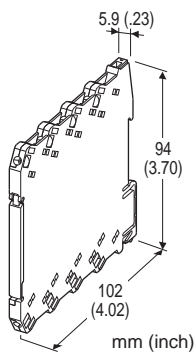


## Euro Terminal Ultra-Slim Signal Conditioners M6D Series

### SIGNAL TRANSMITTER

#### 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
- High-density mounting
- Power indicator LED
- UL approval



### MODEL: M6DVS-[1][2]-[3][4]

#### ORDERING INFORMATION

- Code number: M6DVS-[1][2]-[3][4]  
Specify a code from below for each [1] through [4].  
(e.g. M6DVS-4W4W-R/K/UL)
- Special input and output ranges (For codes Z & 0)

#### [1] INPUT

##### Current

- A:** 4 - 20 mA DC (Input resistance 50 Ω)
- B:** 2 - 10 mA DC (Input resistance 100 Ω)
- C:** 1 - 5 mA DC (Input resistance 200 Ω)
- D:** 0 - 20 mA DC (Input resistance 50 Ω)
- E:** 0 - 16 mA DC (Input resistance 50 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 20 Ω)
- Z:** Specify current (See INPUT SPECIFICATIONS)

##### Voltage

- 3:** 0 - 1 V DC (Input resistance 1 MΩ min.)
- 4:** 0 - 10 V DC (Input resistance 1 MΩ min.)
- 5:** 0 - 5 V DC (Input resistance 1 MΩ min.)
- 6:** 1 - 5 V DC (Input resistance 1 MΩ min.)
- 4W:** -10 - +10 V DC (Input resistance 1 MΩ min.)

**5W:** -5 - +5 V DC (Input resistance 1 MΩ min.)

**0:** Specify voltage (See INPUT SPECIFICATIONS)

#### [2] OUTPUT

##### Current

- A:** 4 - 20 mA DC (Load resistance 550 Ω max.)
- D:** 0 - 20 mA DC (Load resistance 550 Ω max.)
- G:** 0 - 1 mA DC (Load resistance 11 kΩ max.)
- Z:** Specify current (See OUTPUT SPECIFICATIONS)

##### Voltage

- 3:** 0 - 1 V DC (Load resistance 1000 Ω min.)
- 4:** 0 - 10 V DC (Load resistance 10 kΩ min.)
- 5:** 0 - 5 V DC (Load resistance 5000 Ω min.)
- 6:** 1 - 5 V DC (Load resistance 5000 Ω min.)
- 4W:** -10 - +10 V DC (Load resistance 20 kΩ min.)
- 5W:** -5 - +5 V DC (Load resistance 10 kΩ min.)
- 0:** Specify voltage (See OUTPUT SPECIFICATIONS)

#### [3] POWER INPUT

##### AC Power

- M2:** 100 - 240 V AC (Operational voltage range 90 - 264 V, 47 - 66 Hz)  
(UL not available)

##### DC Power

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

#### [4] OPTIONS (multiple selections)

##### RESPONSE TIME (0 - 90 %)

- blank:** Standard (≤ 0.5 sec.)
- /K:** Fast Response (Approx. 3.5 msec. voltage output; Approx. 25 msec. current output)

##### STANDARDS & APPROVALS

- blank:** CE marking
- /UL:** UL approval (CE marking)

#### GENERAL SPECIFICATIONS

##### Connection

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

**Power input:** Via the Installation Base (model: M6DBS)  
(not available for AC power input)  
or Euro terminal (torque 0.3 N·m)

**Applicable wire size:** 0.2 to 2.5 mm<sup>2</sup>

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

**Isolation:** Input to output to power

**Zero adjustment:** -2 to +2% (front)

(Output code 4W, 5W: Adjustable at 0V. No output below 0mA for the code D.)

**Span adjustment:** 98 to 102 % (front)

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

## INPUT SPECIFICATIONS

- **DC Current:** Input resistor incorporated  
Specify input resistance value for code Z.  
( $R \leq 0.125 \text{ W} \div [\text{F.S. Current}]^2$ )
  - **DC Voltage:** -30 - +30 V DC
- Minimum span:** 100 mV  
**Offset:** Max. 1.5 times span  
**Input resistance:** 1 M $\Omega$  min. (10 k $\Omega$  min. with no power supplied)

UL/C-UL nonincendive Class I, Division 2,  
Groups A, B, C, and D hazardous locations  
(ANSI/ISA-12.12.01, CAN/CSA-C22.2 No.213)  
UL/C-UL general safety requirements  
(UL 61010-1, CAN/CSA-C22.2 No.61010-1)

## OUTPUT SPECIFICATIONS

- **DC Current:** 0 - 20 mA DC
- Minimum span:** 1 mA  
**Offset:** Max. 1.5 times span  
**Load resistance:** Output drive 11 V max.
- **DC Voltage:** 0 - 10 V DC
- Minimum span:** 1 V  
**Offset:** Max. 1.5 times span  
**Load resistance:** Output drive 1 mA max.; at  $\geq 1 \text{ V}$

## INSTALLATION

- Power Consumption**
- **AC Power input:** Max. 2 VA
  - **DC Power input:** Approx. 0.5 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

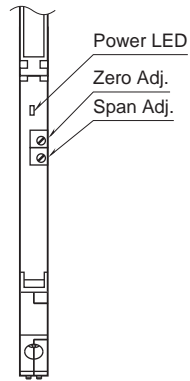
- Accuracy:**  $\pm 0.1 \%$   
**Temp. coefficient:**  $\pm 0.01 \%/^{\circ}\text{C}$  ( $\pm 0.006 \%/^{\circ}\text{F}$ )  
**Line voltage effect:**  $\pm 0.1 \%$  over voltage range  
**Insulation resistance:**  $\geq 100 \text{ M}\Omega$  with 500 V DC  
**Dielectric strength:** 2000 V AC @1 minute (input to output to power to ground)

## STANDARDS & APPROVALS

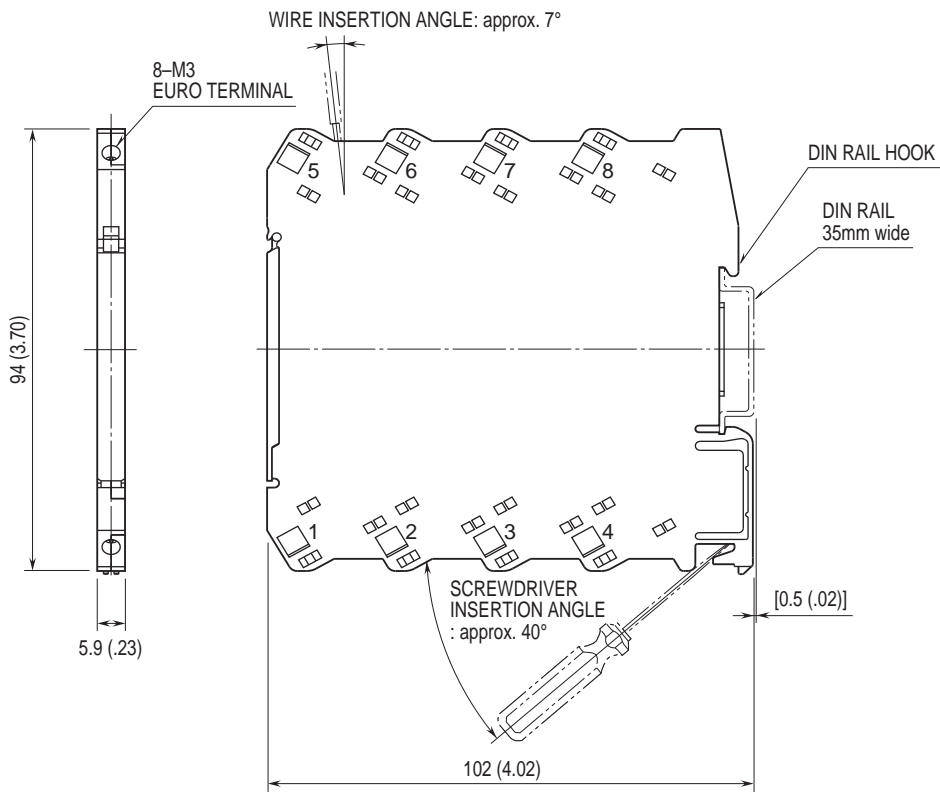
- CE conformity:**
- EMC Directive (2004/108/EC)
  - EN 61000-6-4 (EMI)
  - EN 61000-6-2 (EMS)
  - Low Voltage Directive (2006/95/EC)
  - EN 61010-1
  - Installation Category II
  - Pollution Degree 2
  - Max. operating voltage 300 V
  - Input or output to power: Reinforced insulation
  - Input to output: Basic insulation
- Approval:**

## EXTERNAL VIEW

(With the cover open)

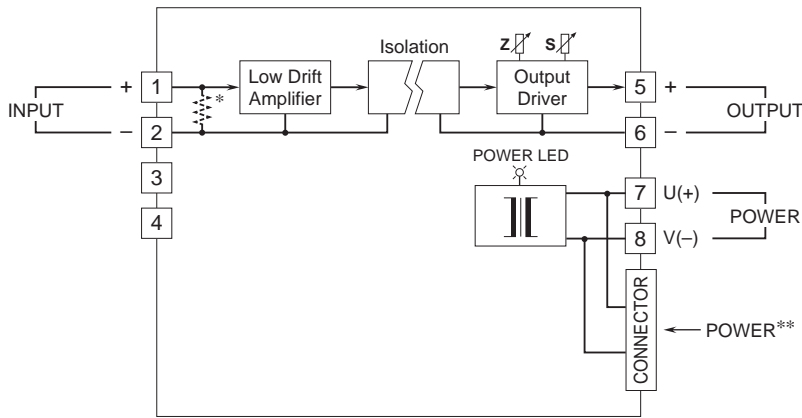


## DIMENSIONS unit: mm (inch)



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

**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



\*Input shunt resistor incorporated for current input.  
 \*\*Available only for DC power input type



Specifications are subject to change without notice.