

## Plug-in Signal Conditioners M-UNIT

V: 48 V DC

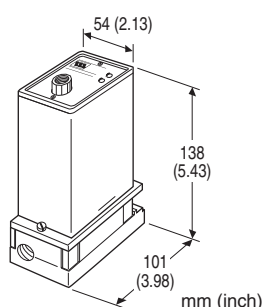
### I/P TRANSDUCER

#### Functions & Features

- Converting a DC input into a proportional standard pneumatic signal
- Semiconductor pressure sensor in the feedback circuit
- High resolution
- No mounting position effect
- High-density mounting

#### Typical Applications

- Converting a 4 – 20 mA from a PID controller into a pneumatic signal



## MODEL: VP-[1]-[2][3]

### ORDERING INFORMATION

- Code number: VP-[1]-[2][3]

Specify a code from below for each of [1] through [3].

(e.g. VP-6-B/A2S/P7)

### [1] INPUT

#### Current

A: 4 – 20 mA DC (Input resistance 250 Ω)

#### Voltage

6: 1 – 5 V DC (Input resistance 1 MΩ min.)

### [2] POWER INPUT

#### AC Power

B: 100 V AC

C: 110 V AC

D: 115 V AC

F: 120 V AC

G: 200 V AC

H: 220 V AC

J: 240 V AC

#### DC Power

S: 12 V DC

R: 24 V DC

### [3] OPTIONS (multiple selections)

#### Output

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

#### Pneumatic Connection

blank: Rc 1/4"

/P7: 1/4" NPT fitting

### GENERAL SPECIFICATIONS

Construction: Plug-in

#### Connection

Input &amp; power input: M3.5 screw terminals (torque 0.8 N·m)

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

#### Material

- **Housing:** Flame-resistant resin (black)
- **Base socket:** Die cast aluminium
- **Valve section:** Die cast aluminium
- **Screw terminals:** Nickel-plated steel;

Isolation: Input to power

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

Span adjustment: 95 to 105 % (front)

### INPUT SPECIFICATIONS

#### ■ DC Current:

Shunt resistor attached to the input terminals (0.5 W)

### OUTPUT SPECIFICATIONS

#### ■ Output:

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

The output goes below 0 % if the input loop is open.

Maximum air delivery: 60 NI/minute (2.1 SCFM)

Maximum air exhaust: 60 NI/minute (2.1 SCFM)

### INSTALLATION

Supply pressure: 140 kPa (1.4 kgf/cm<sup>2</sup>, 1.4 bar, 20 psig)

±10 %. Use dry air containing no carbon black or other foreign particles. To ensure reliability use an air filter (0.01 microns).

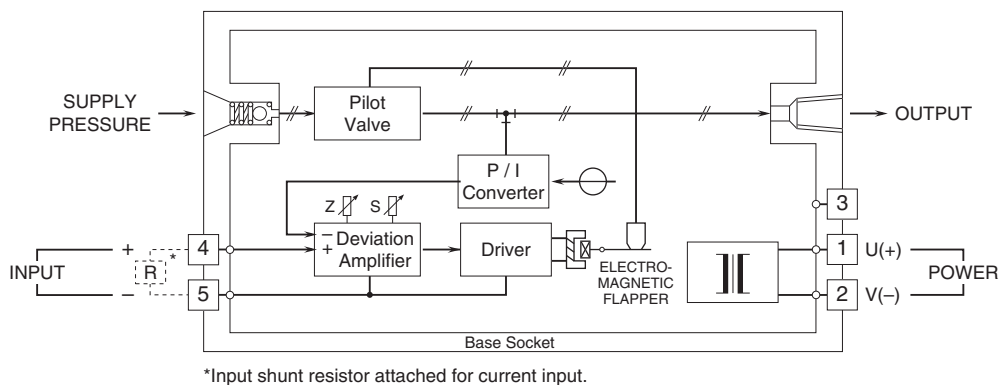
Air consumption: 6 NI/minute (0.21 SCFM)

#### Power input

- **AC:** Operational voltage range: rating ±10 %,



**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



Specifications are subject to change without notice.