

Tension-Clamp Ultra-Slim Signal Conditioners M6S Series

SIGNAL TRANSMITTER

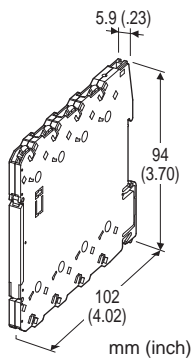
(high-accuracy, ultra-high speed response 30 μ sec.)

Functions & Features

- Maintenance-free tension clamp connection
- 5.9-mm wide ultra-slim design
- Low profile allows the M6S 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: M6SVF-[1]4W-R

ORDERING INFORMATION

- Code number: M6SVF-[1]4W-R
Specify a code from below for [1].
(e.g. M6SVF-04W-R)
- Special input range (For codes 0: e.g. -164 - +164 mV DC)

[1] INPUT

Voltage

2W : -100 - +100 mV 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.)

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

0 : Specify voltage

(Select input range as indicated below. Input resistance 1 M Ω 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 \pm 10 %, ripple 10 %p-p max.)

GENERAL SPECIFICATIONS

Connection

Input and output: Tension clamp

Power input: Via the Installation Base (model: M6SBS) or Tension clamp

Applicable wire size: 0.2 to 2.5 mm², 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 LED: Green light turns on when the power is supplied.

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 $^{\circ}$ C (-4 to +131 $^{\circ}$ F)

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

Mounting: Installation Base (model: M6SBS) or DIN rail

Weight: 60 g (2.1 oz)

PERFORMANCE in percentage of span

Accuracy: \pm 0.01 %

Temp. coefficient: \pm 0.005 %/ $^{\circ}$ C (\pm 0.003 %/ $^{\circ}$ F)

Frequency characteristics: 12 kHz, -3 dB

Response time: \leq 30 μ sec. (0 - 90 %)

Line voltage effect: \pm 0.01 % over voltage range

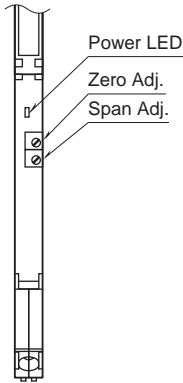
Insulation resistance: $\geq 100 \text{ M}\Omega$ with 500 V DC
Dielectric strength: 2000 V AC @1 minute (input to output to power to ground)

STANDARDS & APPROVALS

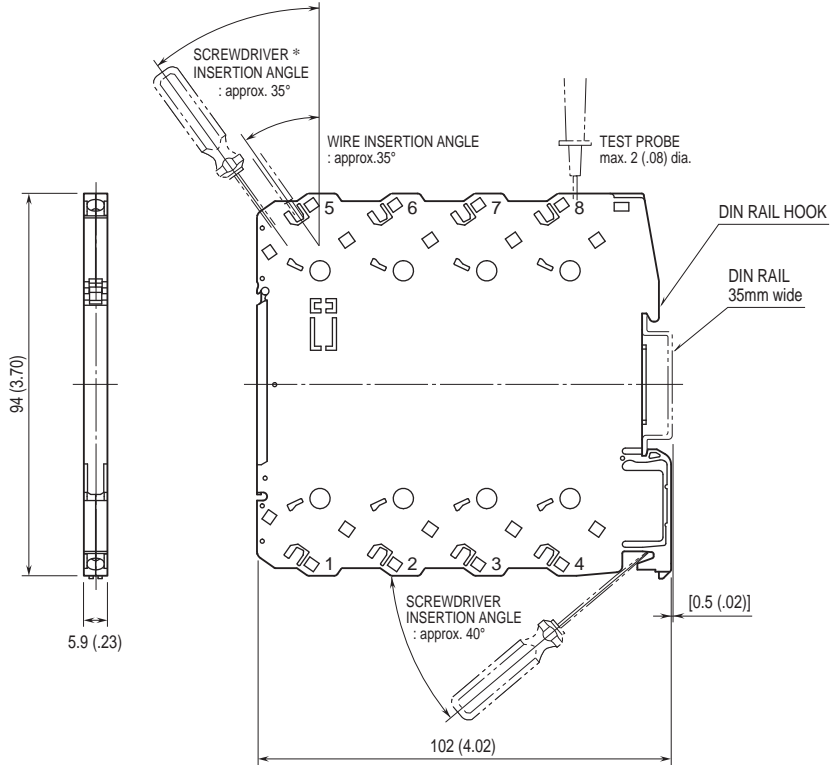
CE conformity:
 EMC Directive (2004/108/EC)
 EN 61000-6-4 (EMI)
 EN 61000-6-2 (EMS)

EXTERNAL VIEW

(With the cover open)



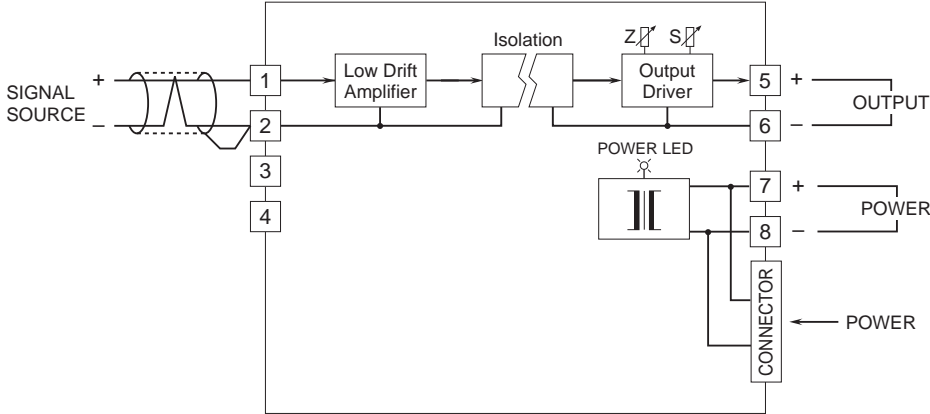
DIMENSIONS unit: mm (inch)



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

*Use a minus screwdriver: tip width 3.8 mm max., tip thickness 0.5 to 0.6 mm

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.