

EchoSafe® XP88-89

Ultrasonic Level Transmitter



Application

The explosion proof ultrasonic transmitter provides continuous level measurement up to 32.8' (10m) with a 4-20 mA signal output, and is configured via its integral push button display module. This non-contact liquid level sensor is well suited for corrosive, sticky or waste liquids, and is selected for bulk storage, day tank and process tank applications located within a classified area.



Features

- Explosion proof level transmitter for use in hazardous areas
- Offered in 2 measurement ranges from 24.6' (7.5m) to 32.8' (10m)
- Configuration is simple via integral push button display module
- Type 4X aluminum XP windowed enclosure with dual conduit ports
- LCD display indicates level in inches, centimeters or percent of span
- Narrow 3" beam width for applications with limited measurement space
- Rugged PVDF transducer and process mounting plug for corrosive liquids
- Automatic temperature compensation for accurate measurement

Success

Refined chemicals are the building blocks of modern products from plastic to aspirin, paint to fertilizer and clothing to detergent. Worldwide there are 2900 petrochemical plants in 4300 locations that manufacture refined chemicals from petroleum and hydrocarbon based material. Chemical plants are hazardous environments that require explosion proof or intrinsically safe certified instrumentation. Here, an EchoSafe ultrasonic level transmitter is installed on the man-way cover of a below grade wastewater storage tank. Our patented digital signal processing features an industry leading 3" beam width that enables installation next to their 6" suction pipe.



Compatible Products



300500

FLUIDWELL™

Level Indicator

CSA approved explosion proof for hazardous environments, the loop powered level indicator displays engineering units connected in series with one 4-20 mA continuous level transmitter. The windowed enclosure is easily wall mounted.

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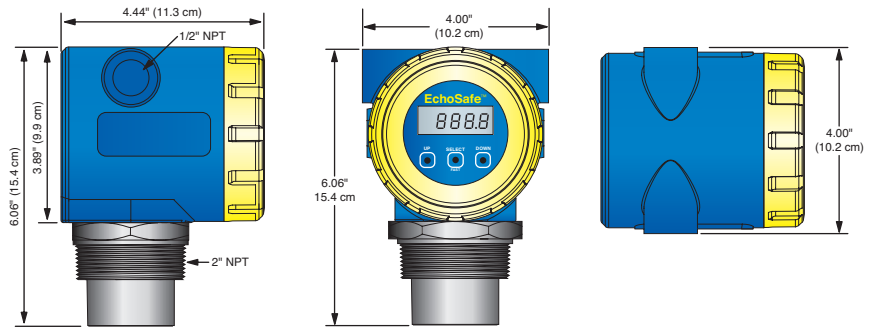
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Specifications

Range:	XP88: 8" to 26.2' (20cm to 8m) XP89: 8" to 32.8' (20cm to 10m)
Accuracy:	± 0.2% of range
Resolution:	0.079" (2mm)
Dead band:	8" (20cm)
Beam width:	3" (7.6cm)
Configuration:	Push button
Memory:	Non-volatile
Display type:	LCD, 6-digit
Display units:	Inch, cm, percent, feet or meter
Supply voltage:	18-28 VDC (loop)
Loop resist.:	250 Ohms max @ 24 VDC
Signal output:	4-20 mA, two-wire
Signal invert:	4-20 mA or 20-4 mA
Signal fail-safe:	4 mA, 20mA, 21 mA, 22 mA or hold last
Process temp.:	F: -4° to 140° C: -20° to 60°
Temp. comp.:	Automatic
Ambient temp.:	F: -40° to 160° C: -40° to 71°
Pressure:	MWP = 30 psi (2 bar)
Enclosure rating:	Type 4X
Encl. material:	Aluminum
Window material:	Glass
Conduit entrance:	Dual, 1/2" NPT
Trans. material:	PVDF
Process mount:	2" NPT
Mount gasket:	Viton®
Classification:	Explosion proof
Compliance:	CE, RoHS
Approvals:	FM: Class I, Div I Groups A, B, C, D Class II/III, Div I, Groups E, F, G

Dimensions



Fittings

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

	P/N	DESCRIPTION
	LM52-2400	3" NPT x 2" NPT, PVC, schedule 40
	LM52-2800	3" NPT x 2" NPT, PVC, schedule 80
	LM52-3800	4" NPT x 2" NPT, PVC, schedule 80
	LM52-2410	3" socket x 2" NPT, PVC, schedule 40
	LM52-3410	4" socket x 2" NPT, PVC, schedule 40
	LM52-2810	3" socket x 2" NPT, PVC, schedule 80
	LM52-3810	4" socket x 2" NPT, PVC, schedule 80
	LM52-2890	2" NPT bulkhead, PVC
	LM52-2850	2" ANSI x 2" NPT, CPVC, schedule 80
	LM50-1001	2" NPT side mount bracket, PP

Ordering

XP8 -0

SENSOR RANGE (1) (2)

8	8m (26.2')
9	10m (32.8')

NOTES

- 1) Install the level sensor using Flowline installation fittings or equivalents.
- 2) For explosion proof level indication, package the level sensor with the DataKeep indicator.