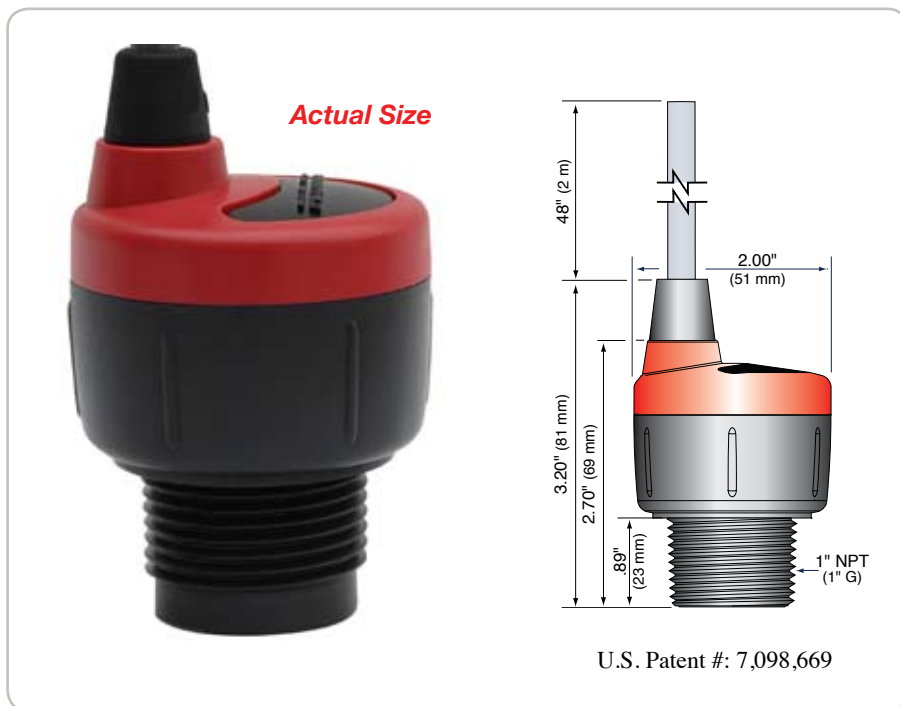# EchoPod®

Introducing EchoPod

The general purpose, ultrasonic sensor provides non-contact level detection up to 49.2" (1.25m) with 4 SPST 60 VA 1A relays. The DS14 directly replaces contact switches connected to a PLC with 1-4 discrete points for easy design conversion or field retrofit. Each relay can be configured on a single set point alarm or latched on two sets for automatic fill or empty in simplex or duplex control modes with fail-safe logic. The embedded controller can replace external control hardware. The sensor is well suited for a wide range of corrosive, sticky or dirty type media. The DS14 is broadly selected for small atmospheric tank, IBC, drum, skid or process vessel, lift station and sump applications. To configure EchoPod, download our free WebCal software and purchase one USB interface tool.

Actual Size

48" (2 m)

2.00" (51 mm)

3.20" (81 mm)

2.70" (69 mm)

.89" (23 mm)

1" NPT (1" G)

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

FM APPROVED c us   CE   RoHS Compliant

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:	12-24 VDC/VAC
Consumption:	0.5W
Contact type:	(4) SPST relays 1A
Relay fail-safety:	Power loss: Hold last Power on: Open, close or hold last
Hysteresis:	Selectable
Configuration:	WebCal®, USB 2.0
Temp. comp.:	Automatic over range
Process temp.:	F: 20˚ to 140˚ C: -7˚ to 60˚
Ambient temp.:	F: -31˚ to 140˚ C: -35˚ to 60˚
Pressure:	MWP = 30 PSI
Enclosure:	Type 6P encapsulated, corrosion resistant & submersible
Encl. material:	Polycarbonate
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, cFMus

Features

☑ Multi-function sensor provides switch and control functions

☑ Compact sensor with 2" beam width and 2" dead band optimized for small tank applications

☑ Four 1A relays programmable for switch or advanced pump or valve control and fail-safety

☑ Control / switch point functions include:

- 2 pumps with 2 alarms
- 1 pump with 3 alarms
- 2 pumps (lead-lag) with 2 alarms
- 2 pumps (duplexing) with 2 alarms
- 4 independent switch point alarms

☑ Rugged PVDF transducer and polycarbonate enclosure rated 6P for corrosive media

Configuration

EchoPod is configured using Flowline's WebCal software and Fob, a USB® interface tool. A single configuration can be easily created, saved, duplicated, emailed or modified. Take control of your level process with WebCal's intuitive interface, pre-programmed menus, tank set point graphics and custom wiring diagrams for each of your configurations. It's level configuration made simple.

FLOWLINE

WebCal Software

LI99-1001 Shown

EchoPod® Ordering

DS14-☐☐

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 (Windows® XP Compatible, USB 2.0).