
Submersible Transducer

SBLTDHPT12B22010MX & SBLTDHPT12B22015MX -Standard Accuracy
SBLTDHHAPT12B22010MX & SBLTDHHAPT12B22015MX -High Accuracy





Description

Submersible Level Transmitters measure the height of the liquid above the position of the transmitter in the tank referenced to atmospheric pressure.

PRM manufactures high quality and high accuracy submersible level transmitters typically used for installation in wells, sumps, pits, tanks, etc. for the purposes of monitoring and/or control of water levels. PRM's transmitters are typically used in potentially harsh environments where chemical resistance is of concern.

The SBLT series have a compact, rugged design and are easily installed. The sensor and cable are completely submersible and need minimal maintenance and care. Reliably monitors levels in groundwater wells, tanks, etc.

Details

- Body Material: 316 Stainless Steel
- PTFE Chemical Resistant Cable Assembly (Other options available upon request)
- Excellent for Environmental Projects where contamination can damage standard units
- Scale Value: 0-10 Meters (0-32.8') scaled for 4~20mA 0-15 Meters (0-49.2') scaled for 4~20mA
- 24 VDC Power (18-36 VDC)
- Temperature Range: 14°F to 175°F
- +/- 0.5% FS standard accuracy +/-0.25% FS higher accuracy
- Higher accuracy version available where enhanced calibration of the sensors at the factory scale the accuracy to 0.25% or greater

Options

Standard:

- 33 Ft. (10 Meter) SBLTDHPT12B22010MX
- 50 Ft (15 Meter) SBLTDHPT12B22015MX

High Accuracy:

- 33 Ft. (10 Meter) SBLTDHHAPT12B22010MX
- 50 Ft (15 Meter) SBLTDHHAPT12B22015MX



Installation

1. Feed the transducer cable through the junction box at the top of the well. Only terminate connections from the transducer in a sealed electrical termination box that is not susceptible to water intrusion. Desiccant packs should be installed inside termination boxes and replaced as they become expended.
2. Suspend the unit at the desired depth and fasten the cable as to not allow the cable to slip father down into the well. Take care to not clamp the cable that may cause damage.
3. The red wire should be terminated to the positive and the black cable to the negative terminals within the junction box. The factory shielded cable
4. The positive terminal should be connected to a 24vdc source and the negative terminal should be wired to the device that monitors the water level, such as a PLC.
5. The air tube within the cable should be exposed to ambient pressure outside of the well for maximum accuracy. Note: Water intrusion into the air tube will result in false readings and **WILL** damage the transducer. A desiccant filter should be connected to the air tube to prevent moisture from entering the line. It is important that the junction boxes and connections cannot be submerged in water.

The transducers should only be installed by Fully Licensed Electrical Contractors with a good working knowledge of low voltage instrumentation needs.

Special considerations should be given when transducers are installed, especially in regards to a field installation where distances make them susceptible to surges or transient voltages that can occur. The transducers come with a shielded cable and a drain grounding conductor. The shield should be properly grounded in accordance with the NEC and local requirements. It is also important that the 4-20mA transmission cable is shielded and is properly grounded with it's drain cable.

Installation of the transmitters should only be done in accordance with good engineering practices for the given application and done so only by licensed electricians. PRM holds no liability for the installation of the transmitters and these units are not designed for installation in hazardous locations where potential explosive vapors could exist. PRM is also not responsible for potential corrosive effects due to an installation where chemical or electrical currents could cause a corrosive affect of the transmitters.