

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

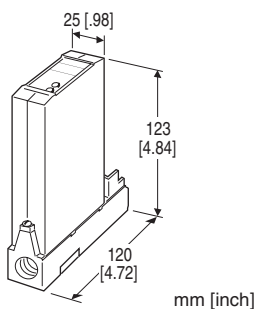
### P/I TRANSDUCER

#### 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/cm<sup>2</sup>

/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/cm<sup>2</sup>

20 – 100 kPa, 0.2 – 1.0 bar

20.7 – 103.4 kPa, 3 – 15 psig

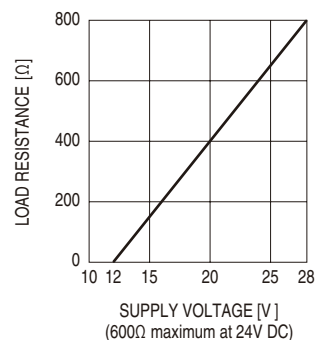
### OUTPUT SPECIFICATIONS

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:  $\leq 0.5$  sec. (0 – 90 %)

Permissible overrange: 196 kPa (2.0 kgf/cm<sup>2</sup>, 1.96 bar, 28 psig)

## STANDARDS & APPROVALS

EU conformity:

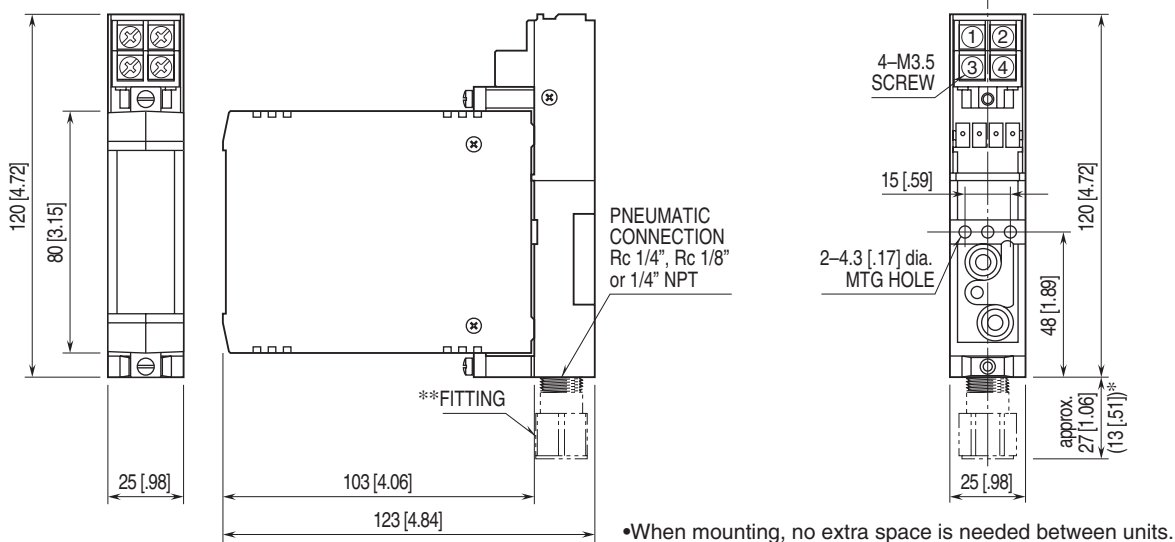
EMC Directive

EMI EN 61000-6-4

EMS EN 61000-6-2

RoHS Directive

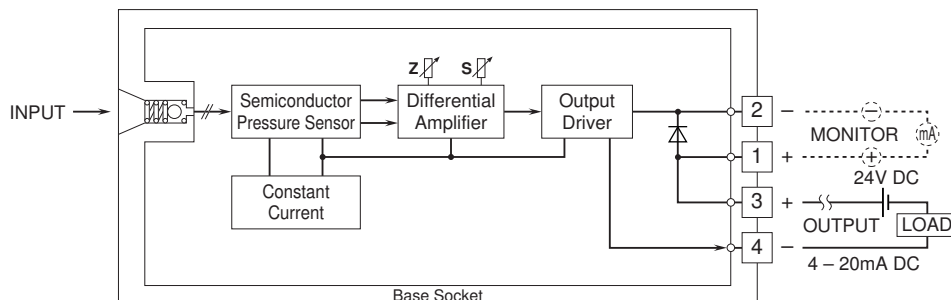
## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



\* ( ) 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.