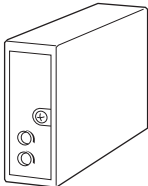


Dual Output Super-mini Signal Conditioners Pico-M Series

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 of [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

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: -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

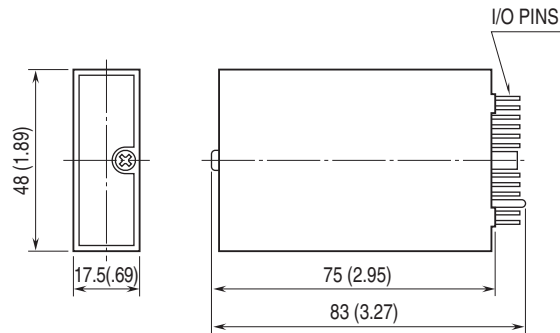
Insulation resistance: ≥ 100 MΩ with 500 V DC

Dielectric strength:

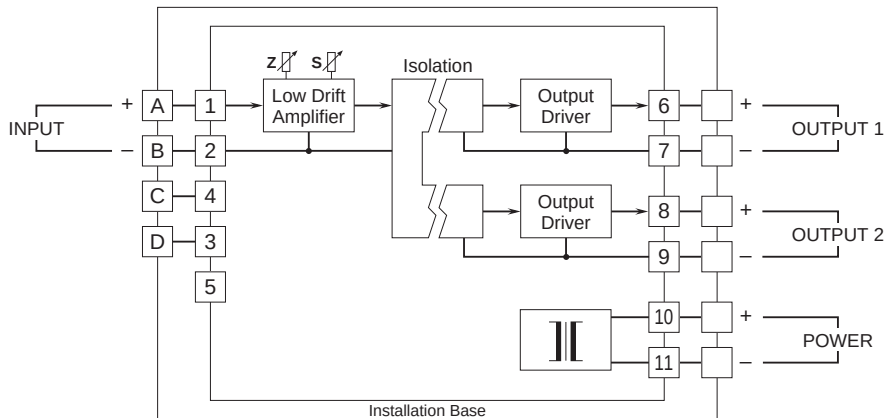
1500 V AC @1 minute (input to output 1 or output 2 or power to ground)
500 V AC @1 minute (output 1 to output 2 to power)

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

EXTERNAL DIMENSIONS unit: mm (inch)



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.