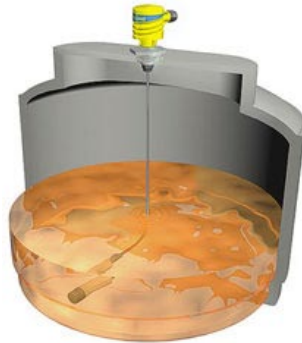


**Application**



LD31



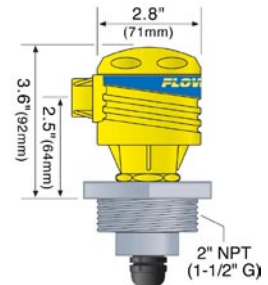
The intrinsically safe submersible pressure level transmitter provides continuous level measurement up to 46' (14m) of water column with a 4-20 mA signal output. Select the LD31 liquid level sensor for relatively clean water, light weight oil or diluted chemical. Application examples include wet wells and water remediation.



**Features**

- ✓ Corrosion resistant 316 SS transducer with polyurethane or ETFE cable
- ✓ Strong cable design with maintenance free breather tube and vent filter
- ✓ Automatic temperature compensation for accurate measurement

**Accessories**



**Submersible Pressure Sensor Mounting Kit w/ Junction Box**

LD90-1001	Term-Strip, 2" NPT Plug, PP
LD90-1061	Term-Strip, 2" G Plug, PP
LD90-5001	Term-Strip, 2" NPT Plug, PVDF
LD90-5061	Term-Strip, 2" G Plug, PVDF

**AC-DC Sensor & Indicator Power Supply**



LC95-1001	100-240 VAC, 24 VDC @ 0.60A, 35mm Rail
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**Key Benefits**

- ✓ Ideal for applications with heavy foam and vapors
- ✓ Connects directly to PLC/SCADA or display
- ✓ 4-20 mA output relation only
- ✓ Pressure is not affected by specific gravity

**Compatible Products**

**DataLoop™ IS Level Indicator**



**Application**

Offered in FM and CSA approved intrinsically safe classification, the loop powered level indicator displays engineering units connected in series with one 4-20 mA continuous level transmitter. Select the LI25-2001 level indicator for hazardous applications with an intrinsically safe sensor. For field mount installation, add a single or dual indicator NEMA box.

### Specifications

Range: -SX01: 0 to 5 psi (0.34 bar),  
 0 to 11' (0 to 3.4m) wc  
 -SX11: 0 to 10 psi (0.69 bar),  
 0 to 23' (0 to 7m) wc  
 -SX21: 0 to 15 psi (1.0 bar),  
 0 to 34' (0 to 10.4m) wc  
 -SX31: 0 to 20 psi (1.38 bar),  
 0 to 46' (0 to 14m) wc

Accuracy: ± 0.25% of full scale  
 Configuration: None, fixed span  
 Supply voltage: 10 to 28 VDC  
 Loop resist.: 900 Ohms @ 28 VDC  
 Signal output: 4-20 mA, two-wire  
 Process temp.: F: 0° to 176°  
 C: -18° to 80°

Temp. comp.: F: 0 to 176°  
 C: -18 to 80°

Proof pressure: 2 x full scale  
 Weight: 2.2 lb (1.0 kg)  
 Trans. rating: NEMA 6 (IP67)  
 Trans. material: 316 SS, 316L SS,  
 Buna-N & PVC

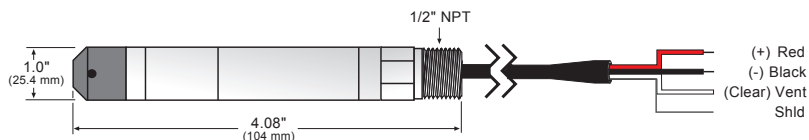
Trans. thread: 1/2" NPT  
 Cable type: 2-conductor, shielded  
 with vent tube  
 Cable length: -SX01 & SX11: 40' (12.2m)  
 -SX21 & SX31: 60' (18.3m)  
 Cable material: -S3X1: Polyurethane  
 -S4X1: ETFE

Classification: Intrinsically safe  
 Class I Div. 1 Groups A, B,  
 C & D; Class II Div. 1  
 Groups E, F & G;  
 Class III Div. 1  
 T4 @ 80 °C ambient

Compliance: CE, UL Intrinsically safe  
 to UL standard 913  
 IEC 61000-4-2:2001  
 IEC 61000-4-3:2006  
 IEC 61000-4-4:2004  
 IEC 61000-4-5:2005  
 IEC 61000-4-6:2006  
 IEC 61000-4-8:2001  
 CENELEC EN 55011:2003  
 CENELEC EN 61326:2003  
 89/336/EEC EMC Directive

Parameters: Vmax = 28 VDC  
 Imax = 93 mA  
 Ci = 0.051\_F  
 Li = 240\_H  
 Pi = 0.651\_W

### Dimensions



### Fittings

For optimum performance, install the level sensor using the below recommended or direct equivalent fittings. For use with LD90.

	P/N	Description
	LM52-2400	3" NPT x 2" NPT (Sch. 40)
	LM52-2800	3" NPT x 2" NPT (Sch. 80)
	LM52-3800	4" NPT x 2" NPT (Sch. 80)
	LM52-2410	3" Socket x 2" NPT (Sch. 40)
	LM52-3410	4" Socket x 2" NPT (Sch. 40)
	LM52-2810	3" Socket x 2" NPT (Sch. 80)
	LM52-3810	4" Socket x 2" NPT (Sch. 80)
	LM52-2890	2" NPT Bulkhead Fitting, PVC
	LM52-2850	2" NPT Flange - 150# (Sch. 80)
	LM50-1001	2" NPT Bracket, Polypropylene

### Ordering

LD31-S   1

**Cable jacket (1) (2)**

- 3 Polyurethane
- 4 ETFE

**Sensor range**

- 0 5 psi (0.34 bar) / 11' (3.4m) wc
- 1 10 psi (0.69 bar) / 23' (7m) wc
- 2 15 psi (1.0 bar) / 34' (10.4m) wc
- 3 20 psi (1.38 bar) / 46' (14m) wc

### Notes

- 1) To install the level sensor through the tank top with a compact junction box, 2" mounting plug and cable connector, order the submersible pressure sensor mounting kit.
- 2) Add the LB11-1001 intrinsic safety barrier to complete your intrinsically safe level measurement package.