

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

P/I TRANSDUCER

MODEL BPV

MODEL & SUFFIX CODE SELECTION

MODEL _____ **BPV-□□**
 PNEUMATIC CONNECTION _____
 2 : Rc 1/4"
 5 : Rc 1/8" fitting
 7 : 1/4" NPT fitting
OUTPUT
 4 – 20mA DC
SUPPLY VOLTAGE
 15 – 28V DC

OPTIONS

• **Input**

(blank): 0.2 – 1.0 kgf/cm²
/A1S: 19.6 – 98.1 kPa
/A2S: 20 – 100 kPa
/A3S: 20.7 – 103.4 kPa
/A2 : 0.2 – 1.0 bar
/A3 : 3 – 15 psig

ORDERING INFORMATION

Specify code number. (e.g. BPV-2/A2S)

GENERAL SPECIFICATIONS

Construction: plug-in

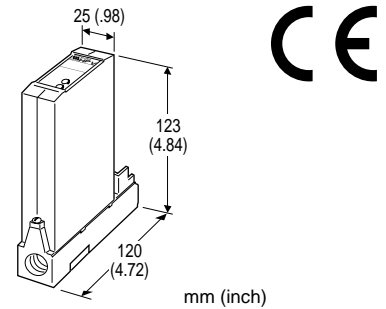
Material

Housing: flame-resistant resin (black)
Base socket: die cast aluminium
Screw terminals: nickel-plated steel;
 torque ≤0.8 N·m

Connection

Output: M3.5 screw terminals
Pneumatic: Rc 1/4", Rc 1/8" or 1/4" NPT female
 (torque ≤12 N·m)

Front adjustments: zero and span; ±5%



Functions & Features

- Converting a standard pneumatic signal into a proportional 4 – 20mA DC output
- Monitor terminals
- High-density mounting
- CE marking

Typical Applications

- Converting a pneumatic system into a 4 – 20mA for indicating and controlling in DCS system

INPUT & OUTPUT

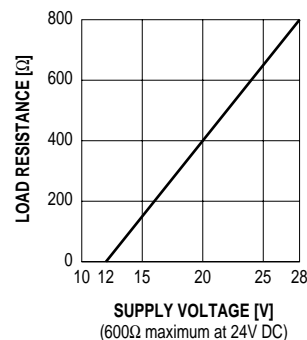
■ **INPUT:** 19.6 – 98.1 kPa, 0.2 – 1.0 kgf/cm²
 20 – 100 kPa, 0.2 – 1.0 bar
 20.7 – 103.4 kPa, 3 – 15 psig

■ **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)



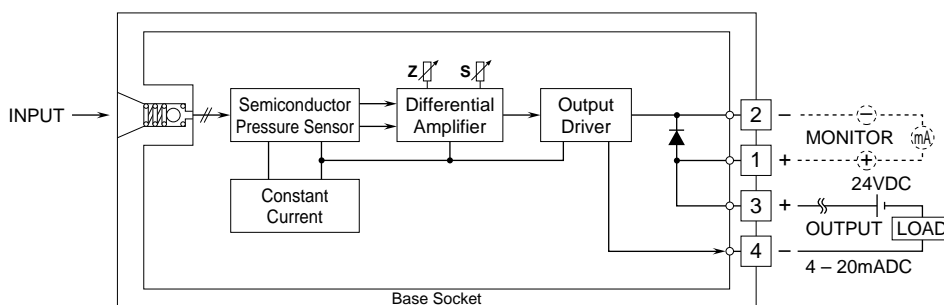
INSTALLATION

Supply voltage: 15 – 28V DC
Operating temperature: -10 to +60°C (14 to 140°F)
Operating humidity: 30 to 90% RH (non-condensing)
Mounting: surface; Standard Rack Mounting Frame (BX-16H) available
Dimensions: W25×H120×D123 mm (0.98"×4.72"×4.84") excluding fitting
Weight: 300 g (0.66 lbs)

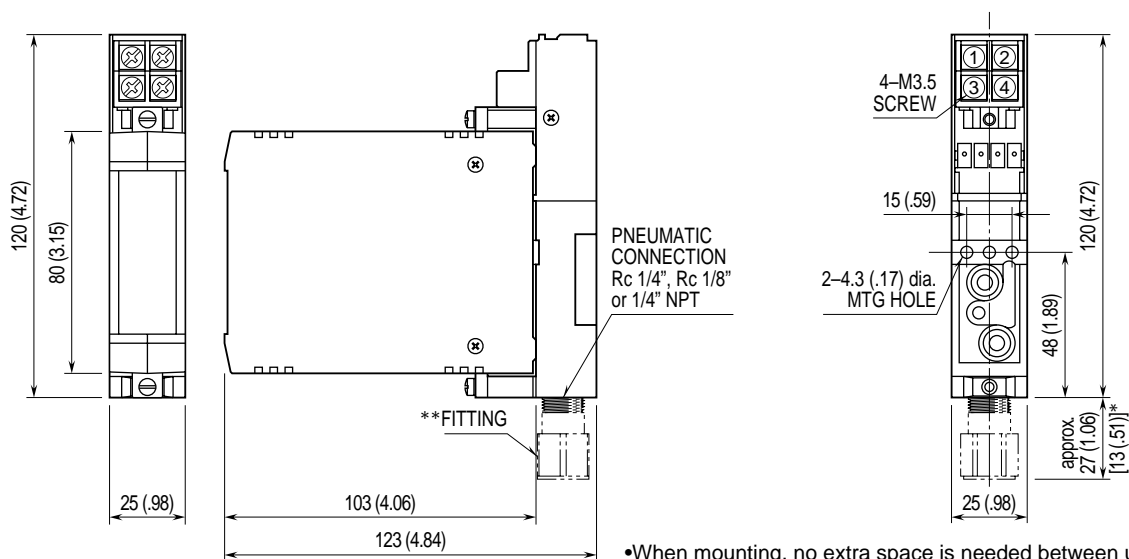
PERFORMANCE in percentage of span

Accuracy: ±0.3%
Temp. coefficient: ±0.03%/°C (±0.02%/°F)
Response time: ≤0.5 seconds (0 – 90%)
Permissible overrange: 196 kPa (2.0 kgf/cm², 1.96 bar, 28 psig)
CE conformity (Europe): 89/336/EEC. Electromagnetic Compatibility (EMC) Directive

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENT mm (inch)



* [] for Rc 1/8".
 **Fitting provided for Rc 1/8" or 1/4" NPT connection.