

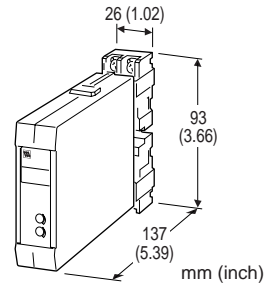
Space-saving Two-wire Signal Conditioners *B-UNIT*

FREQUENCY TRANSMITTER

MODEL BSP

MODEL & SUFFIX CODE SELECTION

MODEL _____ **BSP**-□
 INPUT (voltage pulse) _____
 1 : 0 – 100 Hz
 2 : 0 – 500 Hz
 3 : 0 – 5000 Hz
 OUTPUT
 4 – 20mA DC
 SUPPLY VOLTAGE
 12 – 60V DC



Functions & Features

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

Typical Applications

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

ORDERING INFORMATION

Specify code number. (e.g. BSP-1)

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: zero and span; ±5%

INPUT & OUTPUT

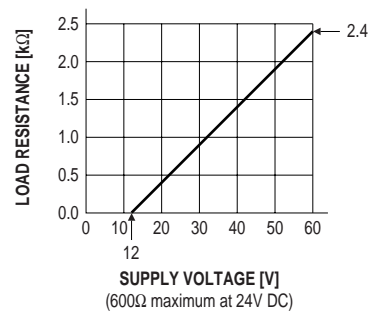
■**INPUT:** voltage pulse (zero-crossed)
Frequency range: 0 – 100 Hz, 0 – 500 Hz or 0 – 5000 Hz
Input amplitude: 20mV p-p – 50V p-p for 100 Hz and 500 Hz; 50mV p-p – 50V p-p for 5000 Hz
Input impedance: 100kΩ at ≤0.7V; 50kΩ at ≥0.7V

■**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: ±0.1% (output 10 – 100%)
Temp. coefficient: ±0.01%/°C (±0.006%/°F)
Response time: approx. ≤1 second (0 – 90%)

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

