

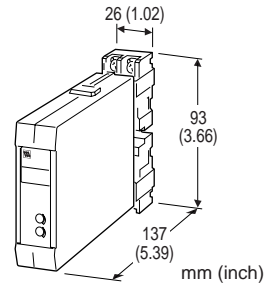
Space-saving Two-wire Signal Conditioners *B-UNIT*

POTENTIOMETER TRANSMITTER

MODEL **BM**

MODEL & SUFFIX CODE SELECTION

MODEL _____ **BM**
INPUT POTENTIOMETER
 Total resistance 100Ω – 2kΩ
OUTPUT
 4 – 20mA DC
SUPPLY VOLTAGE
 12 – 60V DC



Functions & Features

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

Typical Applications

- Tank levels
- Positions

ORDERING INFORMATION

Specify code number. (e.g. BM)

GENERAL SPECIFICATIONS

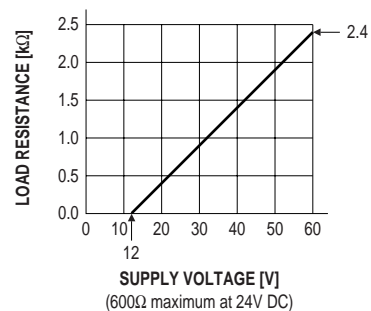
Construction: plug-in
Connection: M3.5 screw terminals
 (nickel-plated steel; torque ≤0.8 N·m)
Housing material: flame-resistant resin (black)
Front adjustments
135Ω or above: 0 – 10% for zero; 50 – 100% for span
Below 135Ω: 0 – 10% for zero; 70 – 100% for span

INPUT & OUTPUT

■ **INPUT:** potentiometer; 100Ω – 2kΩ
Minimum span: 50% of total resistance (≥135Ω); 70% of total resistance (<135Ω)
Excitation: 0.5V DC
 ■ **OUTPUT:** 4 – 20mA DC
Load resistance vs. supply voltage:

$$\text{Load Resistance } (\Omega) = \frac{\text{Supply Voltage (V)} - 12 \text{ (V)}}{0.02 \text{ (A)}}$$

(including leadwire resistance)



INSTALLATION**Supply voltage:** 12 – 60V 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**Dimensions:** W26×H93×D137 mm (1.02"×3.66"×5.39")
See General Spec. Sheet Figure A.**Weight:** 150 g (0.33 lbs)**Terminal assignment:** See General Spec. Sheet Figure B-1.**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 seconds (0 – 90%)**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**