Dual Output Super-mini Signal Conditioners Pico-M Series

CURRENT LOOP SUPPLY

Functions & Features

- Powering a 4 20 mA DC current loop
- Two isolated process signal outputs
- Space-saving, easyto-maintain, multi-channel installation base



MODEL: M8DY-[1][2]-R[3]

ORDERING INFORMATION

• Code number: M8DY-[1][2]-R[3]

- Specify a code from below for each [1] through [3]. (e.g. M8DY-6A0-R/Q)
- Specify the specification for option code /Q (e.g. /C01 /V01)

INPUT

Current

4 – 20 mA DC (Input resistance 250 Ω)

[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.)

[2] TRANSMITTER POWER SUPPLY SWITCH

0: Without

1: With

POWER INPUT

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

[3] OPTIONS

blank: none

/Q: With options (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) Transmitter power supply switch: Stops power supply at OFF (factory setting: ON)

SUPPLY OUTPUT

Output voltage: 24 - 26 V DC with no load Current rating: ≤ 22 mA DC • Shortcircuit Protection Current limited: 30 mA max. Protected time duration: No limit

INPUT SPECIFICATIONS

DC Current: Input resistor incorporated

INSTALLATION

Current consumption: Approx. 60 mA 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)

M.SYSTEM CO.,LTD.

http://www.m-system.co.jp/

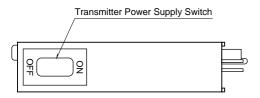
M8DY SPECIFICATIONS

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**: 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

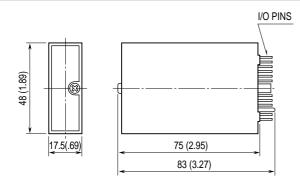
BOTTOM VIEW

• Transmitter Power Supply Switch

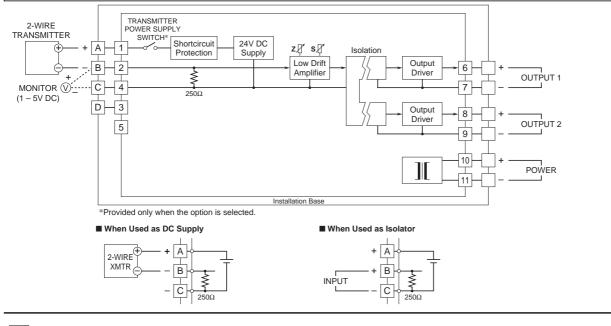
This switch is provided only when the option is specified in ordering. Turn the switch right for ON, left for OFF.



DIMENSIONS unit: mm (inch)



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



M·SYSTEM CO.,LTD, http://www.m-system.co.jp/

M8DY SPECIFICATIONS

Specifications are subject to change without notice.



M8DY SPECIFICATIONS