

Space-saving Two-wire Signal Conditioners B-UNIT

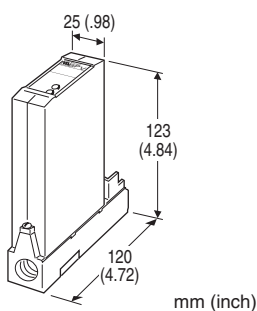
P/I TRANSDUCER

Functions & Features

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

Typical Applications

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



MODEL: BPV-[1][2]

ORDERING INFORMATION

- Code number: BPV-[1][2]

Specify a code from below for each of [1] and [2].

- (e.g. BPV-2/A2S/Q)
- Specify the specification for option code /Q (e.g. /C01/S01)

[1] PNEUMATIC CONNECTION

- 2: Rc 1/4"
- 5: Rc 1/8" fitting
- 7: 1/4" NPT fitting

[2] OPTIONS (multiple selections)

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

Other Options

blank: none

/Q: Option other than the above (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

Output: M3.5 screw terminals (torque 0.8 N·m)

Pneumatic: Rc 1/4", Rc 1/8" or 1/4" NPT female (torque ≤ 12 N·m)

Material

Housing: Flame-resistant resin (black)

Base socket: Die cast aluminium

Screw terminals: Nickel-plated steel (standard) or stainless steel

Zero adjustment: -5 to +5 % (front)

Span adjustment: 95 to 105 % (front)

INPUT SPECIFICATIONS

■ 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

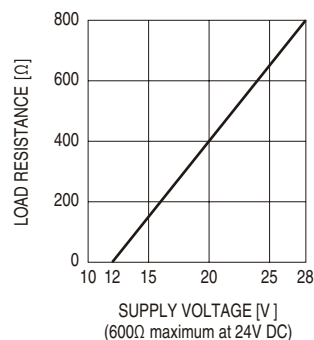
OUTPUT SPECIFICATIONS

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 - 28 V 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
Weight: 300 g (0.66 lb)

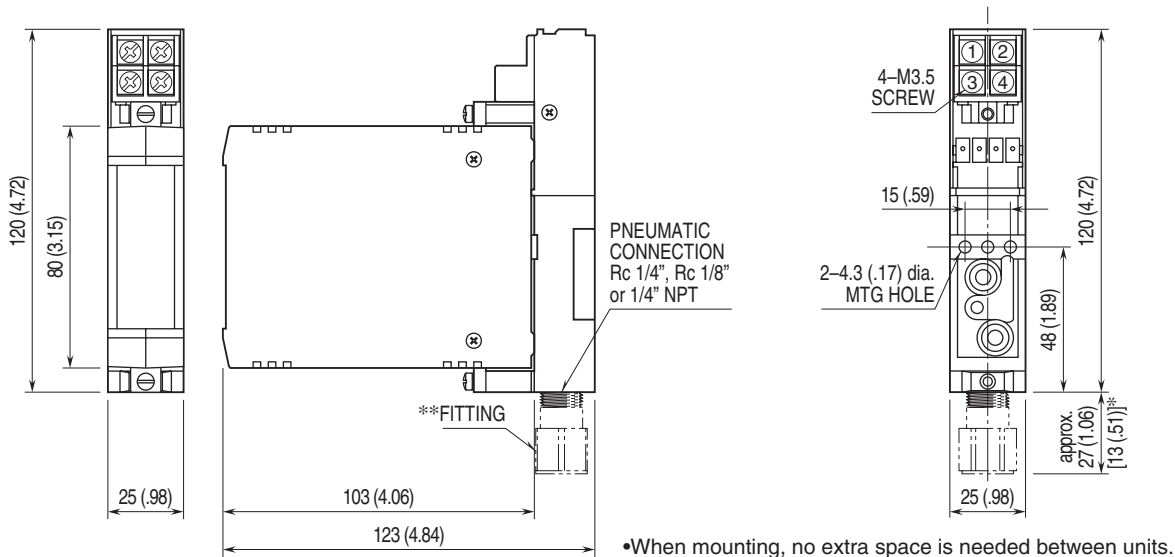
PERFORMANCE in percentage of span

Accuracy: $\pm 0.3\%$
Temp. coefficient: $\pm 0.03\%/^{\circ}\text{C}$ ($\pm 0.02\%/^{\circ}\text{F}$)
Response time: ≤ 0.5 sec. (0 - 90 %)
Permissible overrange: 196 kPa (2.0 kgf/cm², 1.96 bar, 28 psig)

STANDARDS & APPROVALS

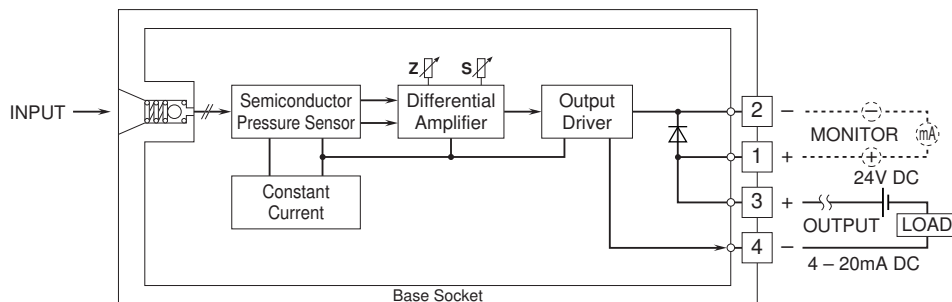
EU conformity:
 EMC Directive
 EMI EN 61000-6-4
 EMS EN 61000-6-2
 RoHS Directive

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



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

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM





Specifications are subject to change without notice.