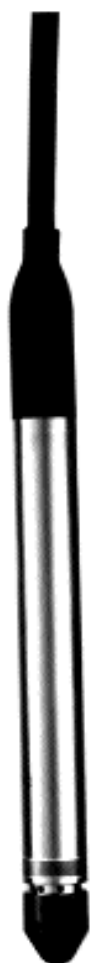


**Druck**

## PTX 1835 / 1235 Series

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

- Excellent stability
- $\pm 0.1\%$  FS or  $\pm 0.25\%$  FS accuracy
- 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)

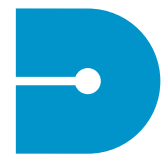


The PTX 1835 and 1235 submersible depth/level pressure transmitters are specifically designed for depth/level measurements in groundwater, well water, canals, rivers and other similar applications where the possibility exists for lightning damage. These devices have the same high performance and excellent reliability as the PTX 1830 and 1230 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 1230 and 1830, the PTX 1235 and 1835 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, polyurethane cable is molded to the transmitter body providing a high-integrity waterproof assembly.

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



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

#### 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, polyurethane and delrin

##### Transduction Principle

Piezoresistive micromachined silicon strain gauge

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

PTX 1835            ±0.1% FS BSL  
PTX 1235            ±0.25% FS BSL  
Improved accuracy available  
Consult factory

##### Temperature Effects

PTX 1835  
±0.3% FS TEb for ranges 5 psi and above  
±0.6% FS TEb for ranges 1 and 2.5 psi  
PTX 1235  
±1.5% FS TEb for ranges 5 psi and above  
±2% FS TEb for ranges 1 and 2.5 psi

##### Operating Temperature Range

-5 to 140°F

##### Compensated Temperature Range

30 to 86°F

##### Output

2-wire, 4-20mA

##### Excitation

9-30 Vdc

##### Sensor Body

All-welded titanium

##### Pressure Connection

Depth cone with radial inlet holes

##### Measurement Diaphragm

Titanium

##### Electrical Connection

Vented polyurethane 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 ±8kV 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 61000-4-5)	±1kV (42 Ohm Source) @ 1.2/50 μS T <sub>r</sub> /T <sub>h</sub>
Conducted RF Immunity (per IEC 61000-4-6)	0.15 to 80 MHz 10V/m
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, polyurethane 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 1885 - same as PTX 1835 with Tefzel 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 DRAWINGS: Dimensions in inches

