

WET/WET DIFFERENTIAL PRESSURE TRANSDUCER

UNI-DIRECTIONAL AND BI-DIRECTIONAL RANGES

0-1 to 0-100 psid Uni-Directional
±0.5 to ±50 psid Bi-Directional

PX2300 Series



- ✓ **0.25% Accuracy**
- ✓ **NEMA 4 (IP65) Rating**
- ✓ **Wet/Wet Corrosive Environments**
- ✓ **Ideal for Measuring Pressure Drop Across Filters**

OMEGA's PX2300 Series high-output, low differential pressure transducers are compatible with most media, from dry air to corrosive liquids. All wetted parts are stainless steel with elastomer seals. The electronics are housed in a NEMA 4 (IP65) enclosure. A high working pressure and high overpressure ratings ensure dependability in harsh industrial environments. These transducers are ideal for measuring pressure drop across filters and other process devices.

SPECIFICATIONS

Excitation: 24 Vdc nominal

Max: $30 + 0.004 \times$
(loop resistance Ω) Vdc

Min: $11 + 0.02 \times$
(loop resistance Ω) Vdc

Loop Resistance: 0 to 1000 Ω

Output: 4 to 20 mA

Accuracy: $\pm 0.25\%$ RSS FS at constant temperature (includes linearity, repeatability and hysteresis)

Linearity: $\pm 0.20\%$ FS

Hysteresis: 0.10% FS

Repeatability: $\pm 0.05\%$ FS

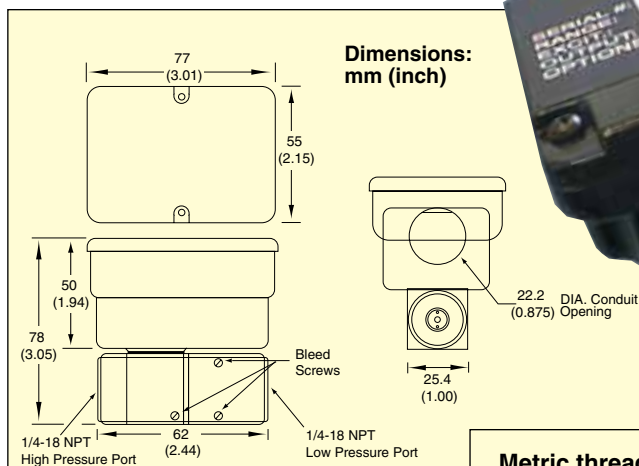
Operating Temperature Range:

-18 to 80°C (0 to 176°F)

Compensated Temperature Range:
-1 to 65°C (30 to 149°F)

Thermal Zero Effect: $\leq \pm 0.02\%$ FS/°F

Thermal Span Effect: $\leq \pm 0.02\%$ FS/°F



Sensor: Capacitive

Maximum Line Pressure: 250 psig

Maximum Overpressure:

High Side: 1 to 5 psi = 20 x FS,
10 to 25 psi = 10 x FS, 50 psi = 5 x FS,
100 psi = 2.5 x FS

Low Side: 2.5 x FS (shift recoverable)

The zero will shift slightly when high differential pressure is applied. The shift may be as much as $\pm 10\%$ FS with overpressure applied to the low port. (Other parameters will not shift.) The shift may be recovered by a positive overpressure or if the overpressure is always in one direction, the user may apply this pressure to pre-set the sensor. Subsequent overloads of less pressure will not cause any further shift.

Metric thread adaptors and snubbers available, visit us online.

PX2300-1DI, shown smaller than actual size.

Wetted Parts: Air and fluids compatible with 17-4 and 300 stainless steel, FKM, and silicone O-rings

Cavity Volume: 0.27/0.08" pos./neg. port

Case: NEMA 4 (IP65)

Pressure Port: 1/4 NPT internal

Electrical Connection: Internal barrier strip with 22.2 mm (0.875") conduit opening

Response Time: 50 ms (water)

Weight: 410 g (14.4 oz)

To Order

RANGE (psid)	MODEL NO.	COMPATIBLE METERS
0 to 1	PX2300-1DI	DP41-E, DP25B-E, DP-7700
0 to 2	PX2300-2DI	DP41-E, DP25B-E, DP-7700
0 to 5	PX2300-5DI	DP41-E, DP25B-E, DP-7700
0 to 10	PX2300-10DI	DP41-E, DP25B-E, DP-7700
0 to 25	PX2300-25DI	DP41-E, DP25B-E, DP-7700
0 to 50	PX2300-50DI	DP41-E, DP25B-E, DP-7700
0 to 100	PX2300-100DI	DP41-E, DP25B-E, DP-7700
BI-DIRECTIONAL RANGE		
±0.5	PX2300-0.5BDI	DP41-E, DP25B-E, DP-7700
±1	PX2300-1BDI	DP41-E, DP25B-E, DP-7700
±2.5	PX2300-2.5BDI	DP41-E, DP25B-E, DP-7700
±5	PX2300-5BDI	DP41-E, DP25B-E, DP-7700
±10	PX2300-10BDI	DP41-E, DP25B-E, DP-7700
±25	PX2300-25BDI	DP41-E, DP25B-E, DP-7700
±50	PX2300-50BDI	DP41-E, DP25B-E, DP-7700

Comes complete with operator's manual.

Ordering Examples: PX2300-5BDI, bi-directional range -5 to 5 psid transducer with current output.

PX2300-1DI, 0 to 1 psid range transducer with current output.