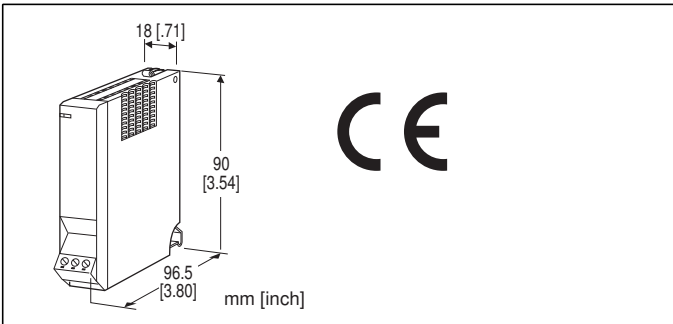


Remote I/O R5 Series

4 - 20 mA INPUT MODULE

(2-wire transmitter excitation supply)



MODEL: R5-DS[1][2][3]

ORDERING INFORMATION

- Code number: R5-DS[1][2][3]
- Specify a code from below for each of [1] through [3].
(e.g. R5-DS2W/S/Q)
- Specify the specification for option code /Q
(e.g. /C01)

[1] NO. OF CHANNELS

- 1: 1 channel
- 2: 2 channels

[2] COMMUNICATION MODE

- S: Single
- W: Dual

[3] OPTIONS (multiple selections)

Input resistance

- blank: 100 Ω
- /S: 250 Ω (for smart transmitters)

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)

Input: Euro type connector terminal
(Applicable wire size: 0.2 - 2.5 mm² (AWG24 - 12),
stripped length 7 mm)

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

Isolation: Input 1 to input 2 to internal bus or internal power

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.

SUPPLY OUTPUT

Output voltage: 24 - 29 V DC with no load

Current rating: ≤ 22 mA DC

- **Shortcircuit Protection**
- Current limited:** 30 mA max.
- Protected time duration:** No limit

INPUT SPECIFICATIONS

Input: 4 - 20 mA DC; input resistor incorporated

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

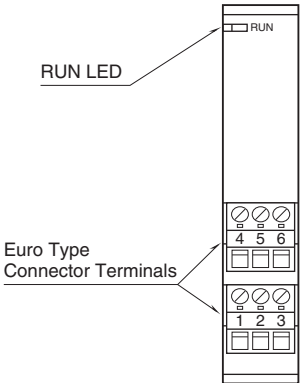
- Conversion accuracy:** ±0.05 %
- Data range:** 0 - 10000 of the input range
- Data allocation:** 1 (2 for 2-channel type)
- Temp. coefficient:** ±0.015 %/°C (±0.008 %/°F)
- Response time:** ≤ 0.2 sec. (0 - 90 %)
- Insulation resistance:** ≥ 100 MΩ with 500 V DC
- Dielectric strength:** 1500 V AC @ 1 minute (input 1 to input 2 to internal bus or internal power)
2000 V AC @ 1 minute (power input to FG; isolated on the power supply module)

STANDARDS & APPROVALS

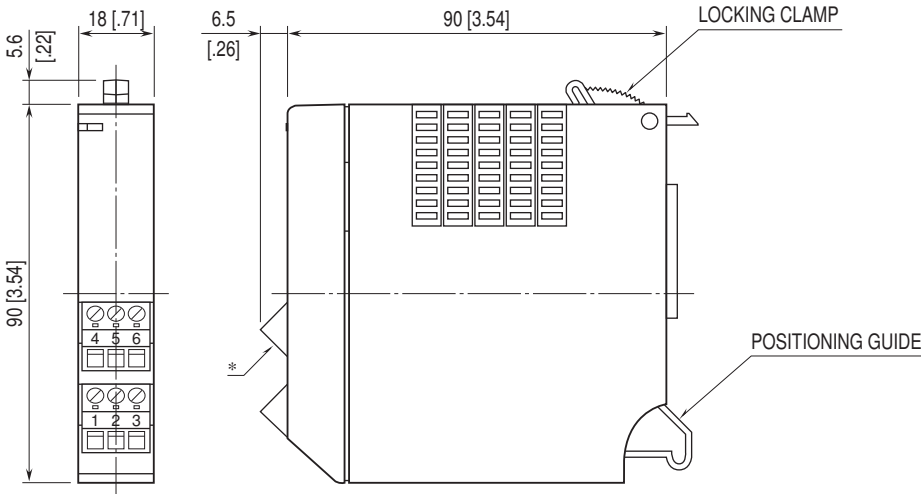
EU conformity:

- EMC Directive
- EMI EN 61000-6-4
- EMS EN 61000-6-2
- RoHS Directive

EXTERNAL VIEW

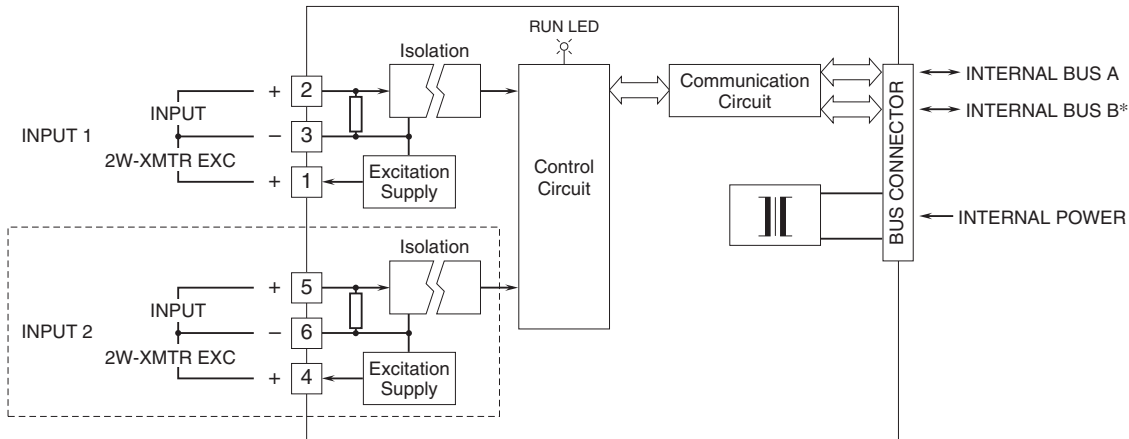


EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



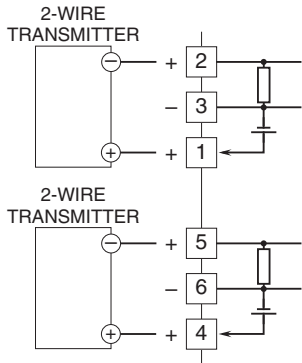
*Euro type connector terminals [4, 5 and 6] provided only with 2-ch. option.

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

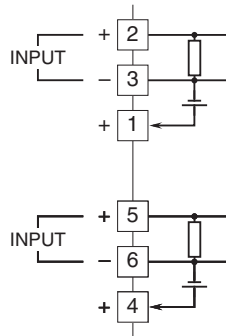


*For dual redundant communication.
 Note: The section enclosed by broken line is with 2-ch. option.

■ When Used as DC Supply



■ When Used as Current Input



Specifications are subject to change without notice.