

GENERAL PURPOSE ELECTROPNEUMATIC TRANSDUCERS I/P AND E/P MODELS

**Current to Pressure (I/P)
Voltage to Pressure (E/P)**

IP211, EP211



Optional† Optional†

- ✓ Low Cost
- ✓ Built-In Volume Booster
- ✓ Small Size
- ✓ Field Reversible
- ✓ Low Air Consumption
- ✓ Mounts at Any Angle
- ✓ Convenient External Span and Zero Adjustment (Except for Explosion-Proof Models)
- ✓ Light Weight
- ✓ Wide Supply Pressure Range
- ✓ Low Supply Pressure Sensitivity

The IP211/EP211 Series transducers are electropneumatic devices that reduce a supply pressure to a regulated output pressure directly proportional to an electrical input signal. The 211 Series accepts a wide range of supply pressures, ranging from a minimum of 3 psig (0.2 bar) above the maximum output to 100 psig (6.9 bar). An integral pneumatic volume booster is included in the design to provide high flow capacity (up to 12 SCFM). Model selection includes general purpose, FM Intrinsically Safe, and CSA Intrinsically Safe.

Mounting

These transducers can be pipe, panel, or bracket mounted in any position. Positions other than vertical will require recalibration of the zero adjustment. For maximum output stability, the transducers should be mounted in a vibration-free location or where vibration is isolated in the x and z axes.

Field Reversible

All transducers are calibrated at the factory for direct-acting operation but may be used in the reverse-acting mode by reversing the polarity of the signal leads and recalibrating. When recalibrated

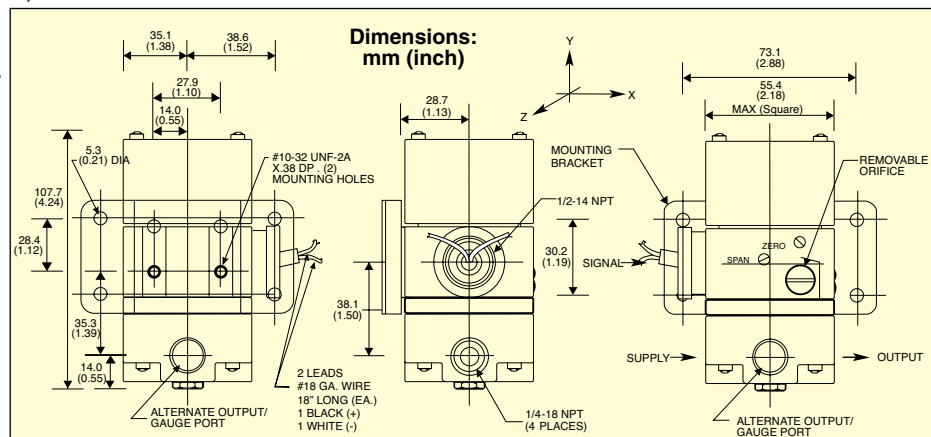
IP211-X15 shown
actual size
(mounting bracket
included).



Easily accessible zero and span adjustments

for reverse-acting applications, the transducers provide a minimum of their full rated output pressure (i.e., 15, 27, or 30 psig) upon input signal failure.

† Refer to the To Order Chart on page L-6 for specific FM or CSA approved models.



GENERAL PURPOSE ELECTROPNEUMATIC TRANSDUCERS

SPECIFICATIONS

Supply Pressure Range:

3 psig (0.2 bar) above maximum output to 120 psig
 15 psig (1 bar) units: 18 to 100 psig (1.3 to 7 bar)
 27 psig (1.9 bar) units: 30 to 100 psig (1.9 to 7 bar)
 30 psig (2.1 bar) units: 33 to 100 psig (2.3 to 7 bar)
 60 psig (4.1 bar) units: 65 to 100 psig (4.5 to 7 bar)
 120 psig (8.3 bar) units: 125 to 150 psig (8.6 to 10.4 bar)

Supply Pressure Sensitivity:

±0.15 of span 1.5 psig (0.1 bar)

Linearity (Terminal Based):

<1.0% of span

Repeatability:

<0.5% of span

Hysteresis:

<1.0% of span

Minimum Flow Rate @ 100 psig

(7 bar): 12 SCFM

Exhaust Capacity @ 5 psig (0.4 bar) Above Setpoint: 2 SCFM

Air Consumption (Max) at Midrange: 0.1 SCFM

Port Size (Pneumatic/Electric): ¼ NPT and ½ NPT

Dimensions: 54 x 54 x 101 mm (2½ x 2½ x 4")

Maximum Flow: 24 SCFM (677 SLPM)

Agency Approvals: Factory Mutual Research Approved as Intrinsically Safe for Class I, II, III, Division 1, Groups A, B, C, D, E, G when installed in accordance with interconnection diagram and with the proper energy limiting barriers. Canadian Standards Association certified as intrinsically safe when connected through certified diode safty barriers in accordance with installation instruction.

Note: Intrinsically safe and non-incendive ratings are not affected by recalibrating for split ranges or reverse-acting applications.



IP211-X15 shown smaller than actual size.

To Order

MODEL NO.	INPUT RANGE	OUTPUT RANGE		IMPEDANCE (NOMINAL)
		psig	bar	
GENERAL PURPOSE I/P				
IP211-X15	4 to 20 mA	3 to 15	0.2 to 1.0	180 Ω
IP211-X27	4 to 20 mA	3 to 27	0.2 to 1.9	220 Ω
IP211-X30	4 to 20 mA	6 to 30	0.4 to 2.1	220 Ω
IP211-X60	4 to 20 mA	2 to 60	0.1 to 4.1	225 Ω
IP211-X120	4 to 20 mA	3 to 120	0.2 to 8.3	260 Ω
FM APPROVED† INTRINSICALLY SAFE I/P				
IP211-X15-ISF	4 to 20 mA	3 to 15	0.2 to 1.0	180 Ω
IP211-X27-ISF	4 to 20 mA	3 to 27	0.2 to 1.9	220 Ω
CSA APPROVED† INTRINSICALLY SAFE I/P				
IP211-X15-ISC	4 to 20 mA	3 to 15	0.2 to 1.0	180 Ω
IP211-X27-ISC	4 to 20 mA	3 to 27	0.2 to 1.9	220 Ω
GENERAL PURPOSE E/P				
EP211-X15	1 to 5 Vdc	3 to 15	0.2 to 1.0	615 Ω
EP211-X15-5V	0 to 5 Vdc	3 to 15	0.2 to 1.0	615 Ω
EP211-X15-10V	0 to 10 Vdc	3 to 15	0.2 to 1.0	985 Ω
EP211-X27	1 to 5 Vdc	3 to 27	0.2 to 1.9	530 Ω
EP211-X27-5V	0 to 5 Vdc	3 to 27	0.2 to 1.9	530 Ω
EP211-X27-10V	0 to 10 Vdc	3 to 27	0.2 to 1.9	840 Ω
EP211-X30	1 to 5 Vdc	6 to 30	0.4 to 2.1	530 Ω
EP211-X30-5V	0 to 5 Vdc	6 to 30	0.4 to 2.1	530 Ω
EP211-X60-5V	0 to 5 Vdc	2 to 60	0.1 to 4.1	500 Ω
EP211-X120-10V	0 to 10 Vdc	3 to 120	0.2 to 8.3	805 Ω
ACCESSORY				
TX4-100	30.48 m (100') of 4-conductor shielded wire			

Comes complete with operator's manual and mounting bracket.

Ordering Example: IP211-X30, electropneumatic converter with 6 to 30 psig output, TX4-100, 4-conductor shielded wire.