



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

IP211 Current to Pressure (I/P)
EP211 Voltage to Pressure (E/P)

Starts at
\$285



Some
Models

IP211-X15, \$285,
shown actual size
(mounting bracket
included).

- ✓ 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.

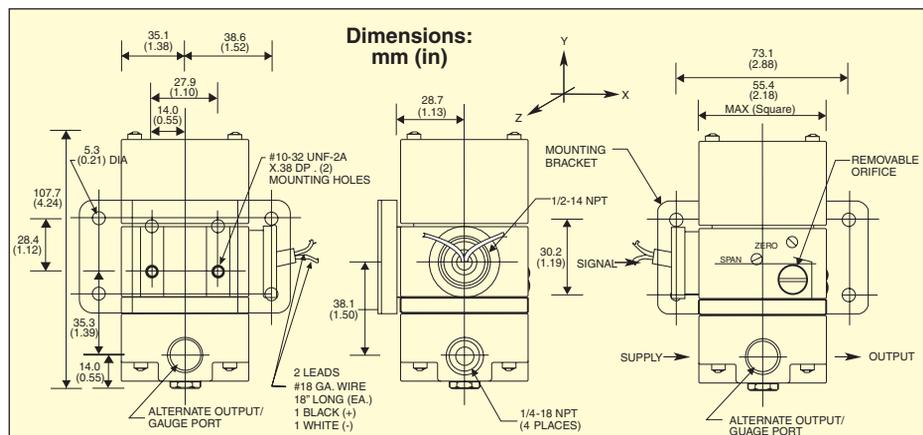
Field Reversible

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



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.





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 safety 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, \$285, shown smaller than actual size.

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

MODEL NO.	PRICE	INPUT RANGE	OUTPUT RANGE		IMPEDANCE (NOMINAL)
			psig	bar	
GENERAL PURPOSE I/P					
IP211-X15	\$285	4 to 20 mA	3 to 15	0.2 to 1.0	180 Ω
IP211-X27	285	4 to 20 mA	3 to 27	0.2 to 1.9	220 Ω
IP211-X30	285	4 to 20 mA	6 to 30	0.4 to 2.1	220 Ω
IP211-X60	340	4 to 20 mA	2 to 60	0.1 to 4.1	225 Ω
IP211-X120	340	4 to 20 mA	3 to 120	0.2 to 8.3	260 Ω
FM INTRINSICALLY SAFE I/P**					
IP211-X15-ISF	\$327	4 to 20 mA	3 to 15	0.2 to 1.0	180 Ω
IP211-X27-ISF	327	4 to 20 mA	3 to 27	0.2 to 1.9	220 Ω
CSA INTRINSICALLY SAFE I/P*					
IP211-X15-ISC	\$327	4 to 20 mA	3 to 15	0.2 to 1.0	180 Ω
IP211-X27-ISC	327	4 to 20 mA	3 to 27	0.2 to 1.9	220 Ω
GENERAL PURPOSE E/P					
EP211-X15	\$285	1 to 5 Vdc	3 to 15	0.2 to 1.0	615 Ω
EP211-X15-5V	285	0 to 5 Vdc	3 to 15	0.2 to 1.0	615 Ω
EP211-X15-10V	285	0 to 10 Vdc	3 to 15	0.2 to 1.0	985 Ω
EP211-X27	285	1 to 5 Vdc	3 to 27	0.2 to 1.9	530 Ω
EP211-X27-5V	285	0 to 5 Vdc	3 to 27	0.2 to 1.9	530 Ω
EP211-X27-10V	285	0 to 10 Vdc	3 to 27	0.2 to 1.9	840 Ω
EP211-X30	285	1 to 5 Vdc	6 to 30	0.4 to 2.1	530 Ω
EP211-X30-5V	285	0 to 5 Vdc	6 to 30	0.4 to 2.1	530 Ω
EP211-X60-5V	340	0 to 5 Vdc	2 to 60	0.1 to 4.1	500 Ω
EP211-X120-10V	340	0 to 10 Vdc	3 to 120	0.2 to 8.3	805 Ω
ACCESSORY					
OP-6	\$225	Reference Book: Fundamentals of Temperature, Pressure, and Air Flow Measurement			

* CSA approved. ** FM approved.

Comes with complete operator's manual.

Ordering Example: IP211-X30, electropneumatic converter with 6 to 30 psig output, TX4-100, 4-conductor shielded wire, \$285 + \$28.50 = \$313.50.

VALVES AND REGULATORS

omega.co.uk[®]

Your One-Stop Source for Process Measurement and Control!

Freephone 0800 488 488 | International +44(0) 161 777 6622 | Fax +44(0) 161 777 6622 | Sales@omega.co.uk

www.omega.co.uk



UNITED STATES

www.omega.com

1-800-TC-OMEGA
Stamford, CT.

UNITED KINGDOM

www.omega.co.uk

Manchester, England
0800-488-488
+44-(0)161-777-6611

CANADA

www.omega.ca

Laval(Quebec)
1-800-TC-OMEGA

FRANCE

www.omega.fr

0800-466-342

GERMANY

www.omega.de

Deckenfronn, Germany
0800-8266342

BENELUX

www.omega.nl

0800-099-33-44



More than 100,000 Products Available!

• Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders, Relative Humidity Measurement Instruments, PT100 Probes, PT100 Elements, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples, Thermowells and Head and Well Assemblies, Transmitters, Thermocouple Wire, RTD Probes

• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485, Ethernet and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Pressure Transmitters, Strain Gauges, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters