

**Druck**

## PTX 1885 / 1285 Series

### Depth/Level Pressure Transmitter with Internal Lightning Protection

- $\pm 0.1\%$  FS or  $\pm 0.25\%$  FS accuracy
- Excellent stability
- High integrity and reliability
- Fully welded titanium with 5 year corrosion warranty
- Output: 2-wire, 4-20mA
- Internal lightning protection (IEC 61000-4-5 Level 4)

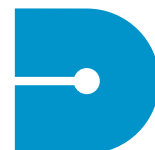


The PTX 1885 and 1285 Series submersible depth/level pressure transmitters are specifically designed for depth/level measurements in groundwater remediation, chemical tanks and other similar applications where the possibility exists for lightning damage. These devices have the same high performance and excellent reliability as the PTX 1880 and 1280 with the additional benefit of internal lightning protection.

Internal lightning protection to IEC 61000-4-5, Level 4 is incorporated inside the device as a means of protecting against a possible water lightning strike. It is also recommended that a high-performance external lightning arrester be used to provide extra protection to surrounding electronic devices.

As with Druck's PTX 1280 and 1880, the PTX 1285 and 1885 are constructed of all-welded titanium and are backed by a 5 year corrosion warranty. An advanced micromachined silicon piezoresistive pressure sensor provides excellent performance and resistance to shock and vibration. A tough, tefzel cable is attached to the transmitter body providing a high-integrity waterproof assembly.

The fully isolated titanium design ensures long term reliable measurements in water and wastewater management, industrial process and marine applications.



# PTX 1885 / 1285 Series

## Depth/Level Pressure Transmitter with Internal Lightning Protection

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### STANDARD SPECIFICATION

#### Operating Ranges

1 and 2.5 psig, and any range between 5 and 900 psig or psia  
Other pressure units can be specified

#### Overpressure

1, 2.5 psig 8X  
5 psig 6X  
above 5 psi 4X  
2000 psi max

#### Pressure Media

Fluids compatible with titanium, tefzel and delrin

#### Transduction Principle

Piezoresistive micromachined silicon strain gauge

#### Combined Non-Linearity, Hysteresis and Repeatability

PTX 1885 ±0.1% FS BSL  
PTX 1285 ±0.25% FS BSL  
Improved accuracy available  
Consult factory

#### Temperature Effects

PTX 1885  
±0.3% FS TE B for ranges 5 psi and above  
±0.6% FS TE B for ranges 1 and 2.5 psi

#### PTX 1285

±1.5% FS TE B for ranges 5 psi and above  
±2% FS TE B for ranges 1 and 2.5 psi

#### Operating Temperature Range

-5 to 140°F

#### Compensated Temperature Range

30 to 86°F

#### Excitation

9-30 Vdc

#### Output

2-wire, 4-20mA

#### Sensor Body

All-welded titanium

#### Measurement Diaphragm

Titanium

#### Pressure Connection

Depth cone with radial inlet holes

#### Electrical Connection

Vented tefzel cable molded to sensor (specify length)

#### Diameter

0.69 inches (17.5mm)

#### Weight

5 oz. nominal (excluding cable)

#### Safety

EMC & Surge Protection	
Electrostatic Discharge (per IEC 61000-4-2)	±4kV in contact w/ unit ±8 kV in air
Radiated RF Immunity (per IEC 61000-4-3)	80 to 1000MHz@10V/m
Fast Transient (per IEC 61000-4-4)	±1kV@5/50 μS T <sub>r</sub> /T <sub>h</sub>
Surge Lines to Ground (per IEC 61000-4-6)	±1kV (42Ω source) @1.2/50 μS T <sub>r</sub> /T <sub>h</sub>
Lightning Surge Immunity (per IEC 61000-4-5 Level 4)	±4kV 8/20 μS T <sub>r</sub> /T <sub>h</sub> ±2kV 8/20 μS T <sub>r</sub> /T <sub>h</sub>

#### Ingress Protection

NEMA 6X (IP68) to 2300 ftH<sub>2</sub>O

#### Insulation Resistance

Greater than 100 Megohms @ 500 Vdc

#### Compatible Fluids

Any fluid compatible with titanium, tefzel and delrin

**NOTE:** Consult factory for FM/CSA/UL IS, Class I, Div 1, Groups A, B, C, D and ATEX IS EEx ia IIC

### OPTIONS

- A) Sinkweight (P/N: DA2608-1-01)
- B) Cable clamp (P/N: 192-373-01)

### ASSOCIATED PRODUCTS

- PTX 1835/1235 - same as PTX 1885/1285 with polyurethane cable
- DPI 280 - Digital display
- STE 110 - Sensor termination enclosure with desiccant
- DPI 610 - Portable Pressure Calibrator
- Lightning Arrestor - P/N: PT 1X2-24DC-ST with PT 1X2-BE

### ORDERING INFORMATION

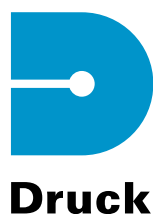
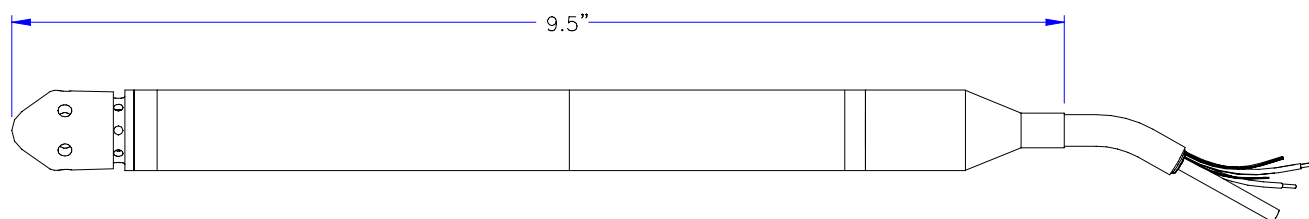
- (1) Select model number
- (2) State pressure range and units
- (3) State output required
- (4) State options (if required)

*Continuing development sometimes necessitates specification changes without notice.*

**Druck is an ISO 9001 registered company**



### INSTALLATION DRAWING: Dimensions in inches



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Representative