

EchoPump

TM

EchoPump LU60 0412 DS0_0

Ultrasonic Level Pump Controller

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, UL94VO |
| 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)

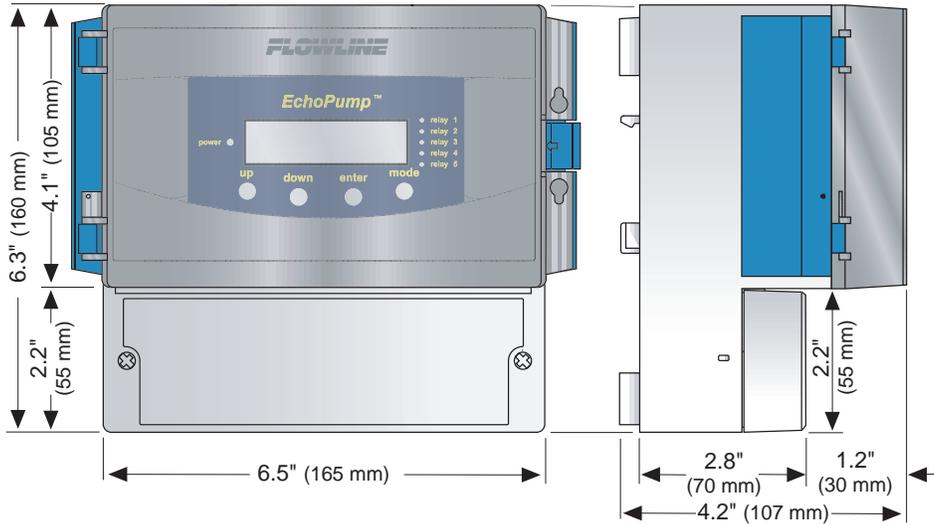


Ordering Notes

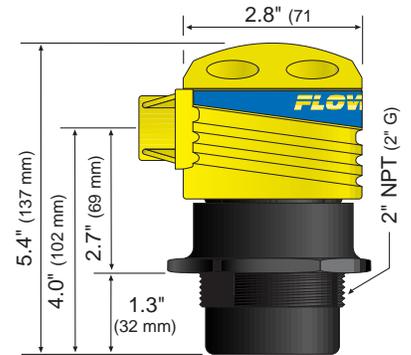
- 1) The straight G thread version seals with an included Viton® mounting gasket.
- 2) For installation on open tanks, order the LM50-1001 (2" NPT) or LM50-1061 (2" G) side mount bracket. Locate the bracket far enough inboard from the side wall to avoid sensor beam width conflicts.

EchoPump™ Ultrasonic Level Pump Controller

Controller Dimensions



Transmitter Dimensions



Specifications are subject to change without notice.

