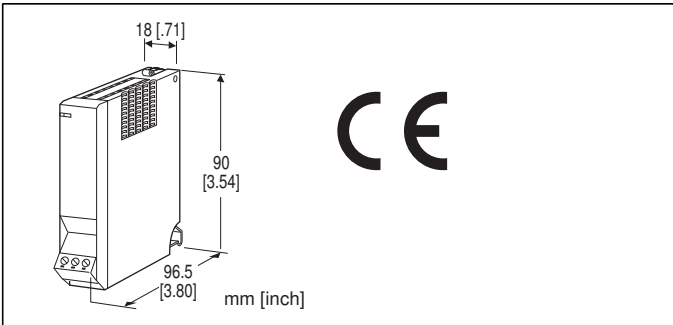


## Remote I/O R5 Series

### 4 - 20 mA OUTPUT MODULE



### MODEL: R5-YS[1][2]/A[3]

#### ORDERING INFORMATION

- Code number: R5-YS[1][2]/A[3]  
Specify a code from below for each of [1] through [3].  
(e.g. R5-YS1W/A/H/Q)
- Specify the specification for option code /Q  
(e.g. /C01)

#### [1] NO. OF CHANNELS

- 1: 1  
2: 2

#### [2] COMMUNICATION MODE

- S: Single  
W: Dual

#### OUTPUT HOLD

/A: With output hold setting switch

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

##### Load Resistance

- blank:  $\leq 300 \Omega$   
/H:  $\leq 600 \Omega$  (available only for 1-channel output type)

##### Other Options

- blank: none  
/Q: Option 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  
/C03: Rubber coating

#### GENERAL SPECIFICATIONS

##### Connection

**Internal bus:** Via the Installation Base (model: R5-BS)

**Output:** Euro type connector terminal  
(Applicable wire size: 0.2 – 2.5 mm<sup>2</sup> (AWG24 - 12),  
stripped length 7 mm)

**Internal power:** Via the base (model: R5-BS)

**Isolation:** Output 1 to output 2 to internal bus or internal power

**Output hold:** Setting of output hold or off for communication error with side DIP SW

**RUN indicator:** Bi-color (red/green) LED;  
Red when the bus A operates normally;  
Green when the bus B operates normally;  
Amber when both buses operate normally.

#### OUTPUT SPECIFICATIONS

**Output range:** 4 – 20 mA DC

**Load resistance:** 300  $\Omega$  max. (600  $\Omega$  max. with Option /H)

#### INSTALLATION

**Operating temperature:** -10 to +55°C (14 to 131°F)

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

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

**Mounting:** Installation Base (model: R5-BS)

**Weight:** 100 g (0.22 lb)

#### PERFORMANCE

**Conversion accuracy:**  $\pm 0.1 \%$

**Data range:** 0 – 10000 of the output range

**Data allocation:** 1 (2 for 2-channel type)

**Temp. coefficient:**  $\pm 0.015 \%/^{\circ}\text{C}$  ( $\pm 0.008 \%/^{\circ}\text{F}$ )

With Option /H,  $\pm 0.02 \%/^{\circ}\text{C}$  ( $\pm 0.01 \%/^{\circ}\text{F}$ )

**Response time:**  $\leq 0.2$  sec. (0 – 90 %)

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

**Dielectric strength:** 1500 V AC @ 1 minute

(output 1 to output 2 to internal bus or internal power)

2000 V AC @ 1 minute (power input to FG; isolated on the power supply module)

#### STANDARDS & APPROVALS

##### EU conformity:

EMC Directive

EMI EN 61000-6-4

EMS EN 61000-6-2

RoHS Directive

#### FUNCTIONS

##### Output hold function:

In normal conditions, the module outputs the signal from

the preferred internal bus A.

When an error is detected, the output is switched to the data from the internal bus B.

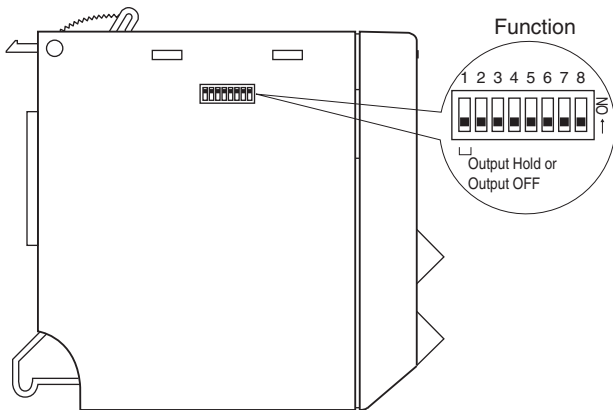
If both are in error, when the DIP switch on the side panel is OFF, the module holds and output the last received data.

When the DIP switch 1 is ON, the module holds and output -15 % of the selected range (approx. 1.6 mA).

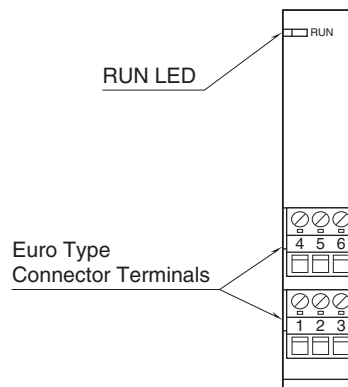
Either internal bus A or bus B becomes normal, output recovers.

## EXTERNAL VIEW

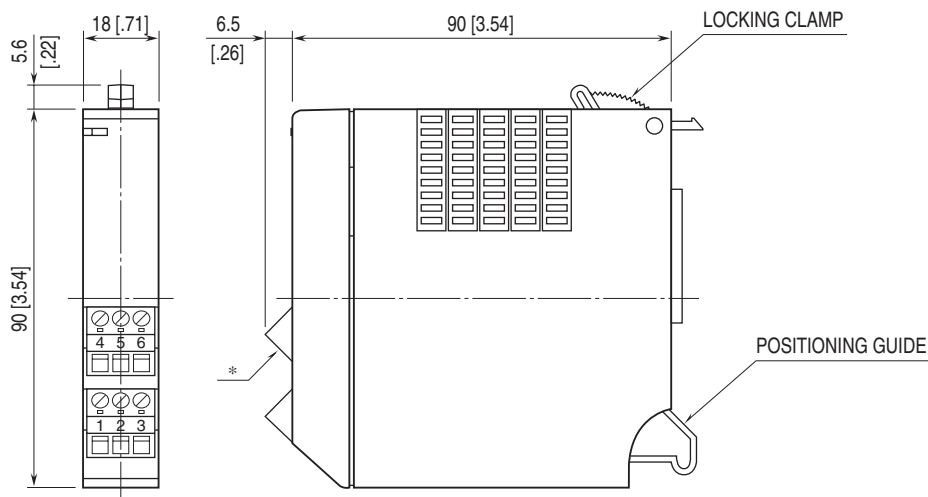
### ■ SIDE VIEW



### ■ FRONT VIEW

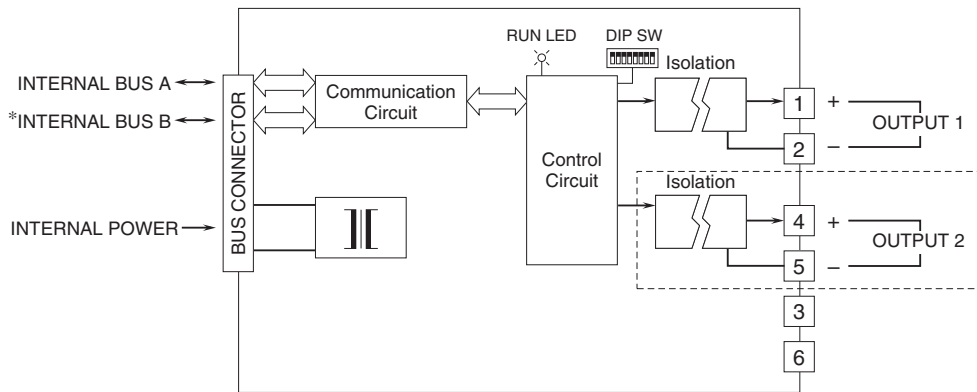


## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



\* Euro type connector terminals [4, 5 and 6] provided only with 2-ch. option.

**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



\* For dual redundant communication.  
 Note: The section enclosed by broken line is with 2-ch. option.



Specifications are subject to change without notice.