

LEVEL & LEAK DETECTION

ULTRASONIC LEVEL SWITCH, TRANSMITTER, AND CONTROLLER DL14, 24, 34 SERIES ECHOPOD



DESCRIPTION

The **Flowline EchoPod DL14, 24 and 34 Series** ultrasonic level switch, transmitter and controller provide non-contact measurement of fluid level in tanks up to 18 ft (5.5 m) in depth. The **EchoPod** is a compact multi-function sensor enabled by WebCal, a PC user interface for configuration and calibration. The **DL Series** combines 4 relays, a 4-20 mA output, and control for 1 or 2 pumps or valves. The rugged PVDF enclosure is well suited for a wide range of corrosive, waste, or slurry type media. It can be broadly applied to atmospheric day tanks, process vessels, dispensers, pump lift stations and waste sumps. Level indication and control may be monitored via a local display or through the BAS.



DL14-00

FEATURES

- Provides switch, controller, and transmitter functions in one device
- Free WebCal PC software provides fast and easy configuration
- Well suited for corrosive and dirty applications
- Maintenance free
- Encapsulated, corrosion resistant submersible NEMA 4X enclosure

APPLICATION

- Cooling tower tanks
- Wastewater tanks
- Diesel fuel tanks
- Chemical feed tanks
- Rinse tanks

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SPECIFICATIONS

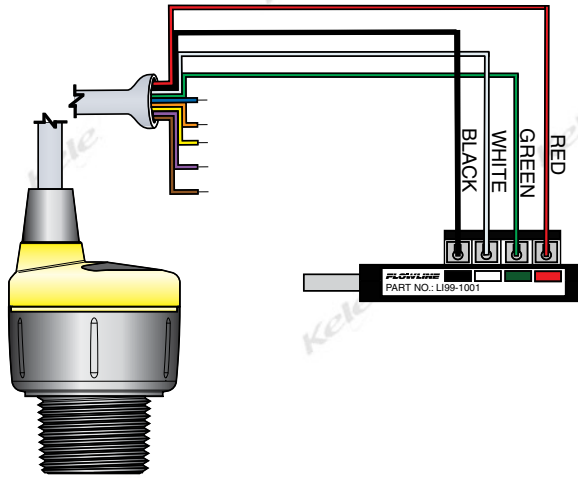
Supply Voltage	24 VDC, 35 mA maximum	DL24	0.039" (1 mm)
Accuracy		DL34	0.079" (2 mm)
DL14	±0.125" (0.3 cm)	Transmitter	PVDF
DL24/34	±0.2% of range	Cable Jacket	Polyurethane
Signal Output	4-20 mA @ 400Ω, (loop powered)	Process Connection	
Measurement Range		DL14	1" NPT with Viton gasket
DL14	Up to 49.2" (1.25m)	DL24	1" NPT (1" G) with Viton gasket
DL24	Up to 9.8' (3m)	DL34	2" NPT (2" G) with Viton gasket
DL34	Up to 18.0' (5.5m)	Cable Length	48" (1.2m)
Relay Type	4 - SPST relays (normally open)	Operating Temperature	-31° to 140°F (-35° to 60°C)
Relay Rating	1 A maximum @ 24 VAC/VDC	Enclosure Rating	Encapsulated, corrosion resistant, submersible, NEMA 4X
Deadband		Dimensions	
DL14	2" (5 cm)	DL14	3.2"H x 2.0" diameter (8.1 x 5.1 cm)
DL24	4" (10 cm)	DL24	4.9"H x 3.06" diameter (12.5 x 7.8 cm)
DL34	8" (20 cm)	DL34	6.5"H x 3.06" diameter (16.5 x 7.8 cm)
Temperature Effect	Automatic compensation	Weight	
Beam Width		DL14	2 lb (0.9 Kg)
DL14	2" (5 cm)	DL24,34	3.1 lb (1.4 Kg)
DL24	2" (5.08 cm)	Approvals	CE, RoHS, FM
DL34	3" (7.62 cm)	Warranty	1 year
Configuration	Free WebCal software (USB port fob tool L99-1001 required)		
Fail Safe	Signal 4 mA, 20 mA, 21 mA 22 mA, or hold last signal Relay: Power loss Hold last signal Relay: Power on Hold last signal, open, closed		
Resolution			
DL14	0.019" (0.05 cm)		



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SET UP AND CALIBRATION HOOK UP

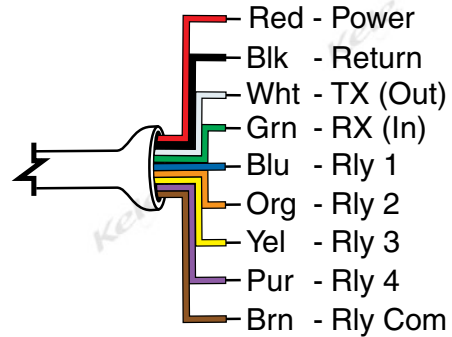


USB® Fob Interface

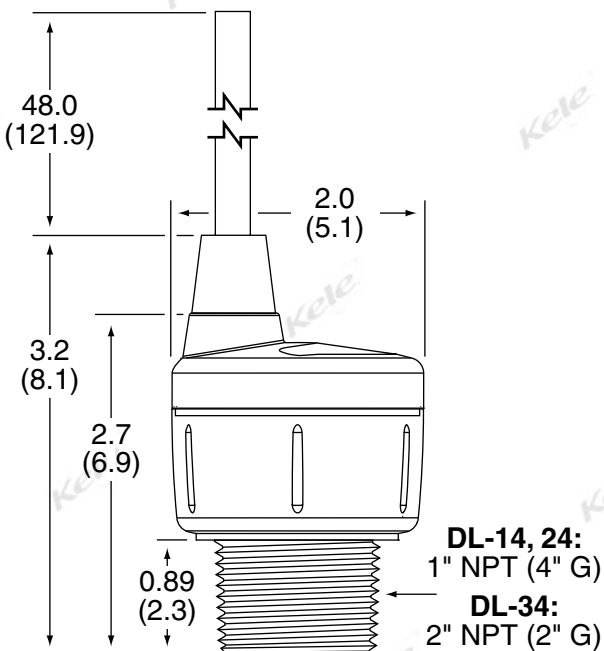
EchoPod communicates with WebCal through a USB® interface called a fob. Before plugging your fob into your computer's USB® port, be sure that you have installed WebCal on your computer.

Connect the red, green, white and black wires from EchoPod into the correct terminals on the fob. Tighten the screws on the terminals and plug your fob into the USB® port of your computer.

FIELD WIRING



DIMENSIONS



ORDERING INFORMATION

MODEL	DESCRIPTION
DL14	EchoPod level sensor, up to 49.2" (1.25m)
DL24	EchoPod level sensor, up to 9.8' (3m)
DL34	EchoPod level sensor, up to 18.0' (5.5m)
0	NPT process connection, DL14 & 24 - 1" NPT, DL34 - 2" NPT
1	Metric process connection, DL14 & 24 - 1" G, DL34 - 2" G
0	Without FOB USB adapter (order separately see related products)
1	Includes FOB USB adapter

*Note: Specify alarm levels when ordering

RELATED PRODUCTS

LI99-1001	Fob calibration key
LM52-1400	2" NPT x 1" NPT (Sch. 40) fitting
LM52-1800	2" NPT x 1" NPT (Sch. 80) fitting
LM52-1410	2" Socket x 1" NPT (Sch. 40) fitting
LM52-1810	2" Socket x 1" NPT (Sch. 80) fitting