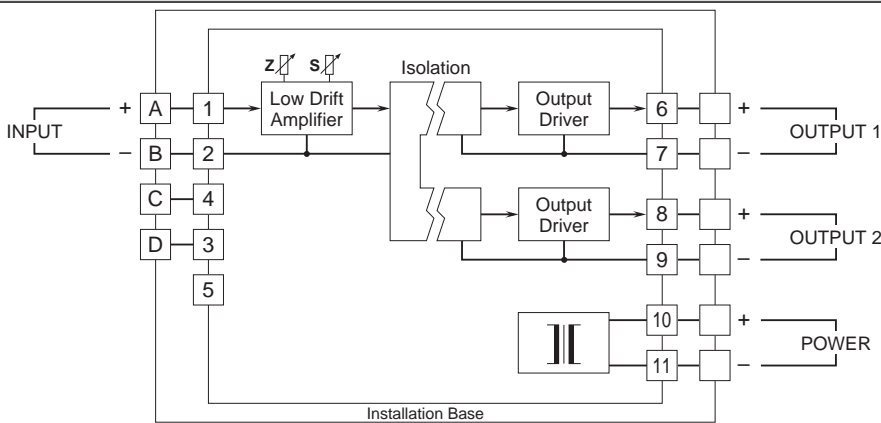
500 V AC @1 minute (output 1 to output 2 to power)

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

**DIMENSIONS unit: mm (inch)**



**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



Specifications are subject to change without notice.