

ULTRA-HIGH-STABILITY AEROSPACE DIFFERENTIAL PRESSURE TRANSDUCER WET/DRY APPLICATIONS

mV/V Output
0-15 to 5000 psid
(0-1 to 350 bar)
Differential Pressure

1 bar = 14.5 psi
1 kg/cm² = 14.22 psi
1 atmosphere = 14.7 psi = 29.93 inHg = 760.2 mmHg = 1.014 bar

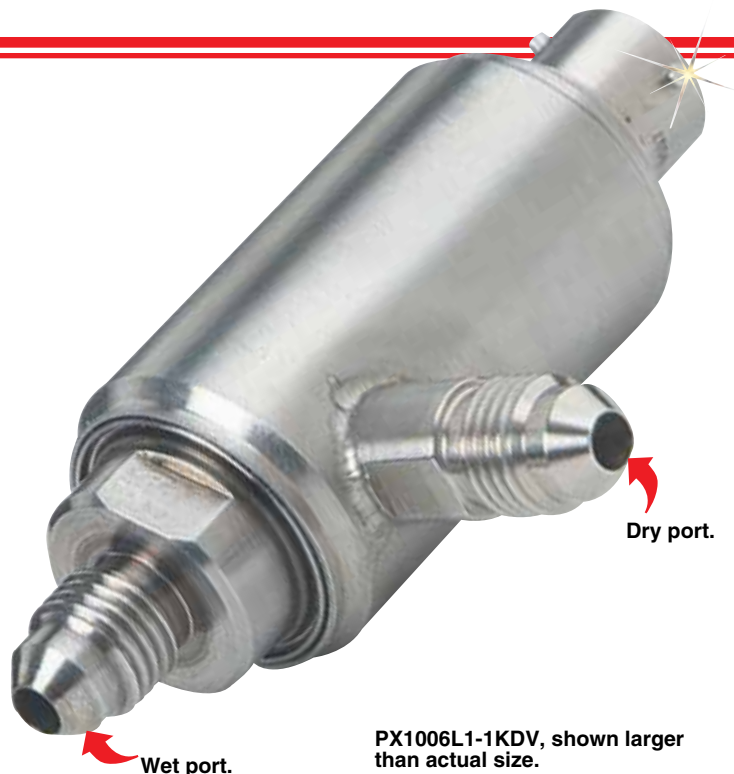
PX1006 Series



Standard

- ✓ High-Accuracy, High-Stability Wet/Dry Differential Pressure
- ✓ All Stainless Steel Body for Harsh Industrial Environments
- ✓ High Overpressure Capability
- ✓ Broad Compensated Temperature Range
- ✓ Shock and Vibration Resistant

The PX1006 wet/dry differential pressure transducers are high-stability aerospace units that use a sputtered strain gage assembly. The sputtering method produces an ultra-stable high-temperature sensor that can withstand high shock and vibration environments. The wet chamber is all stainless steel and is compatible with most industrial fluids. The reference chamber is limited to dry, non-corrosive, non-conductive fluids and gases.



PX1006L1-1KDV, shown larger than actual size.

SPECIFICATIONS

mV/V Output

ELECTRICAL

Excitation: 5 Vdc

Output: 15 mV nominal, 13 mV minimum

Bridge Resistance: 350 Ω nominal

Zero Balance: 0 mV ±2% FSO

Input Resistance: 400 Ω nominal

Output Resistance: 400 Ω nominal

PERFORMANCE

Accuracy: ±0.25% FSO linearity, hysteresis and repeatability combined

Hysteresis: <0.1% FSO

Repeatability: <0.05% FSO

Zero Shift with Line Pressure:

Line Pressure ≤3 psia: <1.5%

Line Pressure 3 to 15 psia: <0.25%

Line Pressure >15 psia: <2.5%

Sensitivity Shift with Line Pressure:

<0.5% per 100 psi

ENVIRONMENTAL

Operating Temp Range:

-54 to 149°C (-65 to 300°F)

Compensated Temp Range:

-54 to 121°C (-65 to 250°F)

Thermal Effects:

Zero: ±0.009% FSO/°C

(±0.005% FSO/°F)

Span: ±0.009% rdg/°C

(±0.005% rdg/°F)

Full Scale Output Stability:

Less than 0.05% FSO for 2 hr at room temperature. Less than 0.10% FSO for 2 hr at 121°C (250°F).

Zero Stability: Less than 0.05% FSO for 2 hr at room temperature. Less than 0.10% FSO for 2 hr at 121°C (250°F).

PRESSURE

Ranges psid: 15, 25, 50, 100, 300, 500, 1000, 2000, 2500, 5000

Safe Overpressure: 200% rated pressure or 15,000 psi, whichever is less

Burst Pressure: 300% rated pressure or 20,000 psi, whichever is less

Reference Chamber Pressure Range: 0 to 400 psi

MECHANICAL

Media Compatibility:

Wet Connection: 17-4 PH stainless steel

Dry Connection: Clean, dry, non-corrosive, non-conductive fluids

Natural Frequency: 50,000 Hz @ 5000 psi decreasing logarithmically to 5000 Hz @ 15 psi

Shock: 100 g half-sine wave for an 11 ms duration

Vibration: 35 g peak sinusoidal vibration from 10 Hz to 2 kHz limited to ½" D.A.

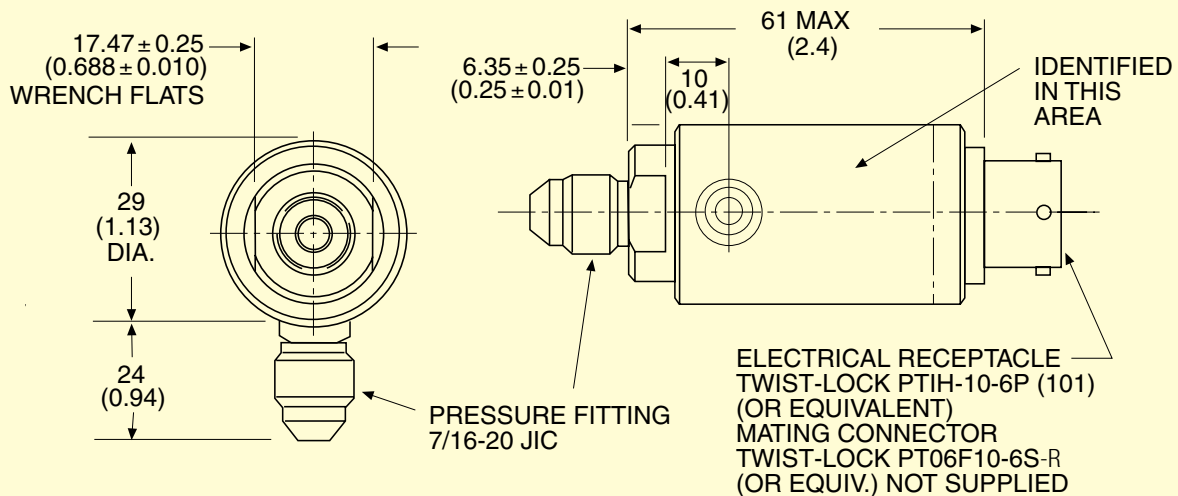
Pressure Port: ⅜-20 JIC

Electrical Connection: PTIH10-6P (or equal)

Mating Connector: PT06F10-6S-R (sold separately)

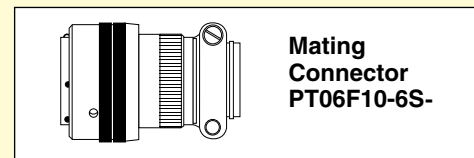
Weight: 142 g (5 oz) maximum

ULTRA-HIGH-STABILITY DIFFERENTIAL PRESSURE TRANSDUCER



| Pins | Functions |
|------|-----------------|
| A | POSITIVE INPUT |
| B | POSITIVE OUTPUT |
| C | NEGATIVE OUTPUT |
| D | NEGATIVE INPUT |
| E | SHORTED TO "D" |
| F | SHORTED TO "C" |

Dimensions: mm (inch)



PX1006L1-1.5KDV,
shown actual size.

To Order

Uni-Directional Wet/Dry Thin-Film Differential Pressure Transducer

| RANGE | | MODEL NO. | COMPATIBLE METERS* |
|----------------|---------------|------------------------|--------------------|
| 0 to 15 psid | 0 to 1.0 bar | PX1006L1-015DV | DP41-S, DP25B-S |
| 0 to 25 psid | 0 to 1.7 bar | PX1006L1-025DV | DP41-S, DP25B-S |
| 0 to 50 psid | 0 to 3.4 bar | PX1006L1-050DV | DP41-S, DP25B-S |
| 0 to 100 psid | 0 to 6.9 bar | PX1006L1-100DV | DP41-S, DP25B-S |
| 0 to 500 psid | 0 to 34.5 bar | PX1006L1-500DV | DP41-S, DP25B-S |
| 0 to 1000 psid | 0 to 68.9 bar | PX1006L1-1KDV | DP41-S, DP25B-S |
| 0 to 1500 psid | 0 to 103 bar | PX1006L1-1.5KDV | DP41-S, DP25B-S |
| 0 to 2000 psid | 0 to 138 bar | PX1006L1-2KDV | DP41-S, DP25B-S |
| 0 to 2500 psid | 0 to 172 bar | PX1006L1-2.5KDV | DP41-S, DP25B-S |
| 0 to 5000 psid | 0 to 345 bar | PX1006L1-5KDV | DP41-S, DP25B-S |

Comes complete with 5-point NIST traceable calibration.

* Visit us online for compatible meters.

Metric ranges available – consult Engineering.

Ordering Examples: **PX1006L1-500DV**, 500 psid wet/dry differential pressure transducer with mV/V output and integral connector. **PT06F10-6S-R**, mating connector (sold separately), **PX1006L1-015DV**, 15 psid wet/dry differential pressure transducer with mV/V output and integral connector. **PT06F10-6S-R**, mating connector (sold separately).