

SERIES PBLT2 & PBLTX | MERCOID SUBMERSIBLE LEVEL TRANSMITTERS

FEATURES/BENEFITS

- Durable cage design with large diameter 316 SS diaphragm seal that is non-clogging and damage resistant to floating solids
- 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) on PBLT2 models
- Maintenance free filter eliminates particulate or water droplets from entering and damaging the transducer
- UL approved intrinsically safe on PBLTX models for use in hazardous locations when used with proper barrier
- Excellent chemical compatibility for wide application use
- NPT connection allows the unit to be rigidly installed in a pipe/conduit, or the addition of a A-625 hanging loop for attaching a chain for pulling out of the installation

APPLICATIONS

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

DESCRIPTION

The **SERIES PBLT2 & PBLTX** Submersible Level Transmitters are manufactured for years of trouble free service in the harshest applications. This Series measures 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.



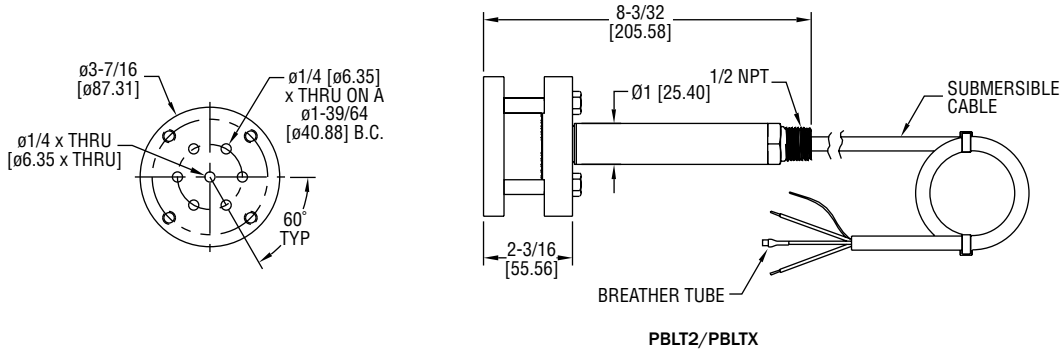
SPECIFICATIONS

Service	Compatible liquids.
Wetted Materials	316 SS, 316L SS, epoxy, cable: ETFE or polyurethane.
Accuracy	±0.25% FS (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 FS.
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.
Electrical Protection	PBLT2: Lightning and surge protection, PBLTX: none.
Weight	4.3 lb (2.0 kg).
Agency Approvals	PBLT2: CE, 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)**.
*Configured ranges below 5 psi (11.54 ft w.c.) (3.52 m w.c.) ±1% FS accuracy	
**Up to 196 ft (59.5 m) for ETFE cable; Up to 333 ft (101.5 m) for polyurethane cable	





DIMENSIONS



HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code.

PBLT2	-5	-40	-PU
<p>SERIES</p> <p>PBLT2 - Submersible level transmitter</p> <p>PBLTX - Submersible level transmitter (intrinsically safe)</p>	<p>*RANGE psi (ft w.c.) [m w.c.]</p> <p>-5 - 5 (11.54) [3.52]</p> <p>-10 - 10 (23.09) [7.04]</p> <p>-15 - 15 (34.63) [10.56]</p> <p>-20 - 20 (46.18) [14.08]</p> <p>-3.5M - 4.97 (11.48) [3.5]</p> <p>-5M - 7.11 (16.40) [5]</p> <p>-10M - 14.21 (32.81) [10]</p> <p><small>*Additional pressure ranges available, consult factory</small></p>	<p>**CABLE LENGTH ft (m)</p> <p>-40 - 40 (12.2)</p> <p>-60 - 60 (18.3)</p> <p>-5M - 16.40 (5)</p> <p>-10M - 32.81 (10)</p> <p>-18M - 59.06 (18)</p> <p><small>**Configured cable lengths available from 10 to 2000 ft (3 to 610 m)</small></p>	<p>CABLE TYPE</p> <p>BLANK - ETFE</p> <p>-PU - Polyurethane</p>

ACCESSORIES

Model	Description
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 for attaching chain for easy pulling out of application

Important Notice: Dwyer Instruments, Inc. reserves the right to make changes to or discontinue any product or service identified in this publication without notice. Dwyer advises its customers to obtain the latest version of the relevant information to verify, before placing any orders, that the information being relied upon is current.

