

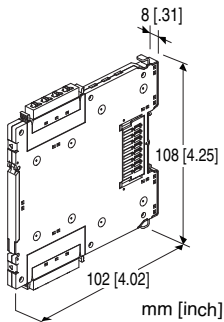
Base-free Interconnecting Ultra-Slim Signal Conditioners M60S Series

## SIGNAL TRANSMITTER

(field-configurable, two isolated outputs)

### 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: M60SWVS-R[1]

### ORDERING INFORMATION

- Code number: M60SWVS-R[1]
- Specify a code from below for [1].  
(e.g. M60SWVS-R/Q)
- Specify the specification for option code /Q  
(e.g. /C01)
  - Default at shipment  
Input range: 4 - 20 mA DC  
Output 1 range: 4 - 20 mA DC  
Output 2 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 1 - Field-selectable

#### Current

4 - 20 mA DC (Load resistance 300 Ω max.)  
0 - 20 mA DC (Load resistance 300 Ω max.)

#### Voltage

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

### OUTPUT 2 - Field-selectable

#### Current

4 - 20 mA DC (Load resistance 300 Ω max.)  
0 - 20 mA DC (Load resistance 300 Ω max.)

#### Voltage

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 1 to output 2 to power

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

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

Adjustable individually for each output 1 and output 2.

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

### INPUT SPECIFICATIONS

■ **DC Current:** Input resistor incorporated

## INSTALLATION

- Power consumption:** 0.7 W max.
- Power input:** 3 A (Total current consumed by the interconnected signal conditioners 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:** ±0.1 %
- I/O setting accuracy:** ±0.2 %
- Temp. coefficient:** ±0.01 %/°C (±0.006 %/°F)
- Response time (0 - 90 %):** selectable with DIP SW
- Standard: ≤ 500 msec.
- Fast: ≤ 5 msec.
- Line voltage effect:** ±0.1 % over voltage range
- Insulation resistance:** ≥ 100 MΩ with 500 V DC
- Dielectric strength:** 1500 V AC @1 minute  
(input to output 1 to output 2 to power to ground)

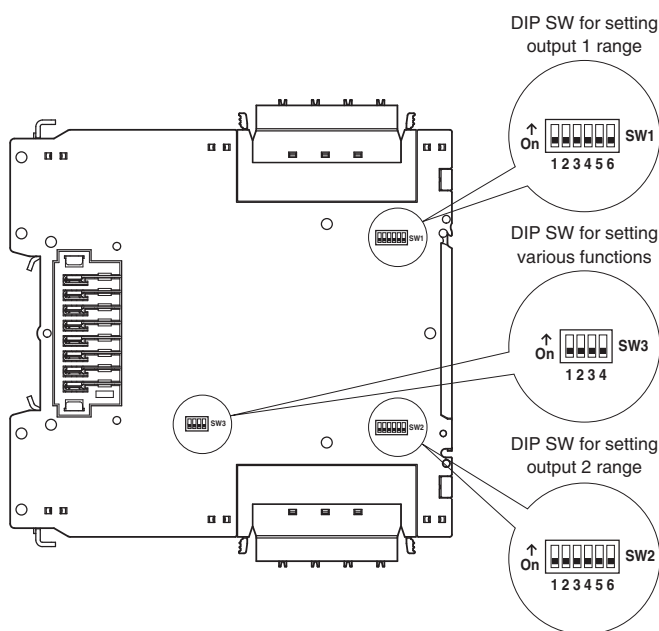
## STANDARDS & APPROVALS

- EU conformity:**
- EMC Directive
- EMI EN 61000-6-4
- EMS EN 61000-6-2
- RoHS Directive

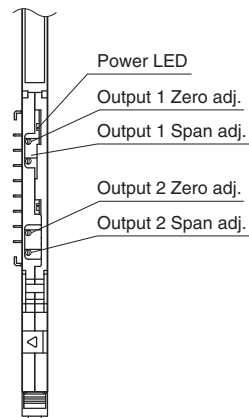
## EXTERNAL VIEW

Refer to the instruction manual for the setting procedure.

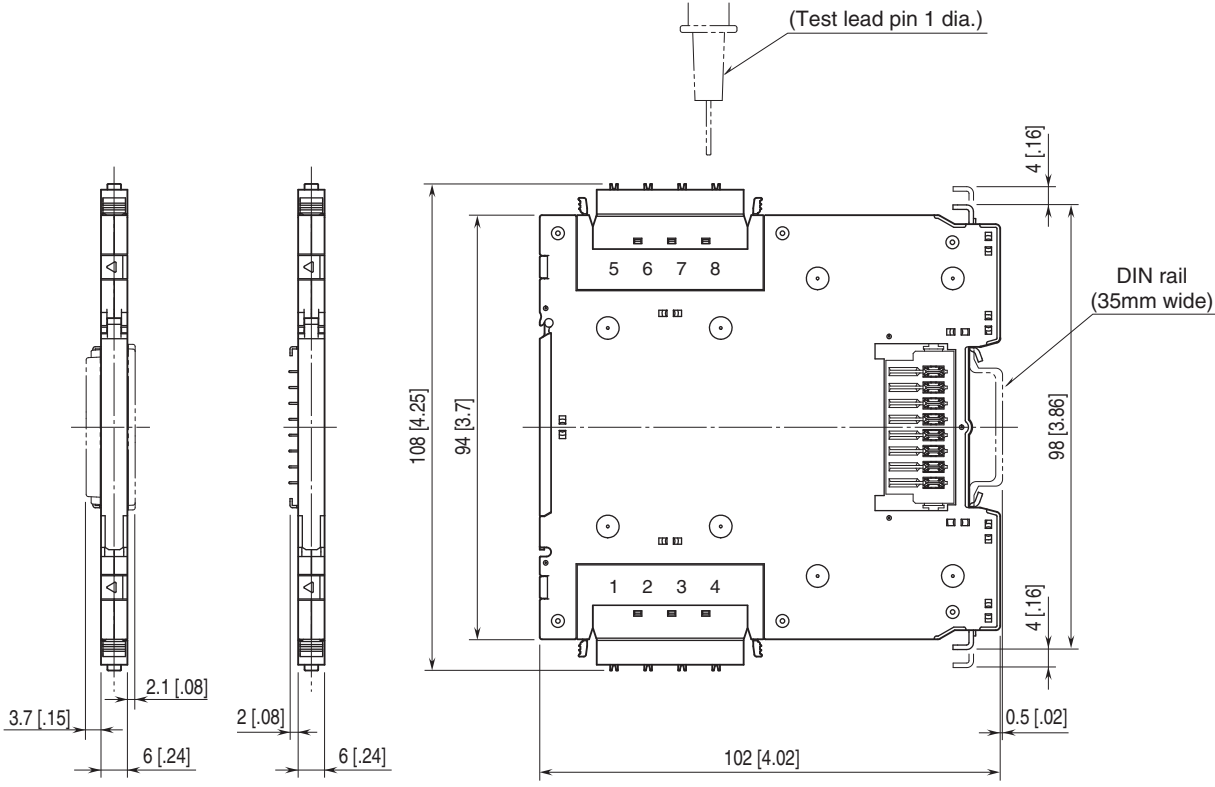
### ■ LEFT SIDE VIEW



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



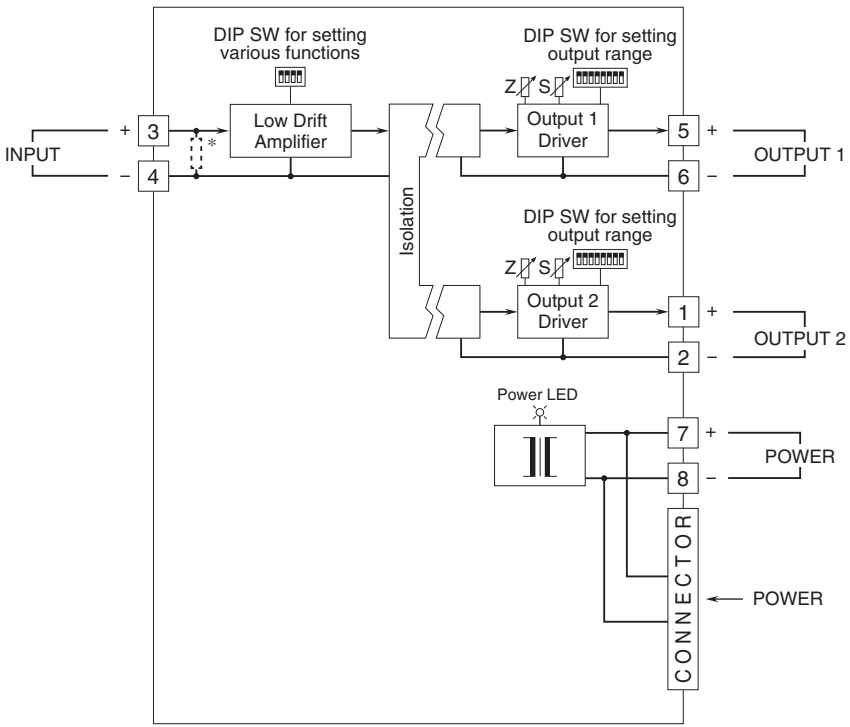
**EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]**



• 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.