

SafeSonic® 25-L Level Transmitter

Loop Powered and Intrinsically Safe for Hazardous Areas

L Series

SAFE sensors are designed for level or distance measurements in areas where ignitable concentrations of flammable gases, vapors or liquids are likely to exist under normal operating conditions.

They offer resistance to most chemicals depending on the installation. The PVDF (Kynar®) construction of the lower body offers superior resistance when installed in a sealed tank using the 2-in NPT threaded mount.

L Series sensors transmit measurements to process control systems using a conventional 2-wire 4-20 mA current loop.



25-ft. (7.6 m) maximum range in IP65 rated housing



Two-Wire Non-Contact Level Transmitter for Hazardous Environments

Features

Two Wire "Loop Powered"

4-20 mA interface reduces wiring, minimizes power consumption and is compatible with most process equipment.

Simple Mounting in liquid tanks using the 2-inch NPT lower threads or 3/4 inch NPT upper threads.

Chemically resistant housing is encapsulated and includes either a sealed, strain-relieved cable or M12 quick-disconnect connector. Various cable lengths are available.

Range calibration is factory set to 4 mA at 25 feet and 20 mA at 1 foot.

SenixSAFE-L software supports configuration, testing, and storage / recall of setups. Requires UA-RCD-L Remote Calibration Device.

Benefits

Rugged Package can be installed indoors or outside to provide years of maintenance-free operation. Standard tapered upper and lower threads are compatible with common flanges and other fittings.

Intrinsically Safe design permits operation in hazardous environments in the US and Canada. All electronics are contained in the transmitter housing. External safety barriers are required in hazardous area installations.

Measurements are made without contacting the liquid or solid material and are:

- Long range, short dead band
- Unaffected by optical factors like color and transparency
- Narrow beam
- Temperature compensated

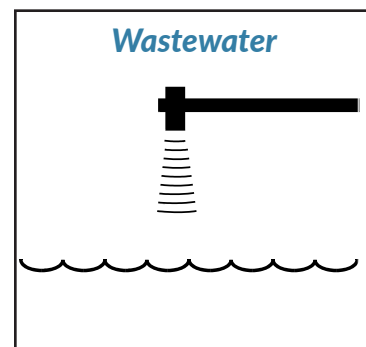
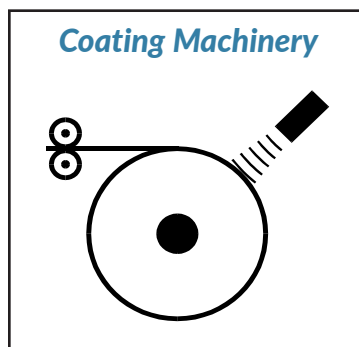
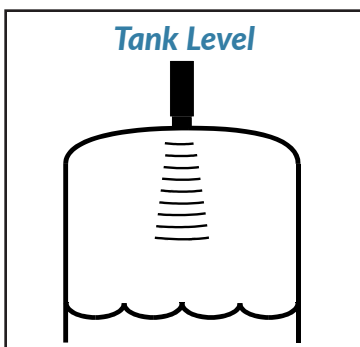
Applications

This transmitter is used primarily for liquid level measurement of vessels in hazardous areas. It also measures open-air distance to target objects such as the roll diameter on a coating machine.

This transmitter should be used only in applications with relatively slow moving targets.

Example Applications:

- Oil & gas drilling environments
- Industrial liquid tank level
- Wastewater treatment
- Paint finishing
- Coating machinery
- Service stations
- Laboratories
- Airports
- Welding bays



SAFESONIC™ 12-M
SAFESONIC™ 25-M



SafeSonic® 25-L Intrinsically Safe Level Transmitter

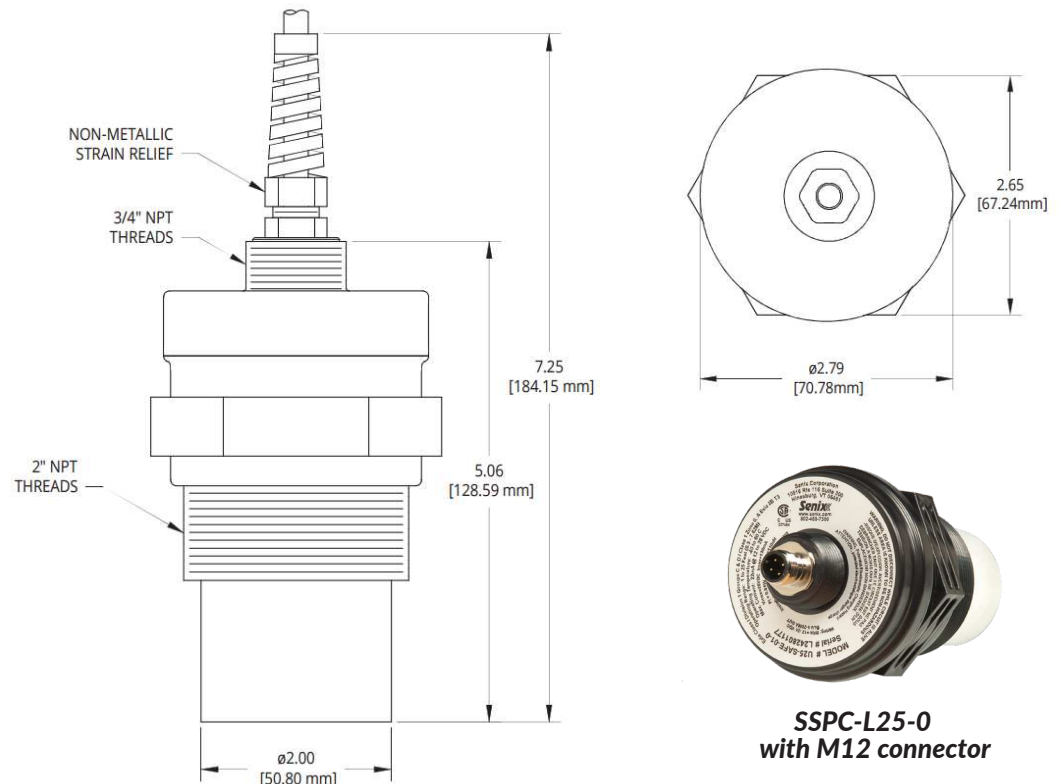
Specifications

Accuracy	+/- 0.25% of detected range	Max Range	25 feet (7.6 m)
Resolution	0.1 in. (2.5 mm)	Min Range	Typ. < 12 in. (305 mm)
Beam Width	9° ± 1° off axis	Frequency	69 kHz
Temperature	-40 to 140 F (-40 to 60 C)	Ingress Protection	IP65
Humidity	0 to 100%, non-condensing	Transducer	Ruggedized Piezoelectric
Compensation	Internal temperature compensation	Response Time	Programmable
Pre-calibration	4 mA at 25 feet, 20 mA at 1 foot	Configuration	Stored in sensor's non-volatile memory
Adjustment	SenixSAFE-L PC Software (requires UA-RCD-L Remote Calibration Device isolated in unclassified area)		
Compliance	United States and Canada, for Class I Division 1 Groups C & D, T3 Class I Zone 0, AEx ia IIB (USA); IP65 and T3 and Ex ia IIB, T3 (Canada); IP65		
Materials	Transducer: PVDF (Kynar®), Housing: PC/PBT		
Response time	10 seconds; varies depending on output range and setup		
Cable	PUR jacketed, UV resistant, shielded, 2-wires plus drain, several standard lengths available		
Electrical	2-wire plus drain; RED = 12-28 VDC in (4-20 mA current source); BLACK = 4-20 mA output		

Target Requirements

Objects	Detects liquid surface, flat or curved objects. Surface must reflect ultrasound to sensor
Distance Range	Affected by size, shape, orientation of target (sound level reflected back to sensor), environment
Orientation	Sensor should be oriented perpendicular to liquid surface for maximum reflection
Optical	Unaffected by target color, light, transparency or other optical characteristics

Mechanical



**SSPC-L25-0
with M12 connector**

Part Numbers

Model Number	Description
SSPC-L25-0	Sensor with 4-pin M12 connector
SSPC-L25-6	Sensor with 6-ft cable
SSPC-L25-XXX	Sensor with longer cable lengths. Options are: XXX = 10, 20, 30, 50, 100 (number indicates length in feet)
UA-RCD-L	Remote Calibration Device, requires SenixSafe-L software from non-hazardous side