

## Euro Terminal Ultra-Slim Signal Conditioners M6D Series

### SIGNAL TRANSMITTER

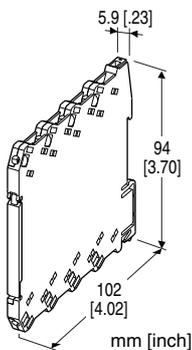
(high-accuracy, ultra-high speed response 30  $\mu$ sec.)

#### Functions & Features

- 5.9-mm wide ultra-slim design
- Low profile allows the M6D module mounted in a 120-mm deep panel
- Galvanically isolates process instrumentation signals
- 30-microsecond response
- Frequency characteristics 12 kHz (-3 dB)
- High-density mounting
- Power indicator LED

#### Typical Applications

- Isolation for a vibration analyzing system
- Isolation for Discharge/Charge tester



## MODEL: M6DVF-[1]4W-R[2]

### ORDERING INFORMATION

- Code number: M6DVF-[1]4W-R[2]
- Specify a code from below for each of [1] and [2].  
(e.g. M6DVF-04W-R/Q)
- Special input range (For code 0: e.g. -164 - +164 mV DC)
  - Specify the specification for option code /Q  
(e.g. /C01)

#### [1] INPUT

Voltage

**2W:** -100 - +100 mV DC (Input resistance 1 M $\Omega$  min.)

**4W:** -10 - +10 V DC (Input resistance 1 M $\Omega$  min.)

**5W:** -5 - +5 V DC (Input resistance 1 M $\Omega$  min.)

**8W:** -20 - +20 V DC (Input resistance 1 M $\Omega$  min.)

**0:** Specify voltage

(Select input range as indicated below. Input resistance 1 M $\Omega$  min.)

-20 - +20 mV DC

-24 - +24 mV DC

-40 - +40 mV DC

-85 - +85 mV DC

-164 - +164 mV DC

-200 - +200 mV DC

-15 - +15 V DC

-25 - +25 V DC

-55 - +55 V DC

-60 - +60 V DC

#### OUTPUT

Voltage

**4W:** -10 - +10 V DC (Load resistance 2000  $\Omega$  min.)

#### POWER INPUT

DC Power

**R:** 24 V DC

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

#### [2] OPTIONS

**blank:** none

**/Q:** With options (specify the specification)

### SPECIFICATIONS OF OPTION: Q

**COATING** (For the detail, refer to our web site.)

**/C01:** Silicone coating

**/C02:** Polyurethane coating

### GENERAL SPECIFICATIONS

**Connection**

**Input and output:** Euro terminal (torque 0.3 N·m)

**Power input:** Via the Installation Base (model: M6DBS)

or Euro terminal (torque 0.3 N·m)

**Applicable wire size:** 0.2 to 2.5 mm<sup>2</sup>, stripped length 8 mm

**Housing material:** Flame-resistant resin (black)

**Isolation:** Input to output to power

**Overrange input:** -5 to +105 %

**Zero adjustment:** -1 to +1 % (front)

**Span adjustment:** 99 to 101 % (front)

**Power indicator LED:** Green LED turns on when the power is supplied.

### INPUT SPECIFICATIONS

**Input resistance:** 1 M $\Omega$  min. (3 k $\Omega$  min. at power loss)

### OUTPUT SPECIFICATIONS

**Parallel load capacitance:** Max. 2000 pF

### INSTALLATION

**Power consumption:** Approx. 0.6 W

**Operating temperature:** -20 to +55°C (-4 to +131°F)

**Operating humidity:** 30 to 90 %RH (non-condensing)

**Mounting:** Installation Base (model: M6DBS) or DIN rail

**Weight:** 60 g (2.1 oz)

## PERFORMANCE in percentage of span

**Accuracy:**  $\pm 0.01$  %

**Temp. coefficient:**  $\pm 0.005$  %/°C ( $\pm 0.003$  %/°F)

**Frequency characteristics:** 12 kHz, -3 dB

**Response time:**  $\leq 30$   $\mu$ sec. (0 - 90 %)

**Line voltage effect:**  $\pm 0.01$  % over voltage range

**Insulation resistance:**  $\geq 100$  M $\Omega$  with 500 V DC

**Dielectric strength:** 2000 V AC @1 minute (input to output to power to ground)

## STANDARDS & APPROVALS

**EU conformity:**

EMC Directive

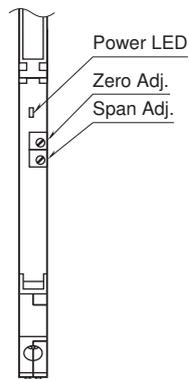
EMI EN 61000-6-4

EMS EN 61000-6-2

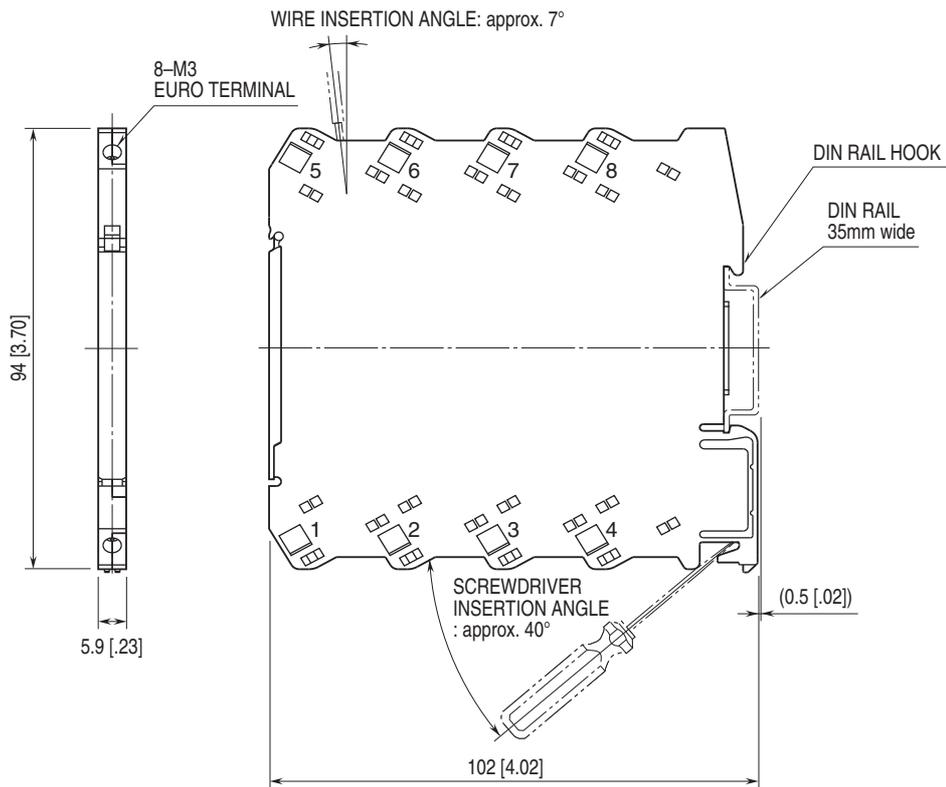
RoHS Directive

## EXTERNAL VIEW

(With the cover open)

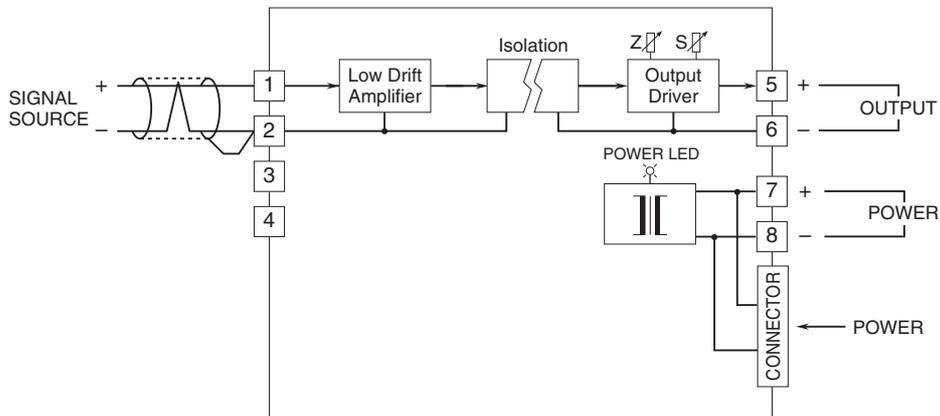


## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



• When mounting, no extra space is needed between units.

## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



This unit, by its fast-response feature, is not designed to eliminate noise present in the input signal. Use a shielded twisted-pair cable to prevent noise from entering through the input wiring.



Specifications are subject to change without notice.