The Series IP Current to Pressure Transducer converts a current input signal to a linearly proportional pneumatic output pressure. The features include built-in volume booster, low air consumption, field reversible (provides output which is inversely proportional to input signal) and flexible zero and span adjustments. The rugged NEMA 4X enclosure allows splashdown and outdoor installation. The IP can be used for applications that require operation of valve actuators, pneumatic valve positioners, damper and louver actuators, final control elements and relays.

**SPECIFICATIONS**

- **Service:** Oil free, clean dry air filtered to 40 microns.
- **Input Signal:** 4 to 20 mA.
- **Input Impedance:** IP-42: 180 Ω; IP-43 and IP-44: 220 Ω.
- **Air Pressure:** Min: 3 psig (21 kPa) above max output; Maximum: 100 psig (700 kPa).
- **Linearity:** < ±0.75% of span.
- **Hysteresis:** < 1% of span.
- **Repeatability:** < 0.5% of span.
- **Supply Pressure Sensitivity:** < ±0.1% of span per psig (< ±0.15% of span per 10 kPa).
- **Power Requirements:** Loop-powered.
- **Temperature Limits:** -20 to 140°F (-30 to 60°C).
- **Pressure Connections:** 1/4˝ female NPT.
- **Electrical Connection:** 1/2˝ female NPT.
- **Air Consumption:** 0.03 SCFM (0.5 m³/h) typical.
- **Output Capacity:** 4.5 SCFM (7.6 m³/h) at 25 psig (175 kPa) supply; 12 SCFM (20 m³/h) at 100 psig (700 kPa) supply.
- **Relief Capacity:** 2 SCFM (3.4 m³/h) at 5 psig (35 kPa) above 20 psig (140 kPa) setpoint.
- **Weight:** 2.1 lb (0.94 kg).
- **Agency Approvals:** CE, FM.

### Table of Input Ranges

<table>
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<tr>
<th>Model</th>
<th>Input Ranges</th>
<th>Output Range</th>
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<tbody>
<tr>
<td>IP-42</td>
<td>4 to 20 mA</td>
<td>3 to 15 psi</td>
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<tr>
<td>IP-43</td>
<td>4 to 20 mA</td>
<td>3 to 27 psi</td>
</tr>
<tr>
<td>IP-44</td>
<td>4 to 20 mA</td>
<td>6 to 30 psi</td>
</tr>
</tbody>
</table>

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The Series EP1000 Electro-pneumatic Controller combines the highest quality instrumentation in one compact NEMA 4X enclosure for easy, low cost installation. Simply provide a supply pressure and voltage with a standard thermocouple, RTD, DC voltage or DC current input to this unit and a traditional pneumatic process quickly converts to a state-of-the-art electronic operation. The versatile microprocessor based controller incorporates a high level of standard features. Typical function setup items appear in the control menus only when the function is selected, so you don't have to wade through unnecessary items. Standard features include Self-Tune, fully adjustable PID and Auto/Manual control. Combine this versatile controller with the Hi-Flow™ Valve for excellent process operation in industries like food and beverage processing, pulp and paper, chemical and pharmaceutical.

**SPECIFICATIONS**

- **Front Panel Selectable Inputs:** Thermocouple, RTD, DC voltage or DC current.
- **Supply Pressure:** Min: EP1000: 18 psig (1.24 bar); EP1011: 33 psig (2.28 bar).
- **Output:** EP1000: 3 to 15 psig (0.21 to 1.03 bar); EP1011: 6 to 30 psig (0.41 to 2.07 bar).
- **Accuracy:** ±1.0% of span.
- **Linearity:** ±0.75% of span.
- **Hysteresis:** ±1.0% of span.
- **Repeatability:** ±0.5% of span.
- **Power Requirements:** 100 to 240 VAC, 50/60 Hz.
- **Temperature Limits:** 32 to 122°F (0 to 50°C).
- **Pressure Connections:** 1/4˝ female NPT.
- **Air Consumption:** 0.03 scfm (0.5 m³/h) typical.
- **Output Capacity:** 4.5 scfm (7.6 m³/h) at 25 psig (172 bar) supply; 12 scfm (20 m³/h) at 100 psig (689 bar) supply.
- **Enclosure:** NEMA 4X.
- **Weight:** 9 lb 1 oz (3.67 kg).