

Space-saving Two-wire Signal Conditioners B-UNIT

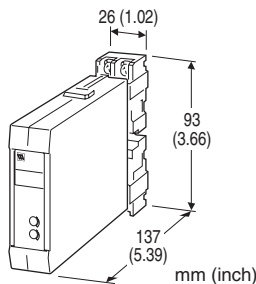
LOW FREQUENCY TRANSMITTER

Functions & Features

- Converting the output from a pulse-type transducer into a standard 4 - 20 mA DC signal
- Monitor terminals
- High-density mounting

Typical Applications

- Positive displacement flowmeters, turbine flowmeters and vortex flowmeters
- Proximity switches



MODEL: BSP-[1][2]

ORDERING INFORMATION

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

[1] INPUT (voltage pulse)

- 1: 0 - 100 Hz
- 2: 0 - 500 Hz
- 3: 0 - 5000 Hz

[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

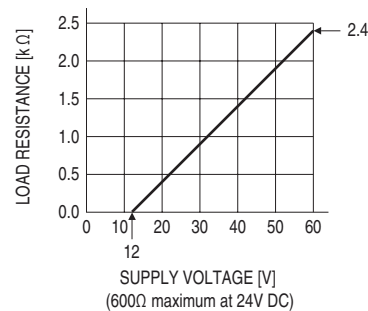
- Construction:** Plug-in
- Connection:** M3.5 screw terminals (torque 0.8 N·m)
- Screw terminal:** Nickel-plated steel (standard) or stainless steel
- Housing material:** Flame-resistant resin (black)
- Zero adjustment:** -5 to +5 % (front)
- Span adjustment:** 95 to 105 % (front)

INPUT SPECIFICATIONS

- Input:** Voltage pulse (zero-crossed)
- Input amplitude:** 20 mVp-p - 50 Vp-p for 100 Hz and 500 Hz;
50 mVp-p - 50 Vp-p for 5000 Hz
- Input impedance:** 100 kΩ at ≤ 0.7 V; 50 kΩ at ≥ 0.7 V

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)



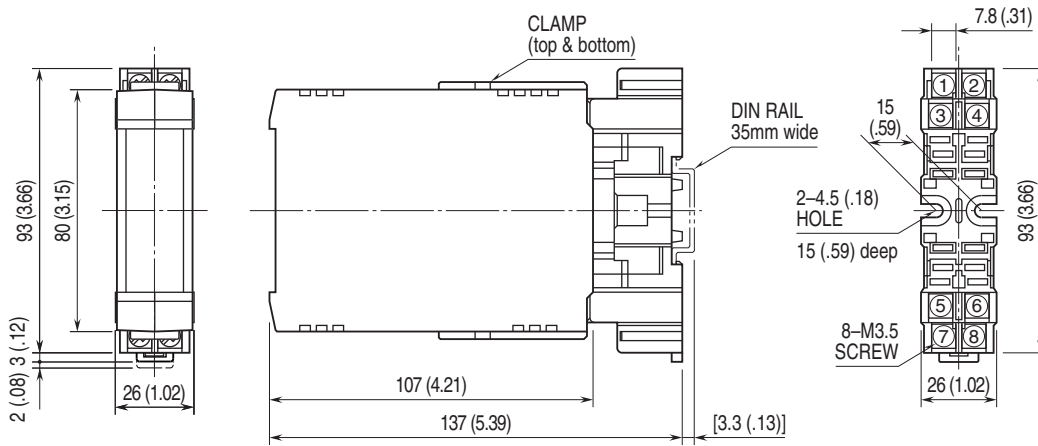
INSTALLATION

- 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

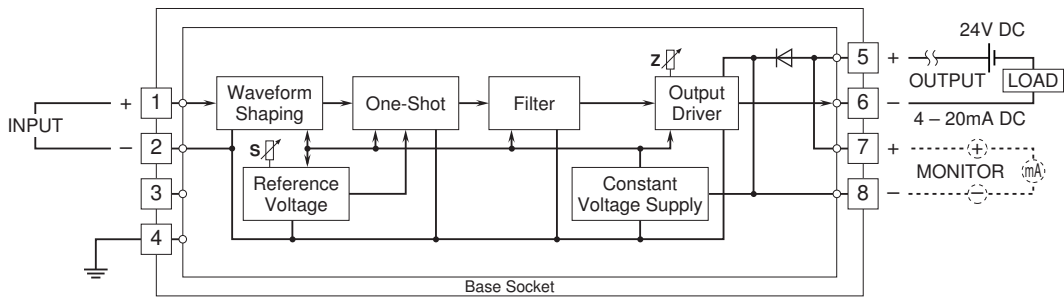
- Accuracy:** ±0.1 % (output 10 - 100 %)
- Temp. coefficient:** ±0.01 %/°C (±0.006 %/°F)
- Response time:** Approx. ≤ 1 sec. (0 - 90 %)

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.