

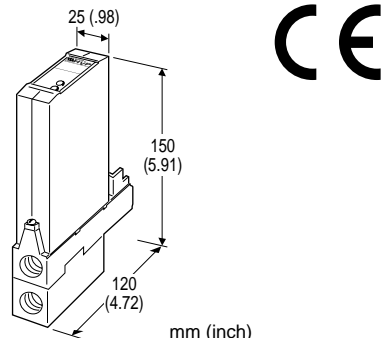
**Space-saving Plug-in Signal Conditioners *H-UNIT***

**LOOP POWERED I/P TRANSDUCER**

MODEL **HVPN**

**MODEL & SUFFIX CODE SELECTION**

MODEL \_\_\_\_\_ HVPN-□A□  
 PNEUMATIC CONNECTION \_\_\_\_\_  
 2 : Rc 1/4"  
 7 : 1/4" NPT fitting  
 INPUT \_\_\_\_\_  
 A : 4 – 20mA DC  
 OUTPUT \_\_\_\_\_  
 1S : 19.6 – 98.1 kPa  
 2S : 20 – 100 kPa  
 3S : 20.7 – 103.4 kPa  
 1 : 0.2 – 1.0 kgf/cm<sup>2</sup>  
 2 : 0.2 – 1.0 bar  
 3 : 3 – 15 psig



**Functions & Features**

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

**Typical Applications**

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

**ORDERING INFORMATION**

Specify code numbers. Mounting Block is required. See the data sheet for model MB.

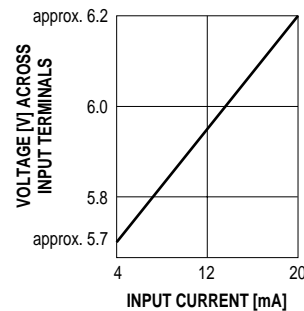
- Code number of the Transducer (e.g. HVPN-2A2S)
- Code number of the Mounting Block (e.g. MB-08)

**GENERAL SPECIFICATIONS**

**Construction:** plug-in  
**Connection**  
 Input: M3.5 screw terminals  
 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; torque ≤0.8 N·m  
 Mounting Block: extruded aluminium  
 Front adjustments: zero and span; ±5%

**INPUT & OUTPUT**

■INPUT: 4 – 20mA DC  
**Equivalent input impedance:** approx. 310Ω at 20mA  
 The voltage measure at the input terminals changes corresponding to the input signal as in the diagram below. Be sure that the device at the input side allows the load increase.



■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 N//minute (2.1 SCFM)  
**Maximum air exhaust:** 60 N//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 Nl/minute (0.21 SCFM)

**Operating temperature:** -5 to +55°C (23 to 131°F)

**Operating humidity:** 30 to 90% RH (non-condensing)

**Mounting:** surface; Standard Rack Mounting Frame (BX-16H) available

**Dimensions:** W25×H120×D150 mm (0.98"×4.72"×5.91") including the Mounting Block (MB-01), excluding 1/4" NPT fitting

**Weight:** 400 g (0.88 lbs)

**PERFORMANCE in percentage of span**

**Accuracy:** ±0.3% including linearity and repeatability

**Linearity:** ±0.2%

**Repeatability:** 0.1%

**Temp. coefficient:** ±0.05%/°C (±0.03%/°F)

**Mounting position effect:** ±0.1% (all dimensions)

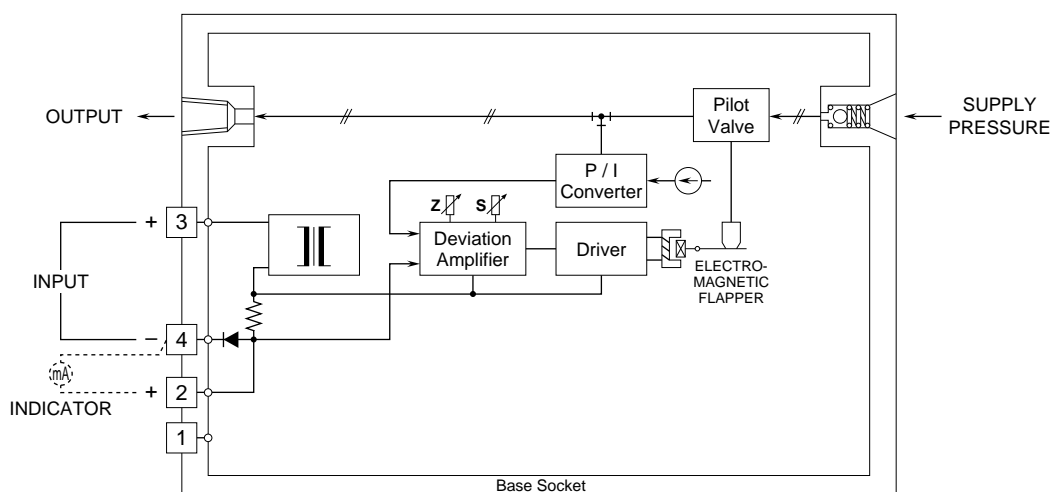
**Response time:** ≤3 seconds (0 – 90%)

**Dielectric strength:** 1500V AC @1 minute

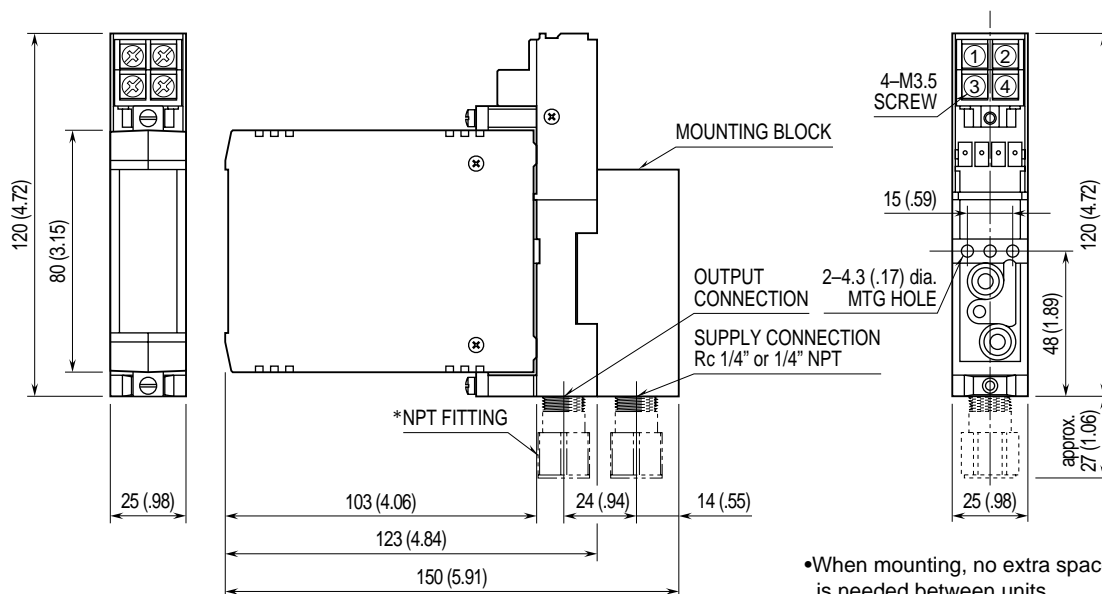
(input to housing)

**CE conformity (Europe):** 89/336/EEC. Electromagnetic Compatibility (EMC) Directive

**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



**EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENT mm (inch)**



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

\*Fitting is provided for 1/4" NPT connection.

Specifications subject to change without notice.