

EchoPump™ Ultrasonic Level Pump Controller

EchoPump LU60 0412 DS0_0

Description

The general purpose ultrasonic controller provides non-contact level measurement up to 33' or 10m with advanced display, tank shape linearization and control functions with 5 relays. Each relay can be configured as a single set point alarm, two latched set points for automatic fill or empty control or two independent set points for out of bounds alarming. Additionally, latched relay pairs can be configured for alternating, lead-lag and duplexing pump control. The sensor is ideally suited for challenging corrosive, slurry or waste liquids and is typically selected for large atmospheric bulk storage and waste pump transfer applications. Media examples include sodium hypochlorite and wastewater.



LU60
Transmitter
Shown

LU60
Controller
Shown

Features

- LCD digital display indicates level in distance or volumetric units
- Isolated 4-20 mA repeater output for integration with remote PLC
- Digital signal with standard cable between sensor and controller
- PC NEMA 4X enclosure with rugged PVDF transducer
- 16-point linearization function for volumetric tank measurement
- Fail-safe intelligence and relay logic for maximum process safety
- Automatic temperature compensation over entire range

Specifications

Sensor

Range:	0.5' to 33' (15 cm to 10m)
Accuracy:	± 0.25% of span in air
Resolution:	0.125" (3 mm)
Beam width:	8° conical
Dead band:	0.5' (15 cm)
Process temp.:	F: -40° to 140° C: -40° to 60°
Temp. comp.:	Automatic
Electronics temp.:	F: -20° to 140° C: -4° to 60°
Pressure:	30 psi (2 bar) @ 25° C., derated @ 1.667 psi (.113 bar) per °C. above 25° C.
Rec. cable:	(5) conductor, shielded
Cable length:	150' (48m) max.
Enclosure rating:	NEMA 4X (IP65)
Installed height:	4.1" (10.4 cm)
Encl. material:	PP, UL94V0
Trans. material:	PVDF Kynar®
Mount. threads:	2" NPT (2" G)
Mount. gasket:	Viton® (G version only)
Conduit entrance:	Single, 1/2" NPT

Controller

Display type:	2-line LCD, 16-digit
Display units:	Distance: inch/cm Volume: gallon/liter
Memory:	Non-volatile
Supply voltage:	120/240 VAC @ 50-60 Hz.
Signal output:	4-20 mA, two-wire
Current flow:	Isolated, sinking
Signal invert:	4-20 or 20-4 mA
Calibration:	Digital, push button
Linearization:	2-16 points
Contact type:	(5) SPDT relay, latching
Contact rating:	250 VAC @ 10A
Contact fail-safety:	Reverts to de-energized state during echo-loss
LED indication:	Power & relay status
Electronics temp.:	F: -40° to 140° C: -40° to 60°
Enclosure:	NEMA 4X (IP65)
Encl. material:	Polycarbonate
Conduit entrance:	1/2" knock outs
Classification:	General purpose
CE compliance:	EN 61326 EMC (pending) EN 61010-1 safety

EchoPump

Ordering

LU60-10 1

Process mount (1) (2)

- 0 2" NPT (US)
- 6 2" G (Metric)

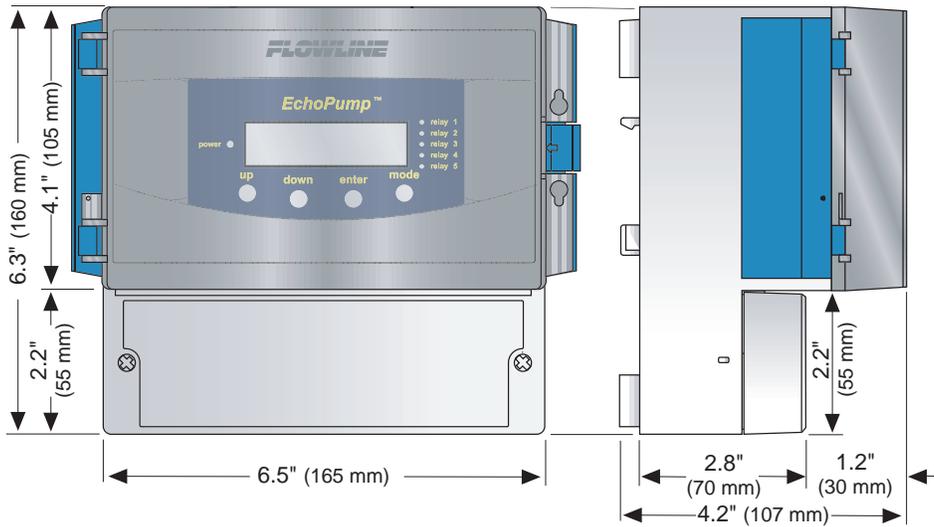


Ordering Notes

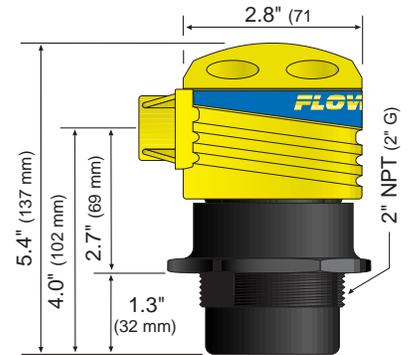
- 1) The straight G thread version seals with an included Viton® mounting gasket.
- 2) For installation on open tanks, order the LM50-1001 (2" NPT) or LM50-1061 (2" G) side mount bracket. Locate the bracket far enough inboard from the side wall to avoid sensor beam width conflicts.

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Controller Dimensions



Transmitter Dimensions



Specifications are subject to change without notice.

