Space-saving Plug-in Signal Conditioners H-UNIT

SQUARE ROOT EXTRACTOR

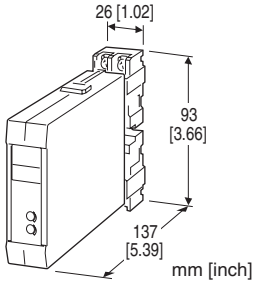
(non-isolated)

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 of [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 kΩ min.)

OUTPUT

Voltage

6: 1 – 5 V DC (Load resistance 10 kΩ min.)

POWER INPUT

DC Power

R: 24 V DC
(Operational voltage range 24 V ±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 our web site.)

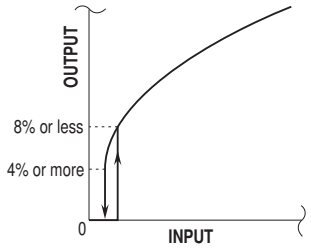
/C01: Silicone coating
/C02: Polyurethane coating
/C03: Rubber coating

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 (standard) or stainless 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. 4 – 8 % (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 lb)

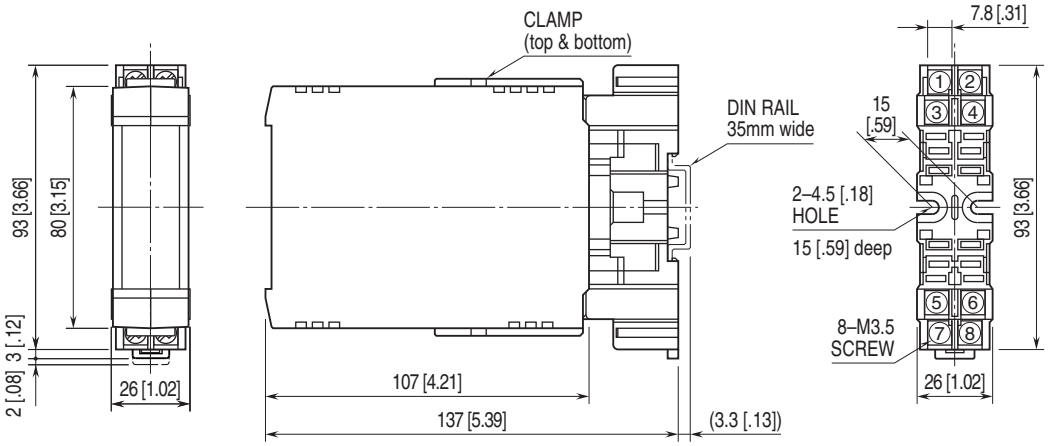
PERFORMANCE in percentage of span

Accuracy: ± 0.1 % (input 1 – 100 %)
Temp. coefficient: ±0.015 %/°C (±0.008 %/°F)
Response time: ≤ 0.5 sec. (0 – 90 %)
Line voltage effect: ±0.1 % over voltage range
Insulation resistance: ≥ 100 MΩ with 500 V DC

MG CO., LTD.
www.mgco.jp

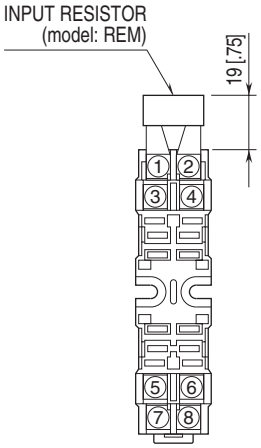
Dielectric strength: 500 V AC @ 1 minute (input or output to power)
1500 V AC @ 1 minute (input or output or power to ground)

EXTERNAL DIMENSIONS unit: mm [inch]



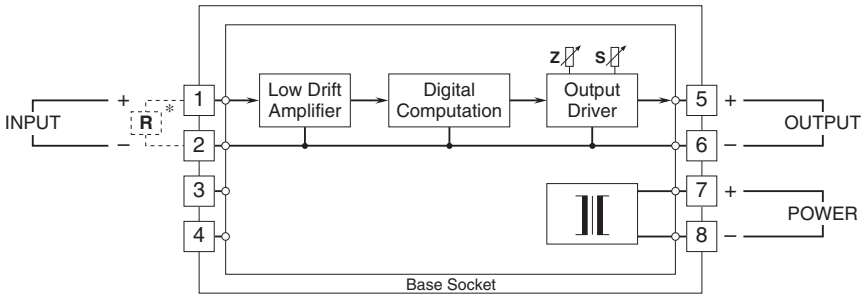
•When mounting, no extra space is needed between units.

TERMINAL ASSIGNMENTS unit: mm [inch]



Input shunt resistor attached for current input.

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*Input shunt resistor attached for current input.

MG CO., LTD.
www.mgco.jp

⚠ Specifications are subject to change without notice.

MG CO., LTD.
www.mgco.jp