EchoPod ®

Ultrasonic Level Switch, Controller and Transmitter

Introducing EchoPod

Flowline introduces EchoPod, an innovative level sensor that replaces floats, conductance and pressure sensors that fail due to dirty, sticking and scaling media in small tanks 49.2" (1.25 m) or less. EchoPod, a general purpose sensor, combines non-contact switch, controller and transmitter capabilities in one package. Combining 4 relays, 4-20 mA output and pump/valve control in one small sensor allows EchoPod to be your total solution. Maintenance free, EchoPod reduces tank system hardware through simplicity and consolidation. Additionally, EchoPod is well suited for corrosive and dirty applications with its non-metallic housing and transducer. EchoPod provides a total solution for fluid handling and automation. The time to "Think Small and Win Big" is now, and it's with EchoPod.

Actual Size

U.S. Patent #: 7,098,669

Specifications

Range:	49.2" (1.25 m)
Accuracy:	0.125" (3 mm)
Resolution:	0.019" (0.5 mm)
Beam width:	2" (5 cm)
Dead band:	2" (5 cm)
Supply voltage:	24 VDC (loop)
Loop resistance:	400Ω max
Consumption:	35 mA maximum
Signal output:	4-20 mA, two-wire (when loop powered)
Contact type:	(4) SPST relays 1A
Loop fail-safety:	4 mA, 20 mA, 21 mA, 22 mA or hold last
Relay fail-safety:	Power loss: Hold last Power on: Open, close or hold last
Hysteresis:	Selectable
Configuration:	WebCal® PC Windows® software interface
Temp. comp.:	Automatic over range
Temperature:	F: 20˚ to 160˚ C: -7˚ to 60˚
Pressure:	Atmospheric
Enclosure:	NEMA 4X encapsulated, corrosion resistant & submersible
Encl. material:	PC/ABS FR
Strain relief mat.:	Santoprene
Trans. material:	PVDF
Cable length:	48" (1.2 m)
Cable jacket mat.:	Polyurethane
Process mount:	1" NPT (1" G)
Mount. gasket:	Viton®
Classification:	General purpose
Approvals:	CE

Description

EchoPod, a general purpose non-contact ultrasonic level switch, controller and transmitter for small tanks 49.2" (1.25 m) or less. EchoPod enables flexible design applications for system integration or retrofit of floats, conductance and pressure sensors. Well suited for fluid handling and chemical feed applications integrating process or control automation of small tanks mounted on tools, skids or machines. The rugged PVDF enclosure is well suited for a wide range of corrosive, waste or slurry type media, and can be broadly selected for atmospheric day tank, process vessel or dispenser, pump lift station and waste sump applications. Level indication can be monitored via a local display or controlled through a PLC.

Advantages

☑ Provides switch, controller and transmitter capabilities

☑ Replacement of multi-point float, conductivity and pressure level switches

☑ WebCal, an innovative PC user interface that provides fast and accurate configuration

☑ Compact sensor with 2" dead band and beam width optimized for small tank applications 49.2" (1.25 m) or less

CE RoHS Compliant

EchoPod ® Ordering

DL14-☐☐

Process mount (1)
- 0   NPT (US)
- 1   G (Metric)

Fob USB interface (2)
- 0   Without Fob
- 1   With Fob

Ordering Notes
1) EchoPod can not be configured without the Fob USB interface tool (LI99-1001) and WebCal. One Fob will configure all EchoPods.
2) WebCal is a free download from our website at www.flowline.com/webcal (Windows® XP Compatible).

EchoPod ®

Ultrasonic Level Switch, Controller and Transmitter

Functions

Switch

4 programmable relays
High or low alarms

Control

1 or 2 pump/valve operation
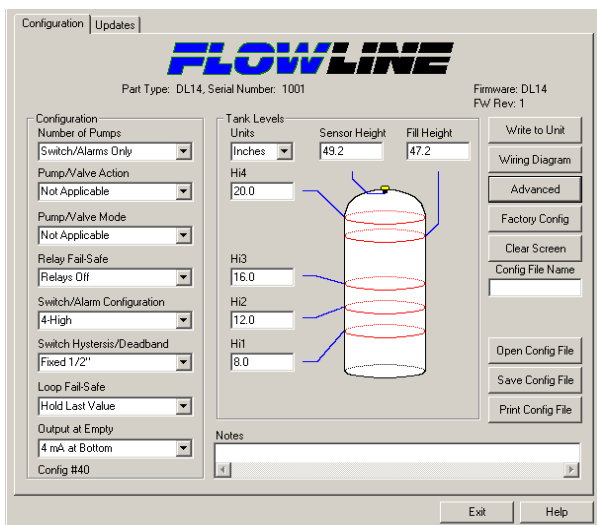Simplex, duplex and lead/lag

Transmitter

4-20 mA output
Reversible 4-20 mA output

WebCal™

Simple software configuration through WebCal, using USB connectivity, enables flexible system integration or retrofit for suitable applications. WebCal's user interface makes configuration quick and simple for even novice computer users. By entering your application requirements through pre-programed menus, WebCal will accurately configure EchoPod to your application requirements every time. Additionally, WebCal provides a printed wiring schematic and file management system that saves your configuration for back-up, technical assistance or additional applications. To get more information on Web-Cal, go to http://www.flowline.com/webcal.

Example Wiring Diagram