

Screw Terminal Ultra-Slim Signal Conditioners M6N Series

SIGNAL TRANSMITTER

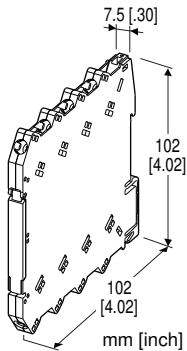
(high-accuracy, ultra-high speed response 30 μsec.)

Functions & Features

- 7.5-mm wide ultra-slim design
- Low profile allows the M6N 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: M6NVF-[1]4W-R[2]

ORDERING INFORMATION

- Code number: M6NVF-[1]4W-R[2]
- Specify a code from below for each of [1] and [2].
(e.g. M6NVF-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 MΩ min.)

4W: -10 - +10 V DC (Input resistance 1 MΩ min.)

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

8W: -20 - +20 V DC (Input resistance 1 MΩ min.)

0: Specify voltage

(Select input range as indicated below. Input resistance 1 MΩ 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 Ω min.)

POWER INPUT

DC Power

R: 24 V DC

(Operational voltage range 24 V ±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: M3 screw terminal (torque 0.5 N·m)

Power input: Via the Installation Base (model: M6NBS)

or M3 screw terminal (torque 0.5 N·m)

Recommended solderless terminal: Max. 5.8 mm (0.23")

wide; Ones with insulation sleeve do not fit.

Applicable wire size: 0.2 - 2.5 mm²

Housing material: Flame-resistant resin (black)

Isolation: Input to output to power

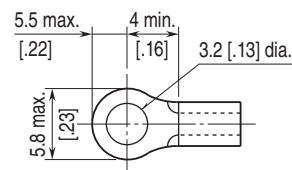
Overrange input: -5 to +105 %

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

Span adjustment: 99 to 101 % (front)

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

■ Recommended solderless terminal (unit: mm [inch])



INPUT SPECIFICATIONS

Input resistance: 1 M Ω min. (3 k Ω 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: M6NBS) or DIN rail

Weight: 60 g (2.1 oz)

PERFORMANCE in percentage of span

Accuracy: ± 0.01 %

Temp. coefficient: ± 0.005 %/°C (± 0.003 %/°F)

Frequency characteristics: 12 kHz, -3 dB

Response time: ≤ 30 μ sec. (0 - 90 %)

Line voltage effect: ± 0.01 % over voltage range

Insulation resistance: ≥ 100 M Ω with 500 V DC

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

STANDARDS & APPROVALS

EU conformity:

EMC Directive

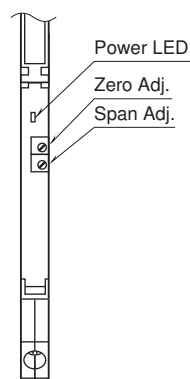
EMI EN 61000-6-4

EMS EN 61000-6-2

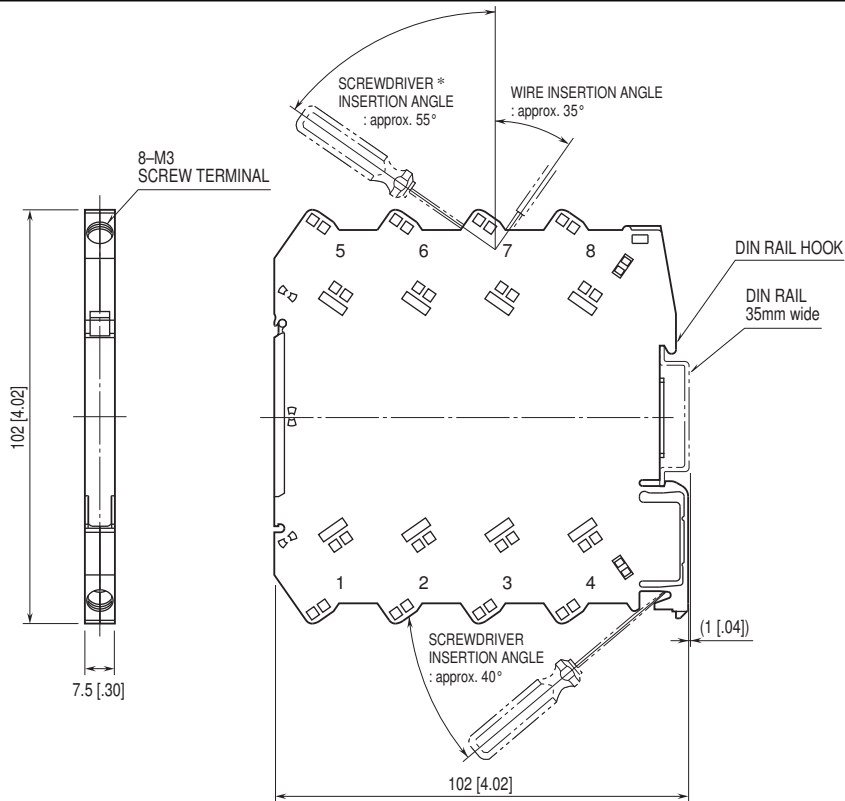
RoHS Directive

EXTERNAL VIEW

(With the cover open)

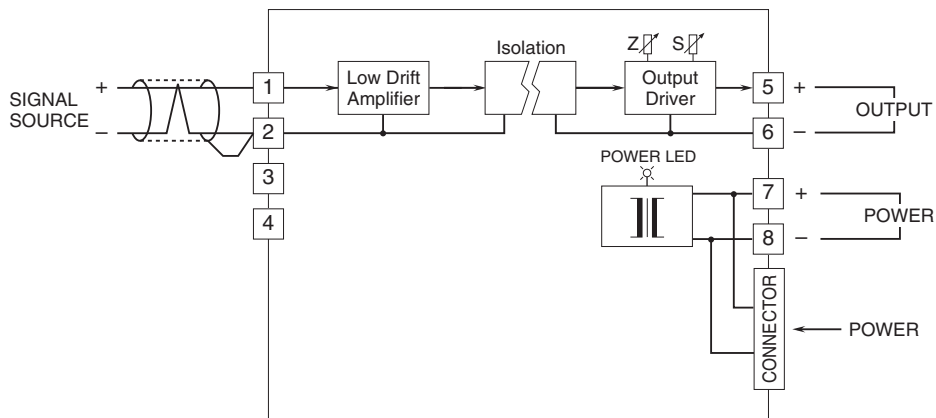


EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



*Screwdriver stem diameter: 6 mm [.24"] or less • 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.