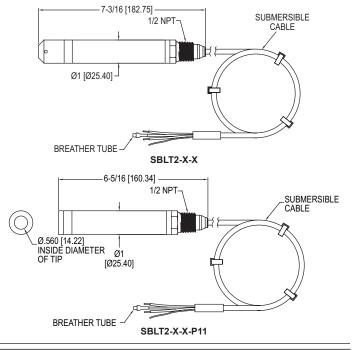


# Series SBLT2 Submersible Level Transducer

# **Specifications - Installation and Operating Instructions**







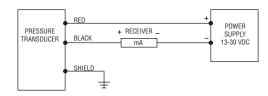
The Series SBLT2 Submersible Level Transducer is manufactured for years of trouble free service. The transmitter consists of a piezoresistive sensing element, encased in a 316 SS housing. Superior lightning and surge protection utilizing dual arrestor technology, grounded to case, eliminating both power supply surges and lightning ground strike transients (surge protection is not guaranteed and is not covered by warranty). Bullet nose design protects diaphragm from damage. Comes equipped with a 270-pound tensile strength, shielded, vented cable. Ventilation tube in the cable automatically compensates for changes in atmospheric pressure above the tank.

## **APPLICATIONS**

- Well monitoring
- Ground water monitoring
- Environmental remediation
- Surface water monitoring
- Down hole
- Water tanks

#### **ELECTRICAL INSTALLATION**

An external power supply delivering 13-30 VDC with minimum current capability of 40 mA DC (per transmitter) is required to power the control loop. See figure below for connection of the power supply, transmitter and receiver.



The maximum receiver load resistance (RLmax) for the DC power supply voltage (Vsup) is expressed by the formula:

$$RLmax = \frac{Vsup - 13 V}{0.02A}$$

Shielded cable is recommended for control loop wiring.

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#### **SPECIFICATIONS**

Service: Compatible liquids.

Wetted Materials: Body: 316/316L SS; Bullet nose: PVC; Cable: Polyether polyurethane or ETFE; Seals:

Fluoroelastomer.

Accuracy: ±0.25% of FS.

**Temperature Limit:** Polyurethane: 0 to 150°F (-18 to 66°C); ETFE: 0 to 200°F (-18 to 93°C).

Compensated Temperature Range: 0

to 140°F (-18 to 60°C).

Thermal Effect: Less than ±0.02%/°F. Pressure Limit: 2X FS.

Power Requirement: 10-30 VDC. Output Signal: 4-20 mA DC, 2-wire.

Response Time: 50 ms. Max. Loop Resistance: 850  $\Omega$  at 30

VDC.

Electrical Connections: Wire pigtail.

Mounting Orientation: Suspended in tank below level being measured.

Weight: 2.2 lb (1.0 kg).

Electrical Protection: Lightning and

surge protection. **Agency Approvals:** CE.

### WARNING

A voltage potential between the ground wire of the unit and the ground of other equipment can lead to electrolytic corrosion. Always ensure the grounding system provides an equipotential between the transmitter and the earthing ground connection. Avoid using the power system protective ground since this will often have a significant potential difference to the transmitter ground. Also note that dissimilar metals in the ground system may cause electrolysis corrosion of the transmitter or other components in the ground system.

During installation, connect a voltmeter or ammeter between the shield ground wire and the grounding connection. If there is a measurable voltage or current electrolytic corrosion may be a serious possibility. If there is a potential difference then some isolation system will be required. Improper grounding may lead to damage or poor signal integrity.

MODEL CHART						
Example	SBLT2	-20	-40	-X	-X	SBLT2-20-40
Series	SBLT2					Bullet style submersible level
						transmitter, polyurethane cable
Range		XXX				In psi (5000 psi maximum)
Cable Length			XXX			In feet (1500 feet maximum)
Cable Type				ETFE		ETFE cable
Options					P1	1/4" NPT male
					P2	1/4" NPT female
					P3	1/4" BSPT male ISO 228 R
					P4	1/4" BSPT female ISO 228 RC
					P11	3/4" clean-out type

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