## **SUBMERSIBLE**

## LEVEL TRANSDUCER



# **MODEL SLX 130**

#### **FEATURES**

- Choice of outputs: Loop powered 4-20 mADC 0.5 - 4.5 VDC Intrinsic Safety
- Choice of ranges: 5, 6.5, 10, 15, 30 PSI
- Choice of cable jacket:
  - Teflon
  - ◆ TPE Thermoplastic Elastomer
- High Chemical resistance
- Large 2.5" Teflon diaphragm
- Sealed breather system

#### **APPLICATIONS**

- Sewage Wet Wells
- Sludge Sumps
- Water Tanks and Reservoirs
- Clearwells
- Process Sumps

CONTEGRA's SLX 130 submersible level transducers reliably measure the level of water, wastewater, or other liquids based upon the hydrostatic pressure of the liquid above the submerged sensor's diaphragm. The transducer provides an output signal directly proportional to the sensed level over the calibrated range of the sensing element.

These sensors provide superior service in adverse environments. Their wide diaphragm provides clog-free sensing. Their PVC, PVDF, and Viton® wetted parts provide strong chemical resistance and electrical isolation. The SLX 130's signal cable jacket is available in Teflon®, which offers excellent chemical resistance, or TPE (thermoplastic elastomer).

The TPE jacketed cable is available on two variations. The 'natural' TPE is used in wastewater or potable water applications. Alternatively, the Ropellant jacketed cable contains a rodent repellant/deterrent which discourages the rodent's interest. Ropellant is typically applied in wastewater applications.

The SLX 130 is available with a 0.5-4.5 VDC or a 2-wire, loop-powered 4-20 mADC output (i.e. the SLX 130-E or SLX 130-M respectively). The SLX 130-MIS is an Intrinsically Safe (IS), loop-powered transducer used in hazardous locations when applied in conjunction with an approved IS barrier such as Contegra's ISB-M1d.

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# **MODEL SLX 130**

### Specifications

#### Pressure Ranges (PSI):

5 (0 - 11.5 ft.)

6.5 (0 - 15 ft.) 'M' Only

10 (0 - 23.1 ft.)

15 (0 - 34.6 ft.)

(0 - 69.3 ft.)

Consult factory for other ranges. Range availability based on Output Version and Sensor Options.

**Accuracy:** 0.25% over the full-scale pressure range including nonlinearity, hysteresis, and repeatability.

Consult factory for 0.1% accuracy option.

Overpressure: 4X @ 5 PSI, all others 3X

Temperature:

+32° to + 140° F (0° to +60°C) nonfreezing.

Wetted parts: PVC body, Teflon® or TPE signal cable, Teflon® and diaphragm. Viton® and PVDF sealing components.

Signal Cable: Available jacket material:

- T2 = 2 conductor Teflon®
- T3 = 3 Conductor Teflon® (T3 is required for the E Sensor)
- R or W Thermoplastic Elastomer (TPE)

The signal cable is shielded and contains both a Kevlar® support/strengthening member and a breather tube for connection to the factory-supplied sealed breather system.

#### Input/Output:

E Versions: 5 VDC Class 2 supply / 0.5-4.5 VDC output. (The SLX 130-E is compatible for use with the T423 & T425.)

M Versions: Loop powered 10-30 VDC Class 2 supply, 4-20 mA output, with

Lead Reversal Protection.

MIS Versions: Intrinsically Safe<sup>1</sup>, Loop powered 10-28 VDC, 4-20 mA Output

Mechanical: Height - 9", Diameter - 3.8",

Cable Dameter: ~0.26"

Approvals: 'M' Sensor: UL Listed 508. MIS Sensors: Intrinsically Safe<sup>1</sup> for Class I, Div 1 when installed with a listed barrier

(e.g. Contegra ISB-M1d).

### **Engineering Specifications**

A submersible level transmitter shall be provided to sense the liquid level of the at the location as shown on the plan drawings and in accordance with the manufacturer's recommendations.

The transducer housing shall be fabricated of PVC with a 2.5" diameter Teflon diaphragm. Silicone oil shall be used as a hydraulic fill. The sensor shall be mounted using its signal cable and have 3/4" NPT pipe threading for pipe mounting.

The internal air pressure of the sensor assembly shall be relieved to atmospheric pressure through a sealed breather system.

The sensor's signal cable shall be 2 conductor Teflon® (i.e.T2) or 3 conductor Teflon® (i.e.T3) or TPE [ < Choose one]. The signal cable shall contain an integral breather tube which shall be connected to the factory supplied sealed breather system and in accordance with the manufacturer's mounting instructions.

#### E version (0.5-4.5 VDC output)

The transmitter shall be a 3 wire, 5 VDC powered type with an output of 0.5-4.5 V directly proportional to the measured level excursion. The transducer shall be UL 508 Listed. The transducer shall be a CONTEGRA Model SLX 130-E.

M version (4-20 mA output)

The transmitter shall be a 4-20 mADC, 2 wire, 10-30 VDC loop-powered type, with its output signal directly proportional to the measured level excursion. The transducer shall be UL 508 listed. The transducer shall be a CONTEGRA Model SLX 130-M.

#### MIS version (4-20 mA output, Intrinsically safe version

(Substitute the following for the underlined text immediately above.) The sensor shall be rated as Intrinsically Safe. The transducer shall be a CONTEGRA Model SLX 130-MIS.

Refer to www.Contegra.com for further specifications and updates including: range availability, accuracy option, entity parameters and barrier information.

Ordering Information (SEE EXAMPLE BELOW**)				
Model	Output Version	Pressure Sensor	Feet of cable & iacket material	Options (not part of UL Listed product)
SLX 130	- E = 0.5-4.5 VDC - M = 4-20 mADC - MIS = 4-20 mADC Intrinsically Safe	- XX 5 PSI 10 PSI 15 PSI 30 PSI	-X (T2, T3, R or W)  20 ft. included/min. 10 ft. increments  T2 or T3 = Teflon® R = TPE w/Ropellant™ W = TPE w/o Ropellant ^ Choose: T2, T3, R or W	ENCLOSURE - A = Nema 4X Junction box - B = Breather system only OTHER - Meters, surge arrestors, Condensation Htrs, etc. are available. Call factory
Consult your Contegra representative, the factory, or www.Contegra.com for additional options				

#### \*\* A typical model number is SLX 130-MIS-10-40T2-B

This includes a submersible level transducer with a 10 PSI sensor, Intrinsically Safe, 4-20 mADC output, 40 feet of 2-Conductor, Teflon® jacketed signal cable and a sealed breather system.

Teflon, Viton, and Kevlar are registered trademarks of DuPont. CONTEGRA and Station Master are registered trademarks and Ropellant is a trademark of Contegra Inc. Specifications are subject to change without notice.

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<sup>&</sup>lt;sup>1</sup> For example, UL 913