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

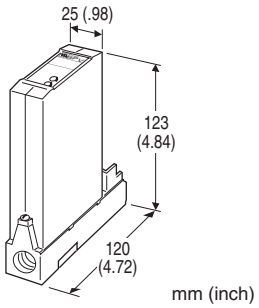
## P/I TRANSDUCER

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$^2$
**/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 M-System's web site.)**
**/C01**: Silicone coating
**/C02**: Polyurethane coating
**/C03**: Rubber coating
**TERMINAL SCREW MATERIAL**
**/S01**: Stainless steel

## GENERAL SPECIFICATIONS

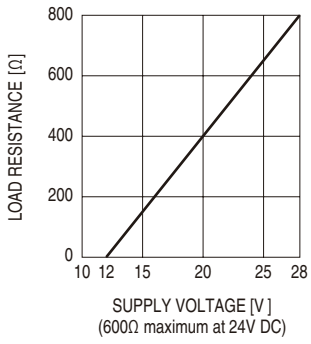
**Construction**: Plug-in
**Connection**
**Output**: M3.5 screw terminals (torque 0.8 N·m)
**Pneumatic**: Rc 1/4", Rc 1/8" or 1/4" NPT female (torque ≤ 12 N·m)
**Material**
**Housing**: Flame-resistant resin (black)
**Base socket**: Die cast aluminium
**Screw terminals**: Nickel-plated steel(standard) 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$^2$
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)

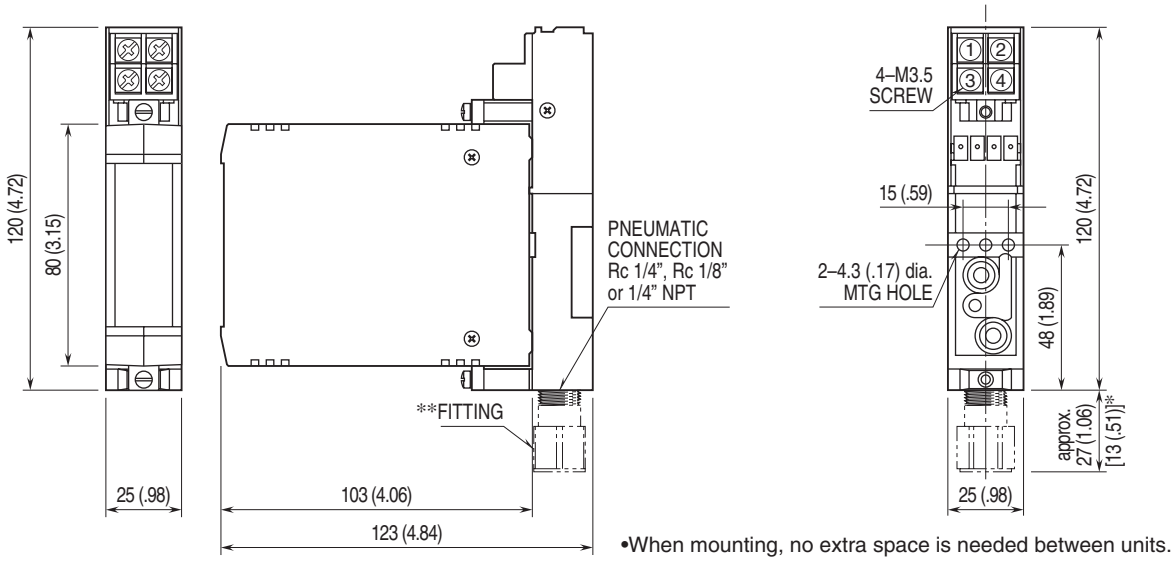
## PERFORMANCE in percentage of span

**Accuracy**: ±0.3 %
**Temp. coefficient**: ±0.03 %/°C (±0.02 %/°F)
**Response time**: ≤ 0.5 sec. (0 – 90 %)
**Permissible overrange**: 196 kPa (2.0 kgf/cm$^2$, 1.96 bar, 28 psig)

## STANDARDS & APPROVALS

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

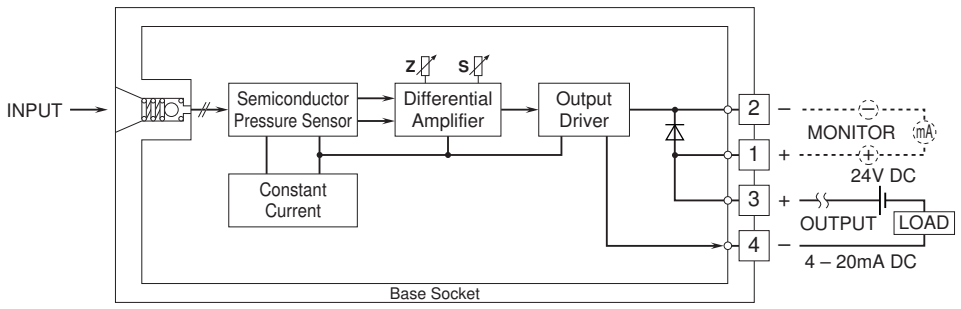
## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]




•When mounting, no extra space is needed between units.

* [ ] 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.