



Series  
IP

# Current to Pressure Transducer

Intrinsically Safe, NEMA 4X Enclosure, Field Reversible, Low Cost



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, relays, air cylinders, web tensioners, clutches and brakes.

Model Number	Input Ranges	Output Range	
		psi	kPa
IP-42	4-20 mA	3-15	20-100
IP-43	4-20 mA	3-27	20-185
IP-44	4-20 mA	6-30	40-200

## SPECIFICATIONS

**Service:** Oil free, clean dry air filtered to 40 microns.

**Input Signal:** 4-20 mA.

**Input Impedance:** IP-42: 180 ohms; IP-43 and IP-44: 220 ohms.

**Air Pressure:** Minimum: 3 psig (21 kPa) above maximum output; Maximum: 100 psig (700 kPa).

**Linearity:**  $< \pm 0.75\%$  of span.

**Hysteresis:**  $< 1\%$  of span.

**Repeatability:**  $< 0.5\%$  of span.

**Supply Pressure Sensitivity:**  $< \pm 0.1\%$  of span per psig ( $< \pm 0.15\%$  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 m<sup>3</sup>/h) typical.

**Output Capacity:** 4.5 SCFM (7.6 m<sup>3</sup>/h ANR) at 25 psig (175 kPa) supply; 12 SCFM (20 m<sup>3</sup>/h) at 100 psig (700 kPa) supply.

**Relief Capacity:** 2 SCFM (3.4 m<sup>3</sup>/h) at 5 psig (35 kPa) above 20 psig (140 kPa) setpoint.

**Weight:** 2.1 lb (0.94 kg).

**Agency Approvals:** CE, FM.