

Space-saving Plug-in Signal Conditioners H-UNIT

SQUARE ROOT EXTRACTOR

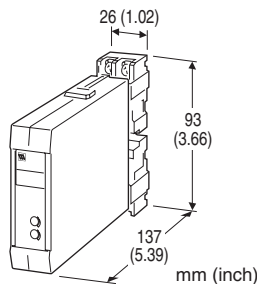
(non-isolated)

Functions & Features

- Providing a DC output proportional to the root of input signal
- Low-end cutout
- High-density mounting

Typical Applications

- Converting differential pressure to flow



MODEL: HN-[1]6-R[2]

ORDERING INFORMATION

- Code number: HN-[1]6-R[2]
- Specify a code from below for each [1] and [2].
(e.g. HN-66-R/Q)
- Specify the specification for option code /Q
(e.g. /C01/S01)

[1] INPUT

Current

- A: 4 - 20 mA DC (Input resistance 250 Ω)
- B: 2 - 10 mA DC (Input resistance 500 Ω)
- C: 1 - 5 mA DC (Input resistance 1000 Ω)
- H: 10 - 50 mA DC (Input resistance 100 Ω)

Voltage

- 6: 1 - 5 V DC (Input resistance 100 k Ω min.)

OUTPUT

Voltage

- 6: 1 - 5 V DC (Load resistance 10 k Ω min.)

POWER INPUT

DC Power

- R: 24 V DC

(Operational voltage range 24 V \pm 10 %, ripple 10 %p-p max.)

[2] OPTIONS

blank: none

/Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q (multiple selections)

COATING (For the detail, refer to M-System's web site.)

- /C01: Silicone coating
- /C02: Polyurethane coating
- /C03: Rubber coating

TERMINAL SCREW MATERIAL

- /S01: Stainless steel

GENERAL SPECIFICATIONS

Construction: Plug-in

Connection: M3.5 screw terminals (torque 0.8 N·m)

Screw terminal: Nickel-plated steel

Housing material: Flame-resistant resin (black)

Isolation: Input or output to power

Overrange output: 0 - 105 % at 1 - 5 V

Zero adjustment: -5 to +5 % (front)

Span adjustment: 95 to 105 % (front)

Low-end cutout: Approx. 10 % (output)

INPUT SPECIFICATIONS

■ DC Current:

Shunt resistor attached to the input terminals (0.5 W)

INSTALLATION

Current consumption: Approx. 60 mA

Operating temperature: -5 to +55°C (23 to 131°F)

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

Mounting: Surface or DIN rail; Standard Rack Mounting

Frame BX-16H available

Weight: 200 g (0.44 lbs)

PERFORMANCE in percentage of span

Accuracy: \pm 0.1 % (input 1 - 100 %)

Temp. coefficient: \pm 0.015 %/°C (\pm 0.008 %/°F)

Response time: \leq 0.5 sec. (0 - 90 %)

Line voltage effect: \pm 0.1 % over voltage range

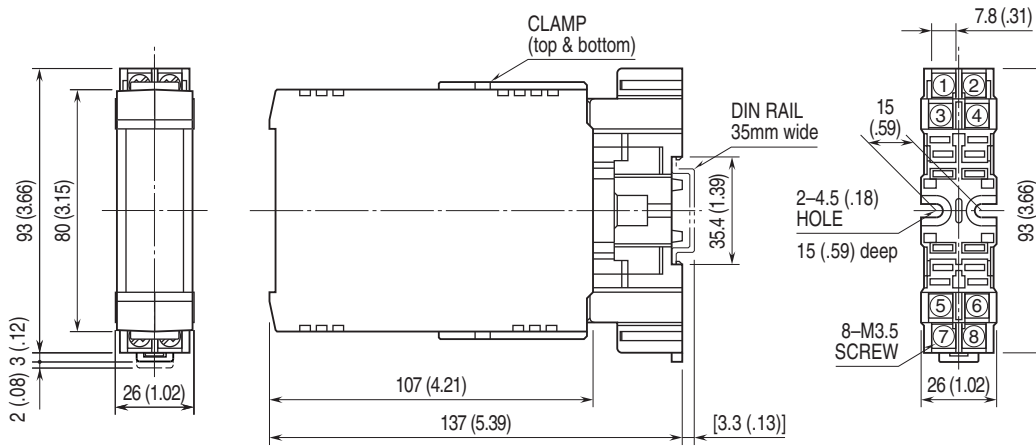
Insulation resistance: \geq 100 M Ω with 500 V DC

Dielectric strength: 500 V AC @ 1 minute (input or output to power)

1500 V AC @ 1 minute (input or output or power to ground)

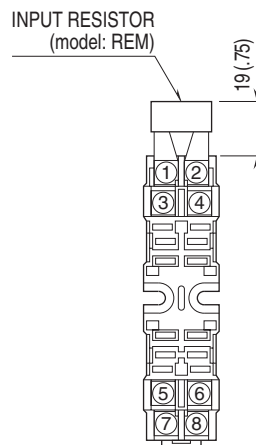


DIMENSIONS unit: mm (inch)



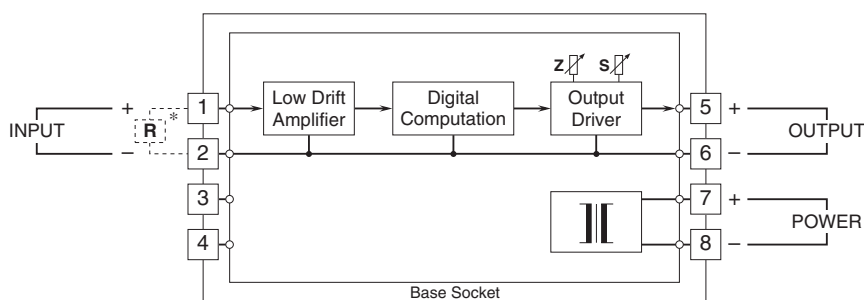
•When mounting, no extra space is needed between units.

TERMINAL ASSIGNMENTS unit: mm (inch)



Input shunt resistor attached for current input.

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*Input shunt resistor attached for current input.



Specifications are subject to change without notice.