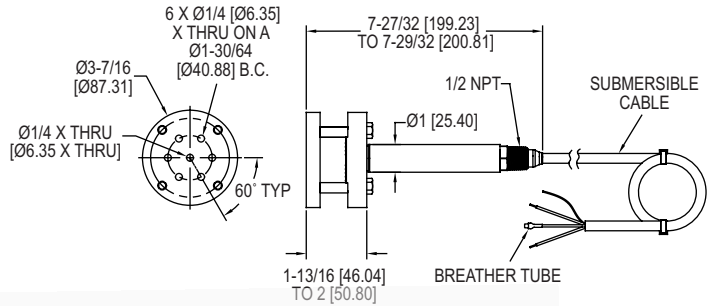


# SUBMERSIBLE LEVEL TRANSMITTERS

Perfect for Sludge and Slurries, Lightning Protected, Standard 72 Hour Lead Time



PBLT2

PBLTX  
(ATEX option available)

The **Series PBLT2 & PBLTX Submersible Level Transmitters** are manufactured for years of trouble free service in the harshest applications. These Series measure the height of liquid above the position in the tank referenced to atmospheric pressure. The transmitter consists of a piezoresistive sensing element, encased in a 316 SS housing with cage and large diameter 316 SS diaphragm seal.

## BENEFITS/FEATURES

- Meet application requirements with durable cage design with large diameter 316 SS diaphragm seal that is non-clogging and damage resistant to floating solids
- Increased life with lightning and surge protection utilizing dual arrestor technology, grounded to case, eliminating both power supply surges and lightning ground strike transients (surge protection is not guaranteed and is not covered by warranty) on PBLT2 models
- Eliminates particulate or water droplets from entering the transducer using maintenance-free filter
- Peace of mind with UL approved intrinsically safe on PBLTX models for use in hazardous locations when used with proper barrier
- Decrease ownership cost with durable, 270 lb tensile strength shielded and vented cable and excellent chemical compatibility
- Flexible installation options with NPT connection to rigidly install in a pipe/conduit or use a A-625 hanging loop to attach a chain to remove from the installation
- Minimal downtime with standard 72 hour lead time

## APPLICATIONS

- Wastewater
- Sludge pits, clarifiers, digesters
- Alum tanks
- Chemical storage tanks
- Oil tanks
- Lime slurry
- Sumps
- Reservoirs

## SPECIFICATIONS

**Service:** Compatible liquids.  
**Wetted Materials:** Body: 316 SS, 316L SS; Cable: Polyether polyurethane or ETFE; Seals: Fluoroelastomer.  
**Accuracy:**  $\pm 0.25\%$  FS (includes linearity, hysteresis, and repeatability).  
**Temperature Limit:** PBLT2: 0 to 200°F (-18 to 93°C); PBLTX: ETFE -4 to 176°F (-20 to 80°C); Polyurethane: -4 to 149°F (-20 to 65°C).  
**Compensated Temperature Range:** PBLT2: 0 to 180°F (-18 to 82°C); PBLTX: 0 to 176°F (-18 to 80°C).  
**Thermal Effect:**  $\pm 0.02\%$  FS/°F.  
**Pressure Limit:** 2X FS.  
**Power Requirement:** PBLT2: 13-30 VDC; PBLTX: 10-28 VDC.  
**Output Signal:** 4-20 mA DC, 2-wire.  
**Response Time:** 50 ms.  
**Loop Resistance:** 900  $\Omega$ .  
**Electrical Connection:** Wire pigtail.  
**Mounting Orientation:** Suspended in tank below level being measured.  
**Electrical Protection:** PBLT2: Lightning and surge protection; PBLTX: None.  
**Weight:** 3.8 lb (1.7 kg) to 4.3 lb (2.0 kg).  
**Compliance:** PBLT2: CE, UKCA; PBLTX: CE, UKCA, cULus intrinsically safe for Class I, Div. 1, Groups A, B, C, D; Class II, Div. 1, Groups E, F, G; Class III, Div. 1; ATEX: II 1 G Ex ia IIC T4 Ga and II 1 D Ex ia IIC T135C Da (According to control drawing 001833-44)\*\*.  
**\*\*Up to 275' (83.8 m) for ETFE cable; Up to 470' (143.3 m) for polyurethane cable.**

| MODEL CHART      |                                  |                        |              |
|------------------|----------------------------------|------------------------|--------------|
| Model            | Range psi*<br>(ft w.c.) [m w.c.] | Cable<br>Length ft (m) | Cable Type   |
| PBLT2-5-40       | 5 (11.54) [3.52]                 | 40 (12.2)              | ETFE         |
| PBLT2-10-40      | 10 (23.09) [7.04]                | 40 (12.2)              | ETFE         |
| PBLT2-15-60      | 15 (34.63) [10.56]               | 60 (18.3)              | ETFE         |
| PBLT2-20-60      | 20 (46.18) [14.08]               | 60 (18.3)              | ETFE         |
| PBLT2-5-40-PU    | 5 (11.54) [3.52]                 | 40 (12.2)              | Polyurethane |
| PBLT2-10-40-PU   | 10 (23.09) [7.04]                | 40 (12.2)              | Polyurethane |
| PBLT2-15-60-PU   | 15 (34.63) [10.56]               | 60 (18.3)              | Polyurethane |
| PBLT2-20-60-PU   | 20 (46.18) [14.08]               | 60 (18.3)              | Polyurethane |
| PBLT2-3.5M-5M-PU | 4.97 (11.48) [3.5]               | 16.40 (5)              | Polyurethane |
| PBLT2-5M-10M-PU  | 7.10 (16.38) [5]                 | 32.81 (10)             | Polyurethane |
| PBLT2-10M-18M-PU | 14.21 (32.78) [10]               | 59.06 (18)             | Polyurethane |

\*Configured ranges below 5 psi (11.54' w.c.) (3.52 m w.c.)  $\pm 1\%$  FS accuracy.

**Note:** For intrinsically safe approval, change model number from PBLT2 to PBLTX. For custom ranges or cable lengths, contact factory.

| OPTIONS |                         |
|---------|-------------------------|
| Model   | Description             |
| -ATEX   | ATEX intrinsically safe |

| ACCESSORIES |                                                                                                                 |
|-------------|-----------------------------------------------------------------------------------------------------------------|
| Model       | Description                                                                                                     |
| A-297       | Dessicant filter for vent tube. Removes humidity for protection of the sensor. Changes color to show saturation |
| A-625       | 316 SS cable hanger use with NPT option for attaching chain for easy pulling out of application                 |
| MTL5541     | Galvanic barrier                                                                                                |
| MTL7706     | Intrinsically safe zener barrier                                                                                |



A-297

A-625