HVAC STYLE LOW DIFFERENTIAL PRESSURE TRANSMITTERS

PX291 Series

0-0.1 inH$_2$O to 0-30 psid
0-25 Pa to 0-2 bar

Starts at
$208

MADE IN USA

PX291-001WDI, $209, shown smaller than actual size.

Applications:

- Drop Across Filters
- Static Fan Pressures
- Clean Room Pressures
- Variable Volume Air Systems
- Velocity Pressures

- Voltage or Current Outputs
- Low Power Consumption
- No Moving Parts to Wear
- Position Insensitive

- Reliable Long-Term Stability
- Rugged Flame-Retardant Case

MOST POPULAR MODELS HIGHLIGHTED!

To Order *(Specify Model Number)*

RANGE		5 Vdc OUTPUT	PRICE	4 TO 20 mA OUTPUT	PRICE	MAX* OVERPRESSURE		COMPATIBLE METERS**
0 to 0.1 inH$_2$O	0 to 25.0 Pa	**PX291-0.1WD5V**	**$231**	**PX291-0.1WDI**	**$226**	5 inH$_2$O	1.25 kPa	DP41-E, DP25B-E, DP24-E
0 to 0.2 inH$_2$O	0 to 50.0 Pa	**PX291-0.2WD5V**	**231**	**PX291-0.2WDI**	**209**	5 inH$_2$O	1.25 kPa	DP41-E, DP25B-E, DP24-E
0 to 0.3 inH$_2$O	0 to 75.0 Pa	**PX291-0.3WD5V**	**209**	**PX291-0.3WDI**	**209**	5 inH$_2$O	1.25 kPa	DP41-E, DP25B-E, DP24-E
0 to 0.5 inH$_2$O	0 to 125.0 Pa	**PX291-0.5WD5V**	**209**	**PX291-0.5WDI**	**209**	5 inH$_2$O	1.25 kPa	DP41-E, DP25B-E, DP24-E
0 to 1.0 inH$_2$O	0 to 249.0 Pa	**PX291-001WD5V**	**209**	**PX291-001WDI**	**208**	20 inH$_2$O	4.98 kPa	DP41-E, DP25B-E, DP24-E
0 to 2.0 inH$_2$O	0 to 498.0 Pa	**PX291-002WD5V**	**208**	**PX291-002WDI**	**208**	20 inH$_2$O	4.98 kPa	DP41-E, DP25B-E, DP24-E
0 to 3.0 inH$_2$O	0 to 748.0 Pa	**PX291-003WD5V**	**208**	**PX291-003WDI**	**208**	20 inH$_2$O	4.98 kPa	DP41-E, DP25B-E, DP24-E
0 to 5.0 inH$_2$O	0 to 1.25 kPa	**PX291-005WD5V**	**208**	**PX291-005WDI**	**208**	5 psid	0.34 bar	DP41-E, DP25B-E, DP24-E
0 to 10.0 inH$_2$O	0 to 2.49 kPa	**PX291-010WD5V**	**208**	**PX291-010WDI**	**208**	5 psid	0.34 bar	DP41-E, DP25B-E, DP24-E
0 to 20.0 inH$_2$O	0 to 4.98 kPa	**PX291-020WD5V**	**208**	**PX291-020WDI**	**208**	5 psid	0.34 bar	DP41-E, DP25B-E, DP24-E
0 to 30.0 inH$_2$O	0 to 7.47 kPa	**PX291-030WD5V**	**208**	**PX291-030WDI**	**208**	5 psid	0.34 bar	DP41-E, DP25B-E, DP24-E
0 to 50.0 inH$_2$O	0 to 12.5 kPa	**PX291-050WD5V**	**208**	**PX291-050WDI**	**208**	15 psid	1.0 bar	DP41-E, DP25B-E, DP24-E
0 to 100.0 inH$_2$O	0 to 24.9 kPa	**PX291-100WD5V**	**208**	**PX291-100WDI**	**208**	15 psid	1.0 bar	DP41-E, DP25B-E, DP24-E
0 to 1.0 psid	0 to 0.07 bar	**PX291-001D5V**	**208**	**PX291-001DI**	**208**	15 psid	1.0 bar	DP41-E, DP25B-E, DP24-E
0 to 2.0 psid	0 to 0.14 bar	**PX291-002D5V**	**208**	**PX291-002DI**	**208**	15 psid	1.0 bar	DP41-E, DP25B-E, DP24-E
0 to 5.0 psid	0 to 0.34 bar	**PX291-005D5V**	**208**	**PX291-005DI**	**208**	15 psid	1.0 bar	DP41-E, DP25B-E, DP24-E
0 to 15.0 psid	0 to 1.0 bar	**PX291-015D5V**	**208**	**PX291-015DI**	**208**	30 psid	2.1 bar	DP41-E, DP25B-E, DP24-E
0 to 30.0 psid	0 to 2.1 bar	**PX291-030D5V**	**208**	**PX291-030DI**	**208**	60 psid	4.1 bar	DP41-E, DP25B-E, DP24-E

Comes with complete operator's manual.

** Maximum momentary overpressure.* *** See section D for compatible meters.*

Note: *See specifications for description of the elevated zero option,* ***$20*** *additional.*

Ordering Examples: PX291-001WD5V, *range of 1.00 inH$_2$O at 5 Vdc and 0 differential pressure at 0 Vdc,* ***$209. PX291-001WD5V-A,*** *range of 1.00 inH$_2$O at 5 Vdc and -0.33 inH$_2$O at 0 Vdc, $209 + $20 =* ***$229. PX291-001WDI,*** *range of 1.00 inH$_2$O at 20 mA and 0 differential pressure at 4 mA,* ***$209. PX291-001WDI-A,*** *range of 1.00 inH$_2$O at 20 mA and -0.33 inH$_2$O at 4 mA, $209 + $20 =* ***$229.***

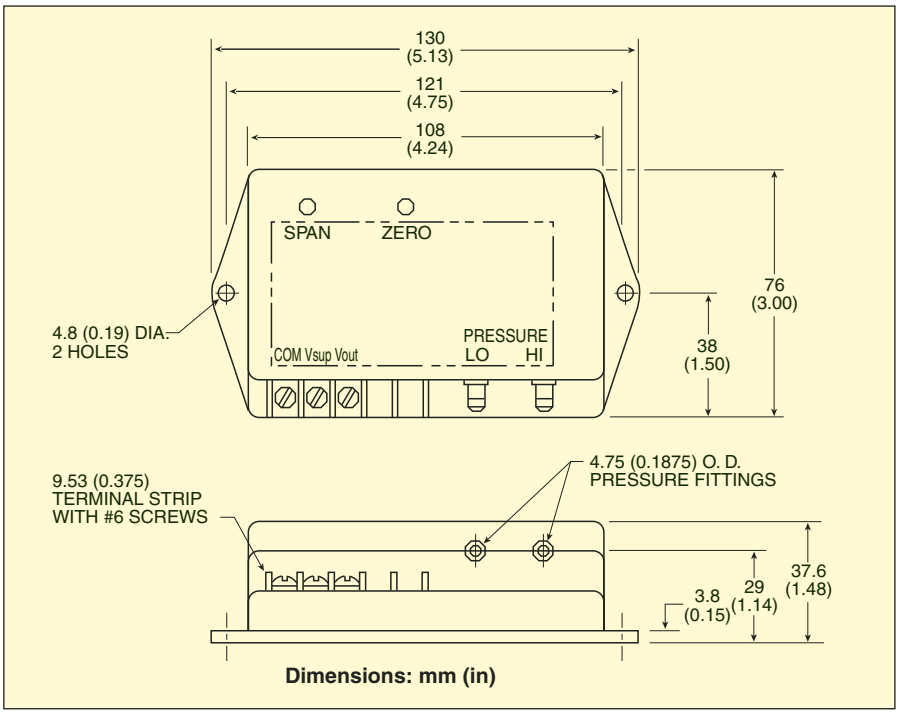
ACCESSORY

MODEL NO.	PRICE	DESCRIPTION
EE-2590	**$190**	Reference Book: Measurement Instrumentation and Sensors Handbook

0 TO 5 Vdc OR 4 TO 20 mA OUTPUTS ZERO OFFSET

The PX291 Series of differential pressure transmitters is designed to measure low pressures while using little power. A selection of ranges is available to meet most industrial and laboratory applications.

The transmitters are housed in a flame-retardant, glass-reinforced polyphenylene oxide case. Electrical connections are made by means of a ⅜" terminal with #6 screws. There are no moving parts and the transducers are virtually position insensitive. The span and zero settings are made via 20-turn potentiometers, for easy and precise adjustments. The pressure sensing element is a differential capacitive cell for the low pressure ranges from 0.1 to 5 inH_2O and a piezoresistive chip for ranges above 5 inH_2O. Both sensors ensure reliability and long-term stability.



Dimensions: mm (in)

SPECIFICATIONS

General: Measures differential, gage pressure or vacuum

Excitation: 11 to 32 Vdc reverse polarity protected

Voltage Output Models:
0 to 5 Vdc 3-wire, source or sink 3.5 mA, short circuit protected, current draw = 10 mA

Current Output Models:
4 to 20 mA, output limited to approximately 3.85 mA at low end and 25 mA at high end

Maximum Current Loop Resistance:
$R_L = (V_S - 11) \times 50$

Accuracy: ±1% includes linearity, hysteresis

Calibration: NIST-traceable

Operating Temperature:
0 to 45°C (32 to 115°F)

Temperature Effects:
Zero: ±0.05%/°C
Span: ±0.02%/°C

Operating Humidity Range:
10 to 90% non-condensing

Shock Resistance: 10 g (11 ms)

Vibration Resistance: 5 g to 50 Hz

Overpressure: See order chart for maximum safe momentary overpressure

Media Compatibility: Suitable for air or inert gas

Pressure Connection: 3/16" Dia. tube connections with integral filters at both ports, suitable for ⅛" ID Tygon® or polyurethane tubing (3 to 4 mm) or ¼" OD polyethlene tubing (6 mm)

Electrical Connection: External ⅜" terminal strip with #6 screws

Case Material: Flame-retardant, glass-reinforced polyphenylene oxide

Dimensions: 36 H x 76 W x 131 mm L (1.4H x 3.0W x 5.15"L)

Weight: 190 g (6.72 oz)

OFFSET OPTIONS

If the measured differential pressure is expected to go from positive to negative, a transducer with offset (elevated zero) should be ordered. The standard models in the order chart have no offset (i.e., at zero differential pressure, the output is 0 Vdc or 4 mA).

2 offset options are available:

"A" ¼ Span Offset
At zero differential pressure, the output is 1.25 Vdc or 8 mA allowable pressure excursion: -33% to 100% of range

"B" ½ Span Offset
At zero differential pressure, the output is 2.5 Vdc or 12 mA allowable pressure excursion: -100% to 100% of range

Examples: PX291-001WD5V-A will have a range of 1" water at 5 Vdc and –0.33" water at 0 Vdc

PX291-001WDI-B will have a range of +1" water at 20 mA and -1" water at 4 mA

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• 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

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 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, Strain Gages, 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

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