

## Euro Terminal Ultra-Slim Signal Conditioners M6D Series

### SIGNAL TRANSMITTER

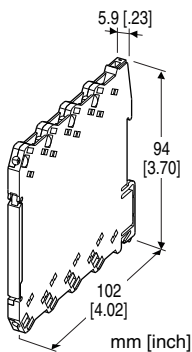
(high-accuracy, ultra-high speed response 30  $\mu$ sec.)

#### 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 M-System's 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:**  $\pm 0.005\%/^{\circ}\text{C}$  ( $\pm 0.003\%/^{\circ}\text{F}$ )  
**Frequency characteristics:** 12 kHz, -3 dB  
**Response time:**  $\leq 30\ \mu\text{sec.}$  (0 - 90 %)  
**Line voltage effect:**  $\pm 0.01\%$  over voltage range  
**Insulation resistance:**  $\geq 100\ \text{M}\Omega$  with 500 V DC  
**Dielectric strength:** 2000 V AC @1 minute (input to output to power to ground)

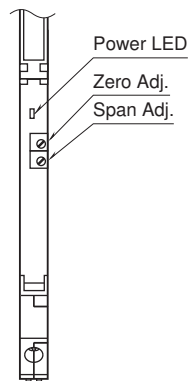
## STANDARDS & APPROVALS

### EU conformity:

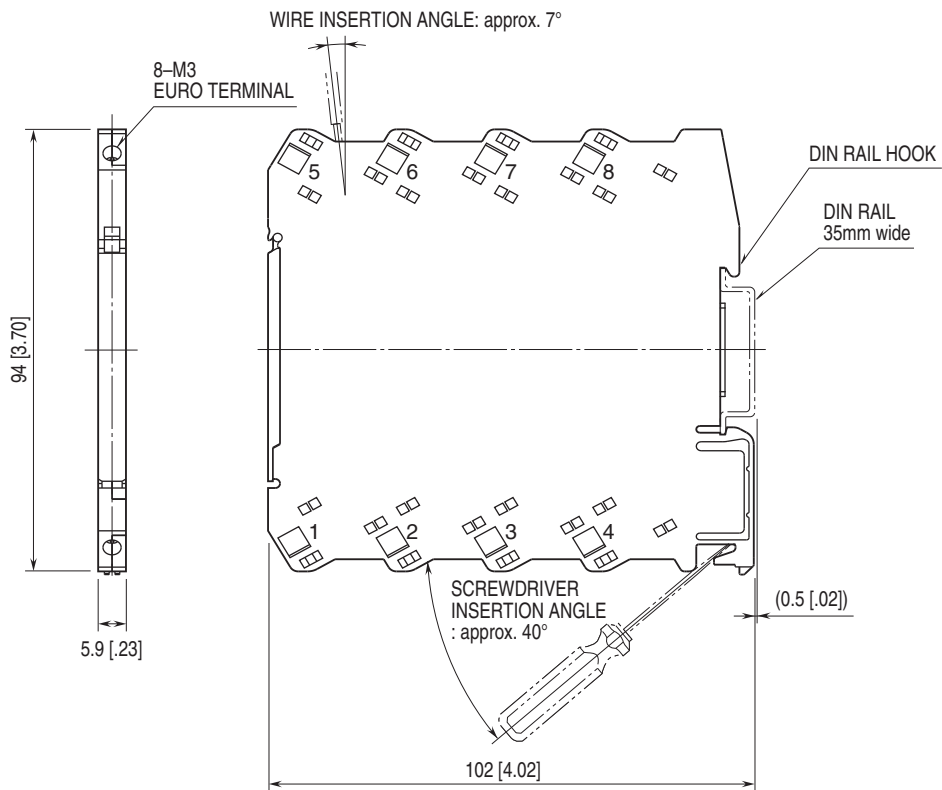
EMC Directive  
EMI EN 61000-6-4  
EMS EN 61000-6-2  
RoHS Directive

## EXTERNAL VIEW

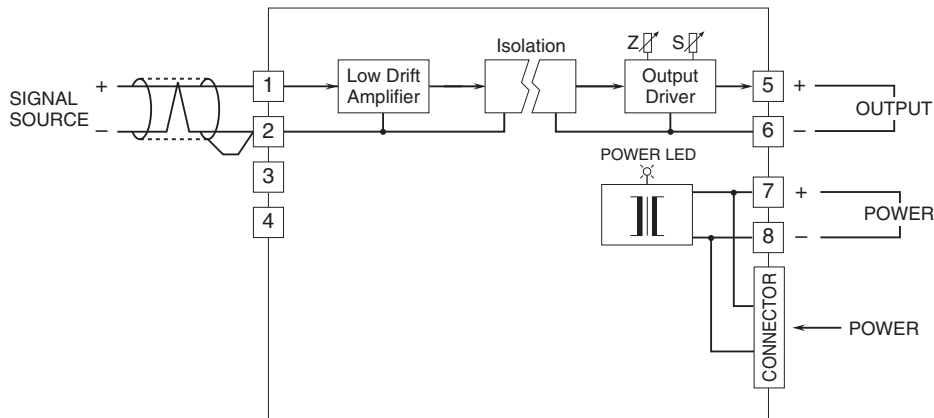
(With the cover open)



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



## 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.