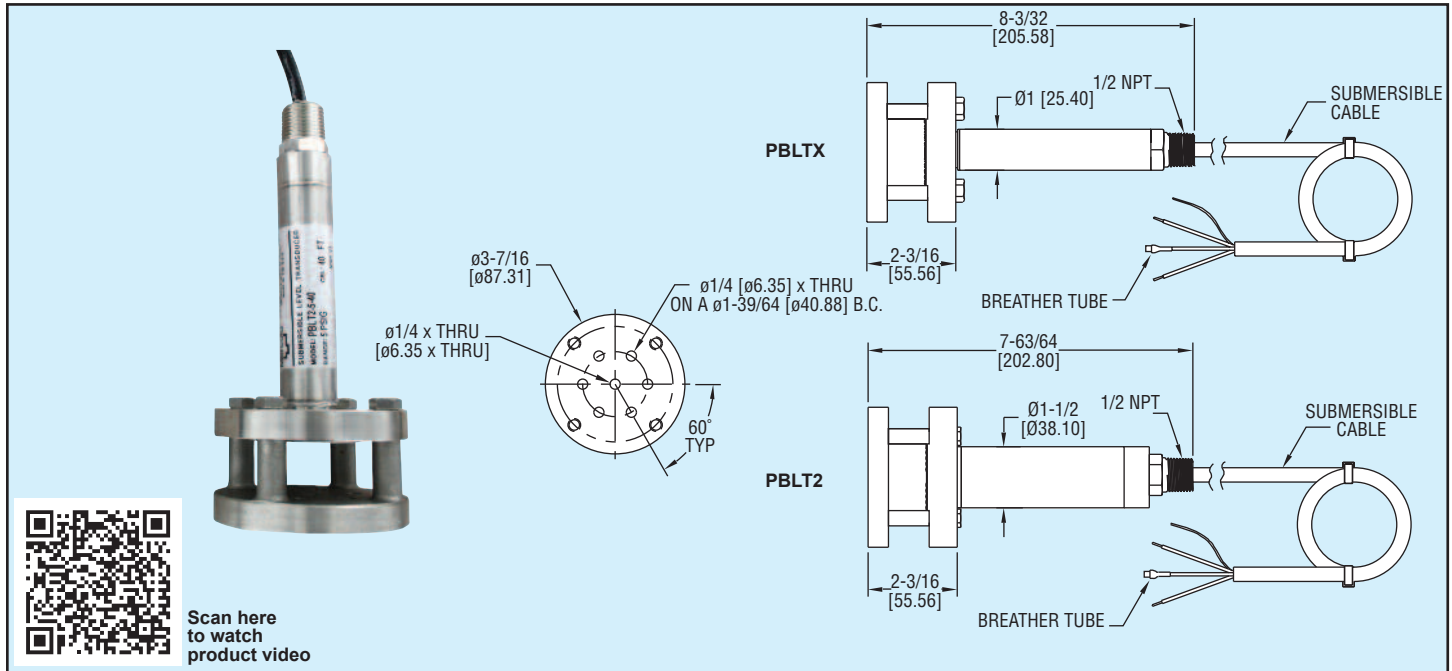




Series  
PBLT2  
&  
PBLTX

# Submersible Level Transmitters

Perfect for Sludge and Slurries, Lightning Protected



**PBLT2 and PBLTX Submersible Level Transmitters** are manufactured for years of trouble free service in the harshest applications. Both measure the height of liquid above the position in the tank referenced to atmospheric pressure. The transmitters consist of a piezoresistive sensing element, encased in a 316 SS housing. Perfect for wastewater and slurry applications with features to protect the unit from these demanding applications. Large diameter 316 SS diaphragm seal is non-clogging and damage resistant to floating solids.

The PBLT2 incorporates 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). The PBLTX is UL approved intrinsically safe for use in hazardous locations when used with proper barrier.

Units come equipped with a 270-pound tensile strength shielded and vented cable. Ventilation tube in the cable automatically compensates for changes in atmospheric pressure above the tank. The vent is protected with a maintenance free filter eliminating particulate or water droplets from entering the transducers.

### FEATURES

- Excellent chemical compatibility with 316 construction and ETFE cable
- Lightning and surge protection on PBLT2 models
- Maintenance free vent filter
- UL approved intrinsically safe on PBLTX models
- Large diameter, non-clogging, damage resistant, 316 SS diaphragm seal

### APPLICATIONS

Wastewater: Sludge pits, clarifiers, digesters; Alum tanks; Chemical storage tanks; Oil tanks; Lime slurry; Sumps; Reservoirs.

| Model            | Range psi<br>(ft w.c.) [m w.c.] | Cable Length<br>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  | 14.21 (32.81) [10]              | 32.81 (10)             | Polyurethane |
| PBLT2-10M-18M-PU | 25.58 (59.06) [18]              | 59.06 (18)             | Polyurethane |

### SPECIFICATIONS

- Service:** Compatible liquids.  
**Wetted Materials:** 316 SS, 316L SS, epoxy, cable: ETFE or polyurethane.  
**Accuracy:** ±0.25% full-scale (includes linearity, hysteresis, and repeatability).  
**Temperature Limit:** PBLT2: 0 to 200°F (-18 to 93°C); PBLTX: 0 to 176°F (-18 to 80°C).  
**Compensated Temperature Range:** PBLT2: 0 to 180°F (-18 to 82°C); PBLTX: 0 to 176°F (-18 to 80°C).  
**Thermal Effect:** ±0.02% FS/°F.  
**Pressure Limit:** 2X full-scale.  
**Power Requirement:** PBLT2: 13 to 30 VDC, PBLTX: 10 to 28 VDC.

**Output Signal:** 4 to 20 mA DC, two wire.

- Response Time:** 50 ms.  
**Loop Resistance:** 900 Ω.  
**Electrical Connection:** Wire pigtail.  
**Mounting Orientation:** Suspended in tank below level being measured.  
**Weight:** 4.3 lb (2.0 kg).  
**Electrical Protection:** PBLT2: Lightning and surge protection, PBLTX: none.  
**Agency Approvals:** PBLT2: None, PBLTX: CE, 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. (According to control drawing 01-700797-00).

### OPTIONS

- Intrinsically Safe Approval** - Change model number from PBLT2 to PBLTX  
**Custom ranges or Cable Lengths** - Contact the factory

### ACCESSORIES

- MTL5041**, intrinsically safe galvanic isolator  
**MTL7706**, intrinsically safe zener barrier



**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