

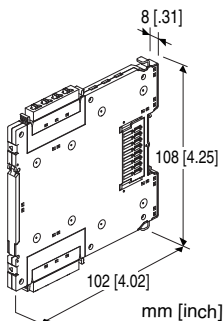
Base-free Interconnecting Ultra-Slim Signal Conditioners M60S Series

## SIGNAL TRANSMITTER

(field-configurable)

### Functions & Features

- Converts DC input from a sensor into a standard process signal
- Output range and response time selectable with DIP SW
- Power connector for interconnecting modules and collectively supplying power
- Spring clamp terminal connection for easy wiring
- 6-mm wide ultra-slim design
- Low profile allows mounting in a 120-mm deep panel
- High-density mounting
- Power indicator LED



## MODEL: M60SVS-R[1]

### ORDERING INFORMATION

- Code number: M60SVS-R[1]
- Specify a code from below for [1].  
(e.g. M60SVS-R/Q)
- Specify the specification for option code /Q  
(e.g. /C01)
  - Default at shipment  
Input range: 4 - 20 mA DC  
Output range: 4 - 20 mA DC  
Response time: Standard response

## INPUT - Field-selectable

### Current

- 4 - 20 mA DC (Input resistance 50 Ω)
- 0 - 20 mA DC (Input resistance 50 Ω)

### Voltage

- 0 - 10 V DC (Input resistance 200 kΩ min.)
- 2 - 10 V DC (Input resistance 200 kΩ min.)
- 0 - 5 V DC (Input resistance 100 kΩ min.)
- 1 - 5 V DC (Input resistance 100 kΩ min.)

## OUTPUT - Field-selectable

### Current

- 4 - 20 mA DC (Load resistance 550 Ω max.)
- 0 - 20 mA DC (Load resistance 550 Ω max.)

### Voltage

- 0 - 10 V DC (Load resistance 10 kΩ min.)
- 2 - 10 V DC (Load resistance 10 kΩ min.)
- 0 - 5 V DC (Load resistance 5000 Ω min.)
- 1 - 5 V DC (Load resistance 5000 Ω min.)

## POWER INPUT

### DC Power

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

## [1] OPTIONS

blank: none

/Q: Options other than the above (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:** Spring clamp terminal

**Power input:** Via the power connector or the spring clamp terminal

**Applicable wire size:** 0.2 to 1.5 mm<sup>2</sup>, stripped length 8 mm

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

**Isolation:** Input to output to power

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

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

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

### INPUT SPECIFICATIONS

- DC Current: Input resistor incorporated

### INSTALLATION

**Power consumption:** Max. 0.6 W

**Power input:** Max. 3 A (Total current consumed by the interconnected signal conditioner must be 3 A or less.)

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

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

**Atmosphere:** No corrosive gas or heavy dust

**Mounting:** DIN rail

**Weight:** 65 g (2.3 oz)

## PERFORMANCE in percentage of span

Accuracy:  $\pm 0.1\%$

I/O setting accuracy:  $\pm 0.2\%$

Temp. coefficient:  $\pm 0.01\%/^{\circ}\text{C}$  ( $\pm 0.006\%/^{\circ}\text{F}$ )

Response time (0 - 90 %): selectable with DIP SW

Standard:  $\leq 500$  msec.

Fast:  $\leq 5$  msec.

Line voltage effect:  $\pm 0.1\%$  over voltage range

Insulation resistance:  $\geq 100\text{ M}\Omega$  with 500 V DC

Dielectric strength: 1500 V AC @1 minute (input to output to power to ground)

## STANDARDS & APPROVALS

EU conformity:

EMC Directive

EMI EN 61000-6-4

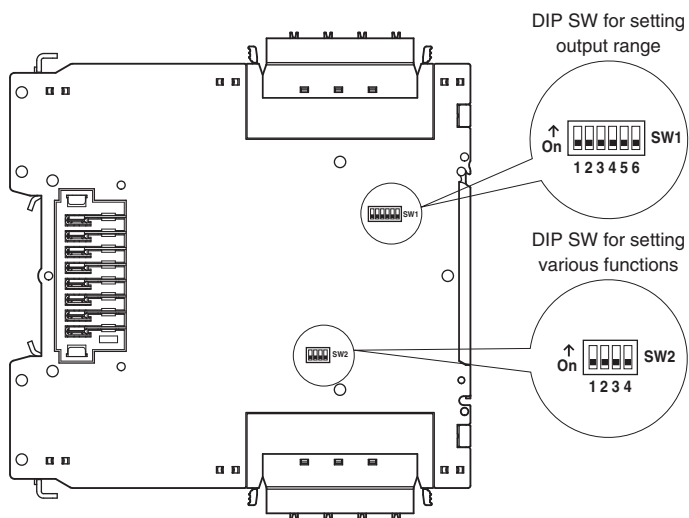
EMS EN 61000-6-2

RoHS Directive

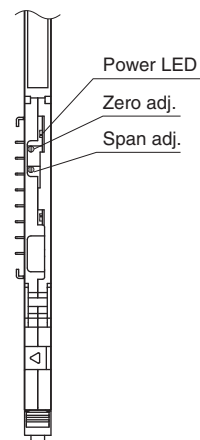
## EXTERNAL VIEW

Refer to the instruction manual for the setting procedure.

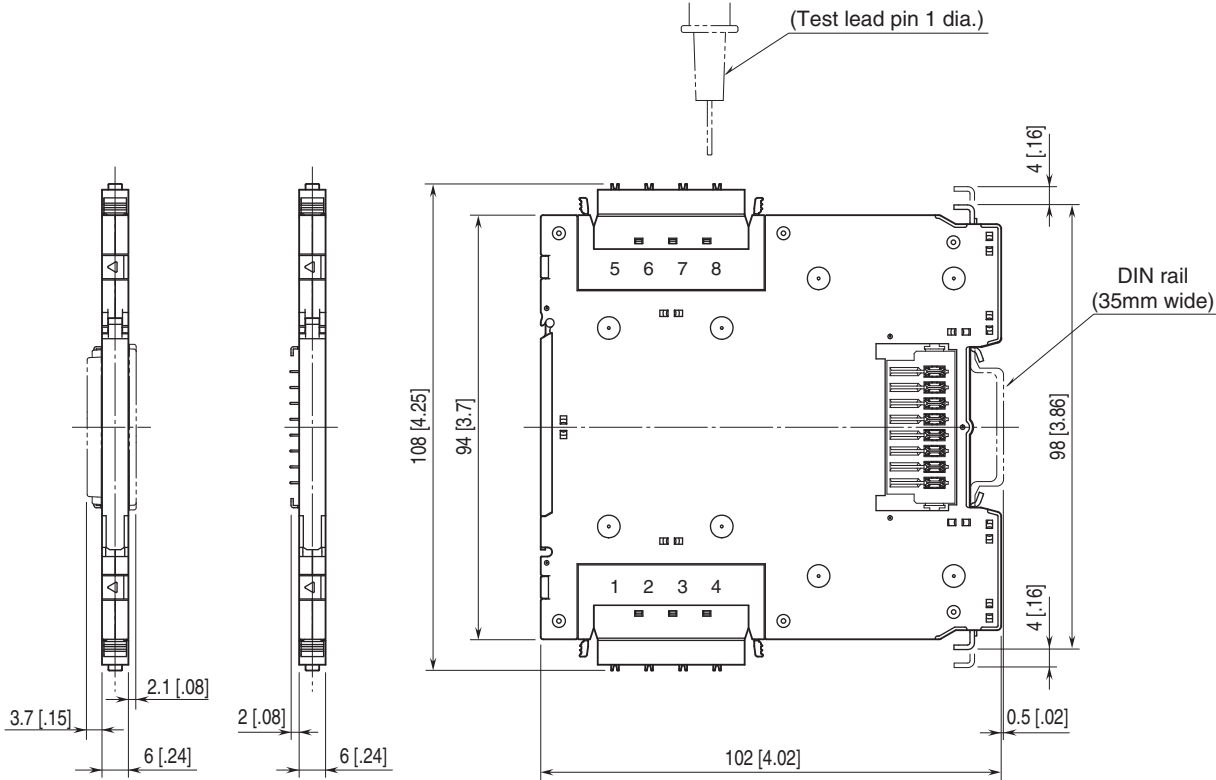
### LEFT SIDE VIEW



### FRONT VIEW (with the front cover removed)



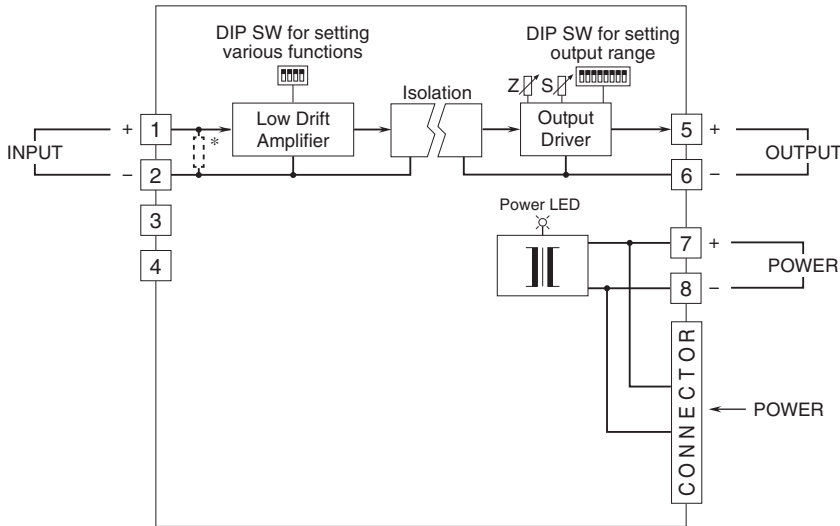
## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



• With the end cover attached

• Capable of High-density mounting

## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



\* Input shunt resistor incorporated for current input.



Specifications are subject to change without notice.