

Dual Output Super-mini Signal Conditioners Pico-M Series

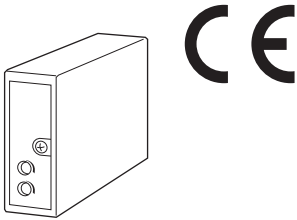
For all other input codes, any output code except 4W4W or 5W5W can be selected.)

SIGNAL CONVERTER

(CE)

Functions & Features

- Converting a DC input into two isolated process signals
- Space-saving, easy-to-maintain, multi-channel installation base



MODEL: M8YV1-[1][2]-R[3]

ORDERING INFORMATION

- Code number: M8YV1-[1][2]-R[3]

Specify a code from below for each of [1] through [3].

(e.g. M8YV1-A6A-R/F/Q)

- Special input range (For codes Z & 0)
- Specify the specification for option code /Q (e.g. /C01 /V01)

[1] INPUT

Current

- A: 4 - 20 mA DC (Input resistance 250 Ω)
- B: 2 - 10 mA DC (Input resistance 500 Ω)
- C: 1 - 5 mA DC (Input resistance 1000 Ω)
- D: 0 - 20 mA DC (Input resistance 50 Ω)
- E: 0 - 16 mA DC (Input resistance 62.5 Ω)
- F: 0 - 10 mA DC (Input resistance 100 Ω)
- G: 0 - 1 mA DC (Input resistance 1000 Ω)
- H: 10 - 50 mA DC (Input resistance 100 Ω)
- Z: Specify current (See INPUT SPECIFICATIONS)

Voltage

- 3: 0 - 1 V DC (Input resistance 1 M Ω min.)
 - 4: 0 - 10 V DC (Input resistance 1 M Ω min.)
 - 5: 0 - 5 V DC (Input resistance 1 M Ω min.)
 - 6: 1 - 5 V DC (Input resistance 1 M Ω min.)
 - 4W: -10 - +10 V DC (Input resistance 1 M Ω min.)
 - 5W: -5 - +5 V DC (Input resistance 1 M Ω min.)
 - 0: Specify voltage (See INPUT SPECIFICATIONS)
- (The input code 4W can be combined only with the output code 4W4W.)

For the input code 5W, any output code except 4W4W can be selected.

[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.)
- 4W4W: -10 - +10 V DC (Load resistance 10 k Ω min.)
/ -10 - +10 V DC (Load resistance 10 k Ω min.)
- 5W5W: -5 - +5 V DC (Load resistance 5000 Ω min.)
/ -5 - +5 V DC (Load resistance 5000 Ω min.)

POWER INPUT

DC Power

R: 24 V DC

(Operational voltage range 24 V \pm 10 %, ripple 10 %p-p max.)

[3] OPTIONS (multiple selections)

Response Time (0 - 90 %)

blank: Standard (\leq 15 msec.)

/F: Fast Response (Approx. 1 msec.)

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 our 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)
(±1 % with the input suffix codes 4W and 5W selected)
Span adjustment: 98 to 102 % (front)
(99 to 101 % with the input suffix codes 4W and 5W selected.)

INPUT SPECIFICATIONS

■ **DC Current:** Input resistor incorporated
Specify input resistance value for code Z.
($R \leq 0.25 \text{ W} \div [\text{F.S. Current}]^2$)
■ **DC Voltage:** -10 - +10 V DC
Minimum span: 1 V
Offset: Max. 1.5 times span
Input resistance: 1 M Ω min.
(10 k Ω min. at loss of power)

INSTALLATION

Current consumption: Approx. 20 mA (40 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)

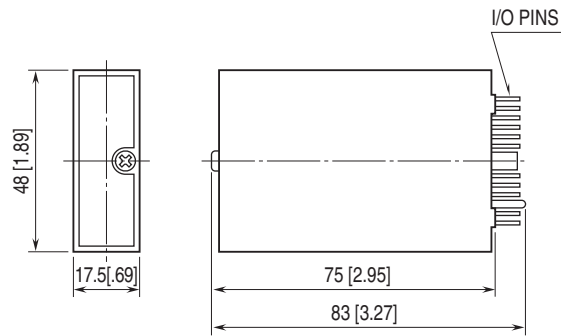
PERFORMANCE in percentage of span

Accuracy: ±0.1 %
Temp. coefficient: ±0.02 %/°C (±0.01 %/°F)
Line voltage effect: ±0.1 % over voltage range
Insulation resistance: ≥ 100 M Ω 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

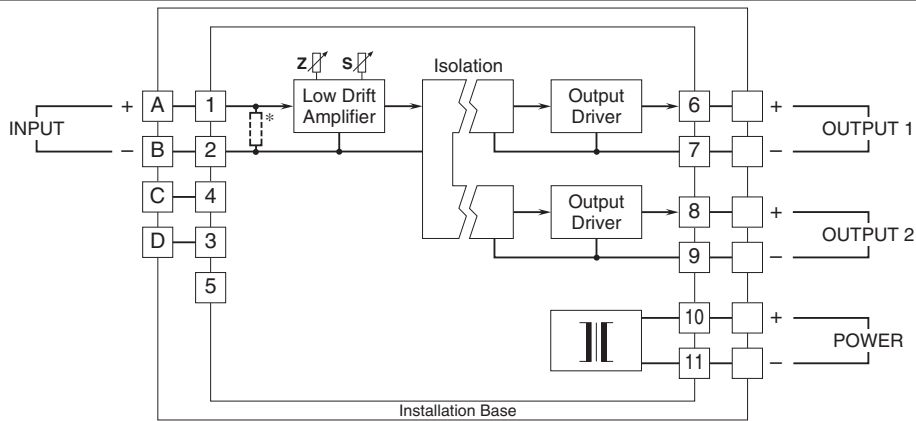
STANDARDS & APPROVALS

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



*Input shunt resistor incorporated for current input.



Specifications are subject to change without notice.