DeltaSpan[™] **LD31 IS** Submersible Pressure Level Transmitter



Application



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

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

Accessories





Submersible Pressure Sensor Mounting Kit w/ Junction Box

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

AC-DC Sensor & Indicator Power Supply



LC95-1001

100-240 VAC, 24 VDC @ 0.60A, 35mm Rail

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.

LM50-1001

DeltaSpan™ LD31 IS Submersible Pressure Level Transmitter



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 None, fixed span Configuration: Supply voltage: 10 to 28 VDC Loop resist.: 900 Ohms @ 28 VDC

4-20 mA, two-wire Signal output: 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) **NEMA 6 (IP67)** Trans. rating: Trans. material: 316 SS, 316L SS, Buna-N & PVC

1/2" NPT Trans. thread:

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

CE, UL Intrinsically safe Compliance:

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

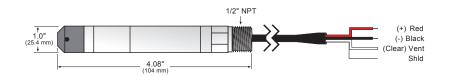
CENELEC EN 55011:2003 CENELEC EN 61326:2003

89/336/EEC EMC Directive Parameters: Vmax = 28 VDC

Imax = 93 mACi = 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
9.	LM52-2850	2" NPT Flange - 150# (Sch. 80)

Ordering



- Cable jacket (1) (2) Polyurethane
- ETFE
- Sensor range
 - 5 psi (0.34 bar) / 11' (3.4m) wc
 - 10 psi (0.69 bar) / 23' (7m) wc
 - 15 psi (1.0 bar) / 34' (10.4m) wc
 - 20 psi (1.38 bar) / 46' (14m) wc

Notes

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" NPT Bracket, Polypropylene

2) Add the LB11-1001 intrinsic safety barrier to complete your intrinsically safe measurement package.