The IP610 and IP710 are electronic pressure regulators, converting a 4 to 20 mA signal to a proportional pneumatic output. Both units feature a compact housing, accessible ports and easy adjustments, making them ideal for space-constrained applications. They also feature high tolerance for impure air and an integral volume booster, providing high flow capacity, increasing control speed in critical applications.

The IP610 is an economical unit, with precision air pressure regulation for actuators, valves, positioners and other final control elements.

The IP710 utilizes closed-loop pressure feedback circuitry to provide precise, stable pressure outputs, with immunity to vibration effects or mounting position and low air consumption, for demanding applications.

The IP610 and IP710 are intrinsically safe, with precision air pressure regulation for actuators, valves, positioners and other final control elements.

### SPECIFICATIONS

**Agency Approvals:** FM and CSA Intrinsically Safe

**Input Signal:** 4 to 20 mA loop powered

**Accuracy:** Includes linearity, hysteresis and repeatability—see table

**Supply Pressure Sensitivity:** 0.1% of span per psi (±0.02% for zero-based units)

**RFI/EMI Effect:** 0.5% of span change in output pressure per En 61000-4-3:1998, Amendment 1, Performance Criterion A

### Supply Pressure Sensitivity:

0.1% of span per psi (±0.02% for zero-based units)

### Air Consumption:

1.8 SCFH typical

### Temperature Limits:

IP610: -30 to 65°C (-20 to 150°F)

IP710: -40 to 70°C (-40 to 158°F)

### Media:

Clean, dry, oil-free, instrument air, filtered to 40 microns

### Pressure Ports:

¼ FNPT

### Electrical Connections:

½ FNPT conduit or DIN 43560 connector

### Mounting:

Direct wall, panel, or optional DIN rail

### Materials

**Housing:** Chromate-treated aluminum with epoxy paint, NEMA 4X (IP65) rated

**Elastomers:** Buna-N

**Trim:** Stainless steel and zinc-plated brass

### Weight:

IP610: 590 g (1.3 lb) or 770 g (1.7 lb) for zero-based units

IP710: 370 g (0.8 lb)
MINIATURE I/P TRANSDUCER

Dimensions: mm (inch)
ø = diameter

Shaded areas and associated dimensions apply to the zero based units only.

To Order

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>RANGE</th>
<th>ACCURACY*</th>
<th>IMPEDANCE</th>
<th>AIR CONSUMPTION</th>
<th>SUPPLY PRESSURE (PSI)</th>
<th>FLOW CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP610-X15</td>
<td>3 to 15 psi</td>
<td>±1.0% span</td>
<td>180 Ω</td>
<td>1.8 scfh @ mid-range</td>
<td>20 to 100</td>
<td>4.5 scfm @ 25 psig</td>
</tr>
<tr>
<td>IP610-X27</td>
<td>3 to 27 psi</td>
<td>±0.10% span</td>
<td>10 kΩ</td>
<td>1.5 scfh @ mid-range</td>
<td>20 to 100</td>
<td>4.5 scfm @ 25 psig</td>
</tr>
<tr>
<td>IP610-X30</td>
<td>6 to 30 psi</td>
<td>±0.10% span</td>
<td>10 kΩ</td>
<td>4.5 scfh @ mid-range</td>
<td>65 to 130</td>
<td>20 scfm @ 130 psig</td>
</tr>
</tbody>
</table>

HIGH ACCURACY I/P CONVERTERS

ACCESSORY

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP610-DM</td>
<td>DIN rail mounting kit</td>
</tr>
</tbody>
</table>

* Accuracy includes linearity, hysteresis and repeatability.

Comes complete with mounting bracket and operator’s manual.

To order with DIN connector, add suffix “-D” to model number, for an additional cost.

Ordering Examples: IP610-X15, loop powered I/P converter with 3 to 15 psi range and conduit connection.
IP710-X15-D, high accuracy loop powered I/P converter with 3 to 15 psi range and DIN connector.

L-8