

EchoSwitch™ Multi-Point Ultrasonic Level Switch

EchoSwitch LU71 0508 D2_2

Description

The general purpose ultrasonic switch provides non-contact level detection up to 8m with 3 relays. Each relay can be configured on a single set point alarm, two latched set points for automatic fill or empty including lead-lag, or two independent set points for out of bounds alarms. In addition, Relays 1 and 2 can be interlocked for either a relay alternation or duplex operation. The switch is well suited for a broad range of corrosive, waste and slurry type media, and is broadly selected for atmospheric day tank, pump lift station and waste sump applications.

Features

- ✓ EasyCal target push button calibration with non-volatile memory
- ✓ Incredible 7.6 cm beam diameter for applications with restricted space
- ✓ Amazing 5 cm dead band optimizes filling capacity of small vessels
- ✓ Fail-safe intelligence with diagnostic feedback for easy troubleshooting
- ✓ PC/ABS enclosure rated NEMA 4X with rugged Kynar transducer



Specifications

Range:	LU75: 2" to 4" (5 cm to 1.2m) LU72: 4" to 9.8' (10 cm to 3m) LU71: 4" to 16.4' (10 cm to 5m) LU73: 8" to 26.2' (20 cm to 8m)	Contact rating:	60 VA
Repeatability:	0.25" (6 mm)	Contact logic:	Single point: alarm Two point: latching or out of bounds alarms
Adjustability:	Over entire range	Relay interlock:	Relays 1 & 2 only; alternation or duplexing
Hysteresis:	LU72/5: 0.5" (1.2 cm) (single set point) LU71/3: 1" (2.5 cm) (single set point)	Contact fail-safety:	De-energizes during echo signal loss
Beam width:	LU72/5: 2" (5 cm) dia. LU71/3: 3" (7.6 cm) dia.	Process temp.:	F: -4° to 140° C: -20° to 60°
Dead band:	LU75: 2" (5 cm) LU71/2: 4" (10 cm) LU73: 8" (20 cm)	Temp. comp.:	Automatic
LED indication:	Power, relay and echo status	Electronics temp.:	F: -40° to 160° C: -40° to 71°
Calibration:	Target, push button	Pressure:	30 psi (2 bar) @ 25° C., derated @ 1.667 psi (.113 bar) per °C. above 25° C.
Memory:	Non-volatile	Enclosure rating:	NEMA 4X (IP65)
Supply voltage:	50_5: 95-250 VAC 58_5: 12-28 VDC	Enclosure vent:	Water tight membrane
Consumption:	50_5: 20 watts max. 58_5: 100 mA @ 24 VDC	Encl. material:	PC/ABS FR
Contact type:	(3) SPDT relays	Trans. material:	PVDF Kynar®
		Process mount:	LU72/5: 1" NPT (1" G) LU71/3: 2" NPT (2" G)
		Mount. gasket:	Viton®
		Conduit entrance:	Dual, 1/2" NPT
		Classification:	General purpose
		CE compliance:	EN 61326 EMC (pending) EN 61010 safety

EchoSwitch Ordering

LU7 -5 5

Sensor range / size

5	1.2m (4') / 1"
2	3m (9.8') / 1"
1	5m (16.4') / 2"
3	8m (26.2') / 2"

Supply voltage

0	95-250 VAC
8	12-28 VDC

Process mount (1) (2)

0	NPT (US)
6	G (Metric)

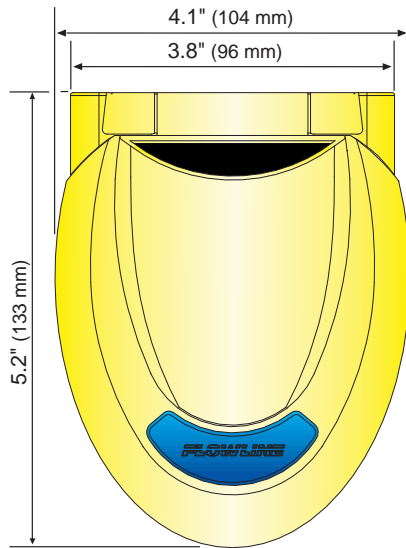
Ordering Notes

- For installation on open tanks, order the LM50-1001-1 (1" NPT), LM50-1061-1 (1" G) LM50-1001 (2" NPT) or LM50-1061 (2" G) side mount bracket.

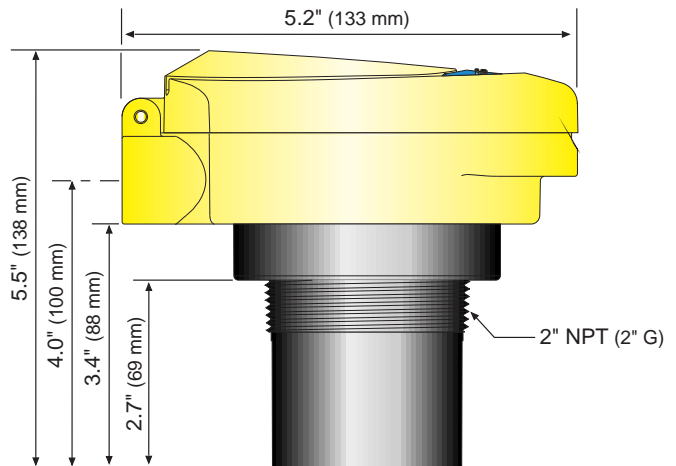


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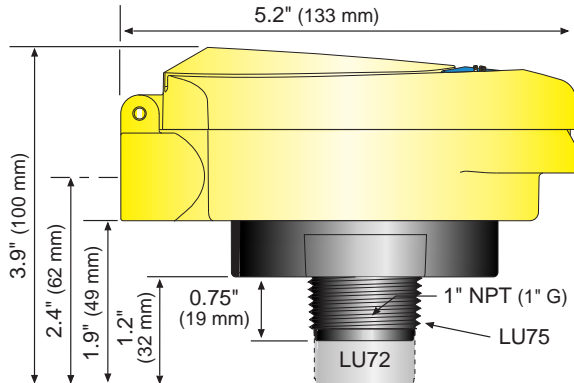
LU71/72/73/75 Top View



LU71/73 Profile

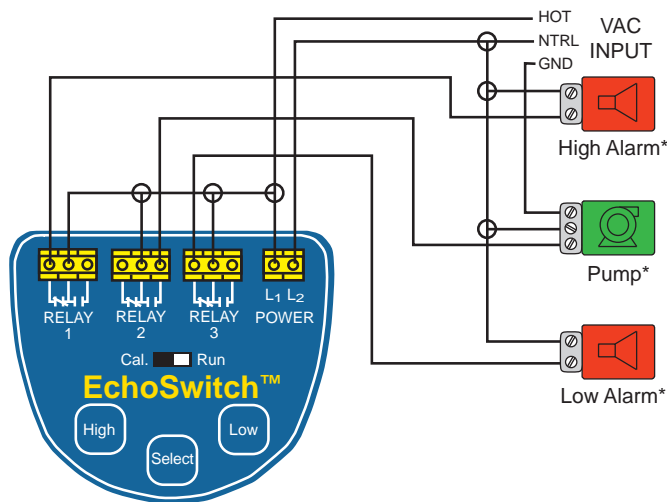


LU72/75 Profile

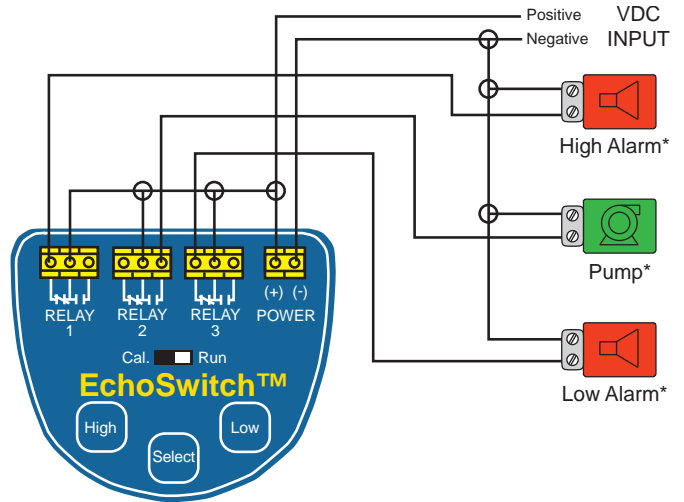


Specifications are subject to change without notice.

50_5 VAC Powered EchoSwitch



58_5 VDC Powered EchoSwitch



Warning: The use of an appropriate motor starter or secondary relay is required with pumps, valves or alarms to prevent damage to the relay contacts. The use of suppressors (snubbers) is recommended when switching inductive loads.