

# PTX 300 Series

## Subsea Pressure Transmitters



- Ranges from 1000 to 15,000 psi
- External/ambient pressure up to 4000 psi
- Better than 0.1% accuracy.
- High reliability and excellent long term stability
- All welded construction, high containment
- Customized designs available



The PTX 300 series of pressure transmitters has been developed for the offshore oil and gas industries as a compact, high performance device for reliable and long term subsea use. Maintenance free, it is available with operating ranges up to 15,000 psi and is fully submersible with an ambient pressure rating up to 4000 psi.

Originally designed for aerospace hydraulic systems, the PTX 300 series utilizes micromachined piezo resistive silicon pressure measurement technology, continually developed and proven by Druck for 30 years.

The product is packaged to suit the specific requirements of subsea hydraulic control systems. In particular, the high pressure containment rating, hydraulic transient protection and integrity of cable/electrical connections combine with the precision measuring technology to make the PTX 300 series a leader in this field.



## Subsea Pressure Transmitters

### STANDARD SPECIFICATIONS

#### Pressure Measurement

#### Operating Pressure Ranges

Any full scale range and engineering units may be specified between 0 - 1000 psi and 0 - 15,000 psi, sealed gauge or absolute.

#### Proof Pressure

Proof pressure tested to 1.5 x F.S.

#### Overpressure

The operating pressure range can be exceeded by 2 x F.S. to 23,000 psi, whichever is less.

#### Secondary Containment Pressure

The transmitter will safely contain up to 16,000 psi without leakage of pressure media.

#### Pressure Media

Fluids compatible with a fully welded assembly of Inconel 625 Hastelloy and Stainless Steel. *Other materials available - please refer to Druck.*

#### Transmitter Supply Voltage

10 to 32 VDC. The minimum supply voltage that must appear across the transmitter terminals is 10Vd.c. and is calculated by:

$$V_{\text{MIN}} = V_{\text{SUP}} - (0.02 \times R_{\text{LOOP}})$$

#### Supply Sensitivity

±0.005% F.S./Volt.

#### Insulation Resistance

>100MΩ at 500V d.c.

#### Output Current

4 to 20mA (2-wire) proportional for zero to full scale pressure.

#### Performance

#### Accuracy

Combined Non-linearity, Hysteresis and Repeatability: ±0.1% F.S. B.S.L.

#### Zero Offset and Span Setting

±1% F.S. nominal at 23 C.

#### Long Term Stability

At standard reference conditions any calibration change will not exceed ±0.1% F.S. per annum.

#### Temperature Range

Process/ambient -40 to 80°C  
Compensated -20 to 50°C  
Storage -40 to 80°C

#### Temperature Effects

±0.5% F.S. Total Error Band.

#### Physical

#### Pressure Connection

Face or piston seal and threaded connections available. *Please refer to Druck.*

#### Electrical Connection

A choice of flying leads and/or subsea connectors are available. *Please refer to Druck.*

#### Weight

9.5 oz nominal.

#### Ingress Protection

IP68, submersible to 4000 psi.

### ORDERING

Please state the following:

- (1) Type number.
- (2) Operating pressure range (Sealed gauge or absolute).
- (3) Pressure and electrical connections required.

*The PTX 300 series can be further customized to suit individual user requirements. Please refer to Druck.*

### RELATED PRODUCTS

Druck manufactures a comprehensive range of pressure sensors, indicators, calibrators, controllers and deadweight testers. The range of portable calibrators also covers temperature and electrical parameters.

*Please refer to Druck for further information and product datasheets.*

### CALIBRATION STANDARDS

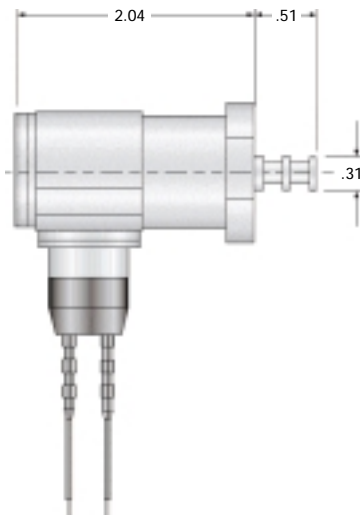
Instruments manufactured by Druck are calibrated against precision pressure calibration equipment which is traceable to International Standards.

***Continuing development sometimes necessitates specification changes without notice.***

***Druck is an ISO 9001 registered company.***



### INSTALLATION DRAWINGS - Dimensions in inches



#### Typical outline examples shown

