EchoPod® DL34

Multi-Function Ultrasonic Liquid Level Transmitter
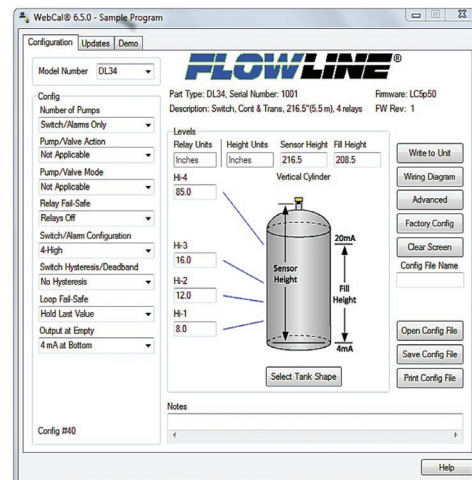
FLOWLINE™
LEVEL BEST

Application

The general purpose ultrasonic level transmitter provides continuous level measurement up to 18.0' (5.5m) with a 4-20 mA signal output, and is configured via our free WebCal software. The level sensor has 4 programmable relays with selectable hysteresis and fail-safe logic. The embedded level controller can lower cost by replacing external control hardware. This non-contact liquid level sensor is ideally suited for corrosive, sticky or dirty liquids, and is widely selected for day tank, skid, IBC, sump and process tank level applications.

FM APPROVED   CE   RoHS Compliant

Features

- Level detection, switch and control functions up to 18' (5.5m)
- Configuration is fast and easy via WebCal software and USB adapter
- Narrow 3" beam width and short 8" dead band optimized for bulk tanks
- Four programmable relays for switch, pump or valve control and fail-safety
  - 1 pump or valve with 3 alarms
  - 2 pumps lead-lag with 2 alarms
  - 2 pumps duplexing with 2 alarms
  - 4 independent switch point alarms
- PVDF transducer and 6P polycarbonate enclosure for corrosive liquids
- Automatic temperature compensation for accurate measurement

WebCal

WebCal® software is a free PC utility program that allows users to easily configure and test compatible Flowline level sensors to their measurement and control requirements. Download your copy and connect your sensor through our Fob USB® adapter.

Compatible Products

LI23
DATALOOP™
Level Indicator

LI55
DATAVIEW™
Level Controller

LI52
DATAPOINT™
Level Controller

EchoPod® DL34

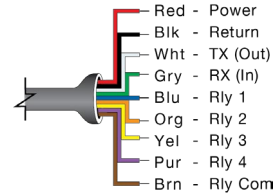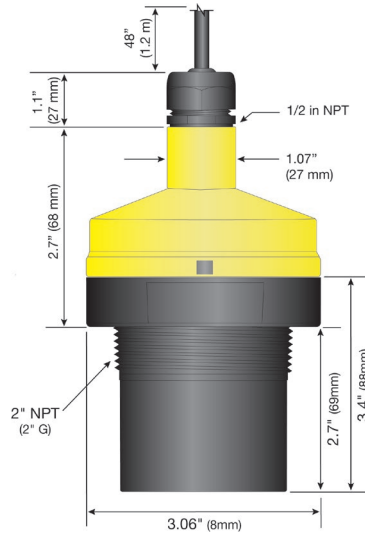Multi-Function Ultrasonic Liquid Level Transmitter

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Specifications

Range:	18.0' (5.5m)
Accuracy:	± 0.2% of range
Resolution:	0.079" (2mm)
Dead band:	8" (20cm)
Beam width:	3" (7.62cm)
Configuration:	WebCal® PC Windows® USB 2.0
Memory:	Non-volatile
Supply voltage:	24 VDC (loop)
Consumption:	0.5W
Loop resist.:	400Ω max
Signal output:	4-20 mA, two-wire
Signal invert:	4-20 mA or 20-4 mA
Signal fail-safe:	4 mA, 20 mA, 21 mA, 22 mA or hold last
Contact type:	(4) SPST relays
Contact rating:	60 VA, 1A maximum
Contact fail-safe:	Power loss: Hold last Echo loss: Open, close or hold last
Hysteresis:	Selectable
Process temp.:	F: 20° to 140° C: -7° to 60°
Temp. comp.:	Automatic
Ambient temp.:	F: -31° to 140° C: -35° to 60°
Pressure:	MWP = 30 PSI (2 bar)
Enclosure rating:	Type 6P, encapsulated, corrosion resistant & submersible
Encl. material:	Polycarbonate
Trans. material:	PVDF
Cable jacket mat:	Polyurethane
Cable type:	9-conductor, shielded
Cable length:	48" (1.2m)
Process mount:	2" NPT (2" G)
Mount gasket:	Viton®
Classification:	General purpose
Compliance:	CE, RoHS
Approvals:	cFMus

Dimensions

48" (1.2 m)
1.1" (27 mm)
1/2 in NPT
2.7" (68 mm)
1.07" (27 mm)
2" NPT (2" G)
2.7" (69mm)
3.4" (88mm)
3.06" (8mm)

- Red - Power
- Blk - Return
- Wht - TX (Out)
- Gry - RX (In)
- Blu - Rly 1
- Org - Rly 2
- Yel - Rly 3
- Pur - Rly 4
- Brn - Rly Com

Fob Adapter

The level sensor is configurable via our free WebCal PC software and a Fob USB® adapter. Sensors are offered with and without Fobs.
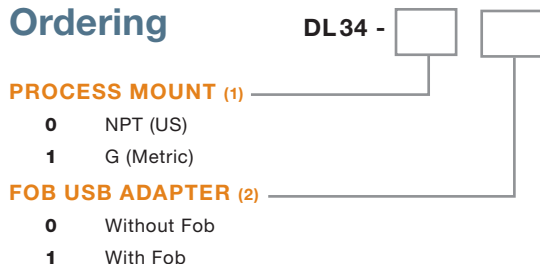

LI99-2001

Fittings

For optimum performance, install the level sensor using the below Flowline installation fittings or direct equivalents.

P/N	DESCRIPTION
LM52-2400	3" NPT x 2" NPT, PVC, schedule 40
LM52-2800	3" NPT x 2" NPT, PVC, schedule 80
LM52-2890	2" NPT Bulkhead, PVC
LM52-3890	3" NPT Bulkhead, PVC
LM52-2850	2" ANSI x 2" NPT, CPVC, schedule 80
LM52-3850	3" ANSI x 3" NPT, CPVC, schedule 80
LM50-1001	2" NPT side mount bracket, PP

Ordering

DL34 - ☐ ☐

PROCESS MOUNT (1)
- **0** NPT (US)
- **1** G (Metric)

FOB USB ADAPTER (2)
- **0** Without Fob
- **1** With Fob

NOTES

1) Install the level sensor using Flowline installation fittings or equivalents.

2) The level sensor is configured via our WebCal software and one LI99-2001 Fob USB adapter. The level sensor is offered with and without a Fob. Fobs are universal and can be used to configure any WebCal compatible product. WebCal is a free download from our website.