

Space-saving Two-wire Signal Conditioners B-UNIT

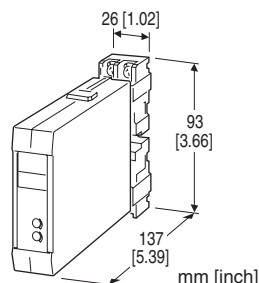
POTENTIOMETER TRANSMITTER

Functions & Features

- Providing a 4 – 20 mA DC signal proportional to a potentiometer or slidewire position input
- Constant voltage excitation allows use with pots with total resistances from 100 Ω – 2 k Ω without affecting accuracy
- Minimal interaction between zero and span adjustments
- Monitor terminals
- High-density mounting

Typical Applications

- Tank levels
- Positions



MODEL: BM[1]

ORDERING INFORMATION

- Code number: BM[1]
- Specify a code from below for [1].
(e.g. BM/Q)
- Specify the specification for option code /Q
(e.g. /C01/S01)

[1] 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)

Zero adjustment: 0 to 10 % of total resistance

Span adjustment: (of total resistance)

135 Ω or above: 50 – 100 %

Below 135 Ω : 70 – 100 %

INPUT SPECIFICATIONS

Potentiometer: 100 Ω – 2 k Ω

Minimum span: 50 % of total resistance ($\geq 135 \Omega$); $\geq 70 \%$ of total resistance ($< 135 \Omega$)

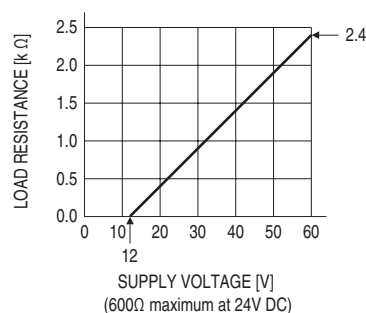
Excitation: Approx. 0.2 V DC

OUTPUT SPECIFICATIONS

Output: 4 – 20 mA DC

Load resistance vs. supply voltage:

Load Resistance (Ω) = (Supply Voltage (V) – 12 (V))
÷ 0.02 (A) (including leadwire resistance)



INSTALLATION

Supply voltage: 12 – 60 V DC

Operating temperature: -5 to +60°C (23 to 140°F)

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

Mounting: Surface or DIN rail; Standard Rack Mounting

Frame BX-16H available

Weight: 150 g (0.33 lb)

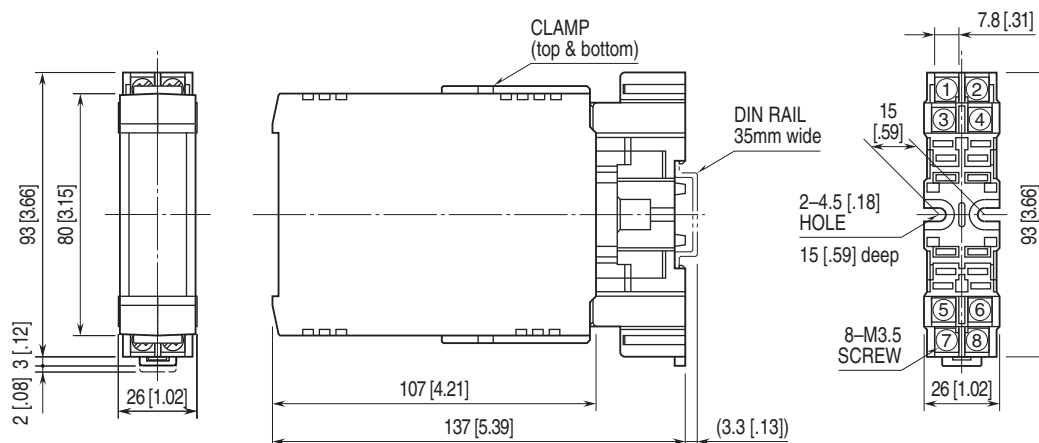
PERFORMANCE in percentage of span

Accuracy: $\pm 0.2 \%$

Temp. coefficient: $\pm 0.05 \%/^{\circ}\text{C}$ ($\pm 0.03 \%/^{\circ}\text{F}$)

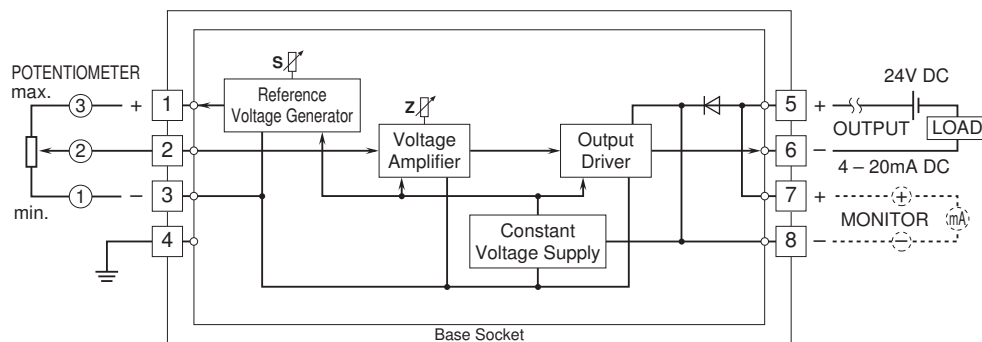
Response time: ≤ 0.5 sec. (0 – 90 %)

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



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

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.