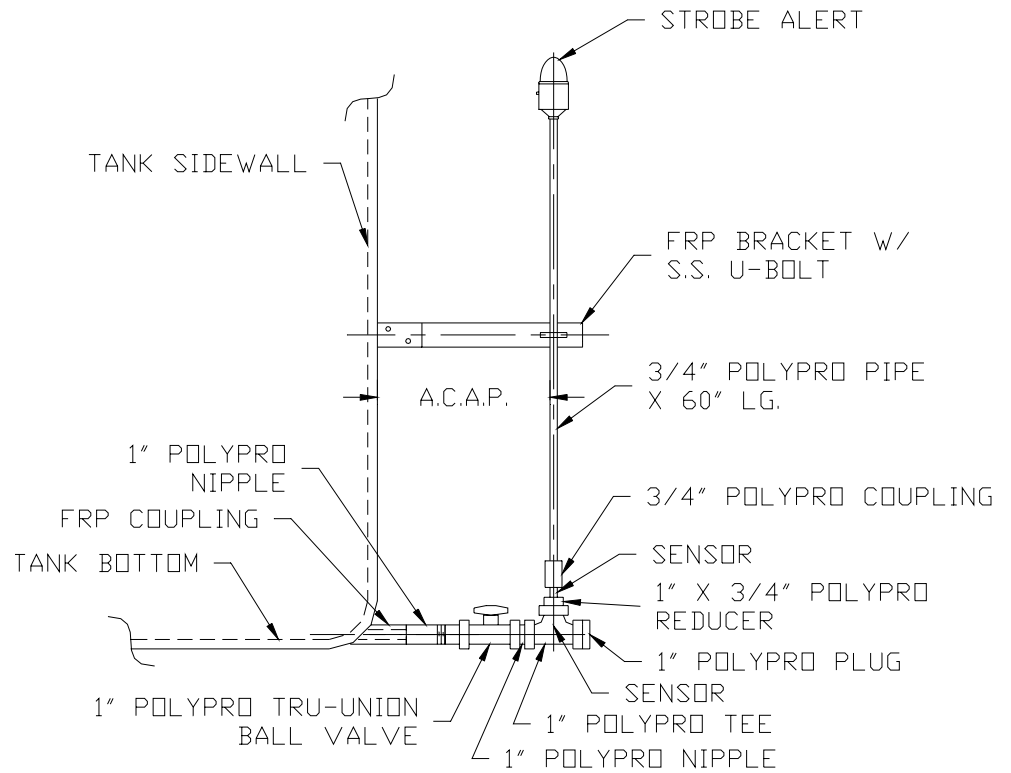
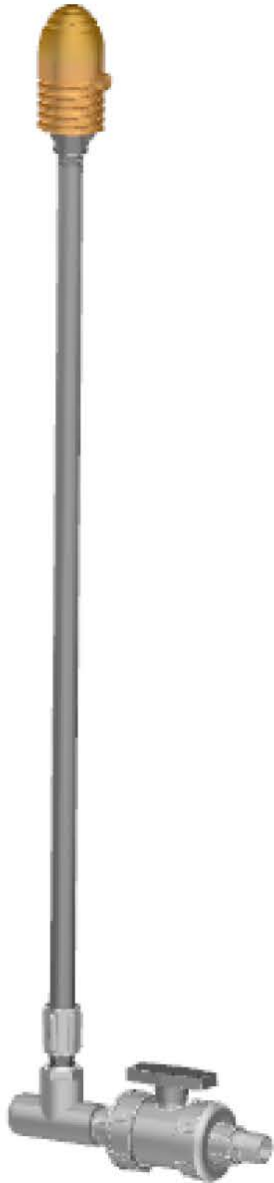


# Double Wall Leak Detection Alarm Module



## LEAK DETECTION SYSTEM

ALL CONNECTIONS TO BE THREADED

## Application



The general purpose level controller is offered in two configurations for pump and valve control. The LC10 accepts one level sensor input and provides one 16A relay for high level control or low level control. The LC11 accepts two level sensor inputs and provides one latching 16A relay for automatic fill or empty control. The optional flash alarm brings attention to level alarm conditions. Package this level controller with our liquid level switch sensors and fittings.



## Features

- ✓ Fail-safe relay control of pumps or valves with 0-60 second delay
- ✓ Optional strobe brings immediate attention to level alarm conditions
- ✓ Polypropylene enclosure rated NEMA 4X with swivel base for conduit alignment
- ✓ Easy setup with LED indicators for sensor, power and relay status
- ✓ Invert switch changes relay state from NO to NC without rewiring

## Key Benefits

- ✓ Connects to any Flowline level switch
- ✓ Can be installed outdoors in any GP environment
- ✓ Interfaces directly with any horn, buzzer, valve, etc.
- ✓ Use LC11 versions for automatic fill/empty applications
- ✓ Add strobe for optional visual alarm

## Compatible Products

### Switch-Tek™ Level Switch Sensors



**LU10**  
Ultrasonic

**LZ12**  
Vibration

**LV10**  
Buoyancy

**LP15**  
Capacitance

**LO10**  
Leak Detection

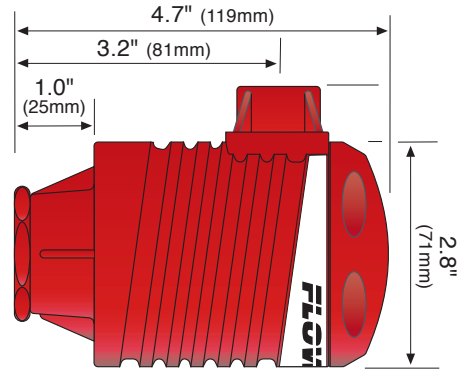
**LH25**  
Mini-Float

**LH35**  
High Temp Float

### Specifications

Supply voltage: 120 / 240 VAC, 50-60 Hz  
 Consumption: 5 watts maximum  
 Sensor inputs: LC10: (1) two wire level switch  
 LC11: (2) two wire level switches  
 Sensor supply: 13.5 VDC @ 27 mA  
 LED indication: Sensor, power & relay  
 Strobe type: -10X1: N/A  
 -10X2: Xenon tube  
 Strobe flash: -10X1: N/A  
 -10X2: (1) per second  
 Contact type: LC10: (1) SPDT relay  
 LC11: (1) SPDT relay, latching  
 Contact rating: 250 VAC @ 16A  
 Contact output: Selectable NO / NC  
 Contact delay: 0-60 seconds  
 Contact latch: LC10: N/A  
 LC11: Selectable ON / OFF  
 Ambient temp.: F: -40° to 158°  
 C: -40° to 70°  
 Enclosure rating: NEMA 4X (IP65)  
 Enclosure mat.: -10X1: PP, UL94VO  
 -10X2: PP, UL94VO & PC  
 Conduit entrance: 1/2 NPT  
 Enclosure mount: 3/4" NPT (3/4" Rp)  
 Classification: General purpose  
 Compliance: CE  
 Approvals: CSA, LR 79326

### Dimensions



### Accessories



#### Strobe Alert

The controller with Strobe Alert configuration flashes when the relay is energized during a high or low level alarm condition.

### Ordering

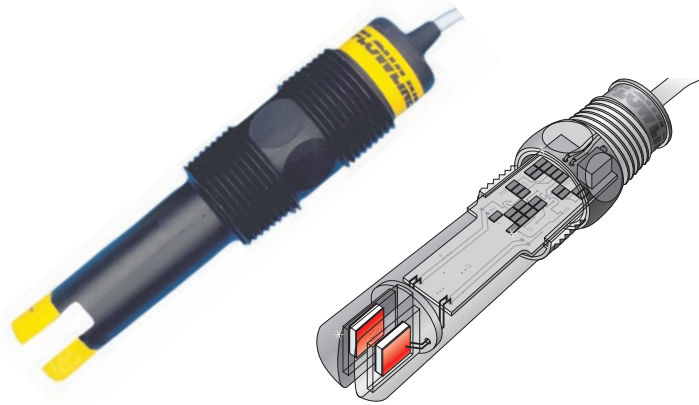
LC1  -10

- Contact / input(s) (1)**
- 0 1 Relay / 1 sensor
- 1 1 Latching relay / 2 sensors
- Enclosure mount**
- 0 NPT (US)
- 5 Rp (Metric)
- Configuration**
- 1 Controller only
- 2 Controller with Strobe Alert

#### Notes

- 1) The level controller is compatible with level switch packages (junction box type) and level switch sensors.

**Application**



CSA approved for hazardous environments, the intrinsically safe ultrasonic point level switch provides reliable liquid level detection of chemical, solvent, hydrocarbon and petroleum based liquids with a 1A relay output. Media examples include fuel, acetone and hydrochloric acid. The submersible polypropylene or PFA liquid level sensor is universally mounted through the tank wall or inside the tank as a high level alarm or low level alarm.



**Features**

- ✓ CSA approved intrinsically safe for use in hazardous environments
- ✓ Submersible polypropylene or PFA Teflon® sensor and cable for corrosive liquids
- ✓ 60VA relay selectable NO or NC via power supply wiring polarity
- ✓ Compatible with Smart Trak and Switch-Pak installation fittings

**Key Benefits**

- ✓ Ideal for highly corrosive liquids
- ✓ Able to mount through the side wall or top wall of tank
- ✓ Compatible with Smart Track or Switch-Pak mounting options
- ✓ Use as redundant alarm in classified applications

**Compatible Products**

**Switch-Pro™**  
Remote Level Controller



**Application**

Available in CSA approved general purpose (LC4X) or isolation (with built-in intrinsic safety barriers for use with associated apparatus, LC9X) classifications, the level controller is offered in three configurations for pump and valve control. The LC40/90 accepts one level sensor input and provides one 10A relay. The LC41 accepts two level sensor inputs and provides one latching 10A relay for automatic fill or empty control. The LC42/92 accepts three level sensor inputs with one latching 10A relay output for automatic fill or empty control, and a second non-latching 10A relay for high level alarm or low level alarm. For field mount installation, add a single or dual indicator NEMA box.

**Switch-Pro™**  
Compact Level Controller



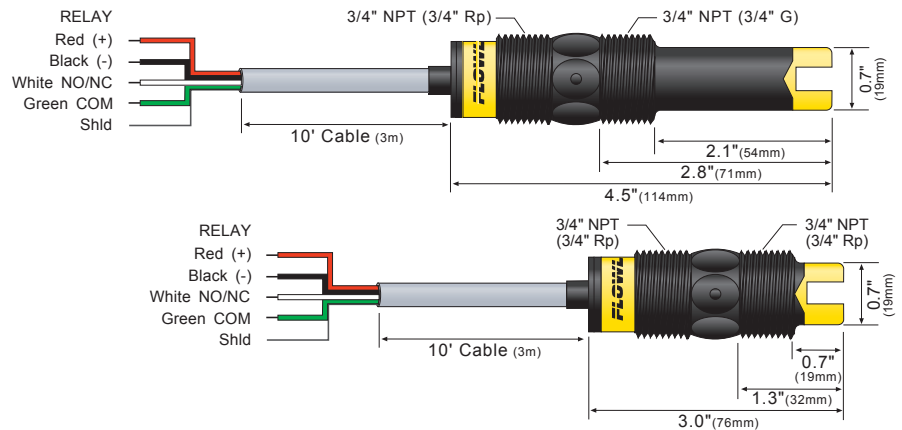
**Application**

The general purpose level controller is offered in two configurations for pump and valve control. The LC10 accepts one level sensor input and provides one 16A relay for high level control or low level control. The LC11 accepts two level sensor inputs and provides one latching 16A relay for automatic fill or empty control. The optional flash alarm brings attention to level alarm conditions. Package this level controller with our liquid level switch sensors and fittings.

## Specifications

Orientation:	Universal
Accuracy:	± 1mm in water
Repeatability:	± 0.5mm in water
Supply voltage:	12-36 VDC
Consumption:	25 mA maximum
Contact type:	(1) SPST relay
Contact rating:	GP: 60 VA IS: 32 VDC @ 0.5A
Contact output:	Selectable NO / NC
Process temp.:	F: -40° to 176° C: -40° to 80°
Pressure:	150 psi (10 bar) @ 25° C, derated @ 1.667 psi (0.113 bar) per °C above 25° C
Sensor rating:	-1XX5: NEMA 6 (IP68) -2XX5: NEMA 4X (IP65)
Sensor material:	-1XX5: PP -2XX5: PFA
Cable jack. mat.:	-1XX5: PP -2XX5: PFA
Cable type:	4-conductor, #22 AWG, shielded
Cable length:	10' (3m)
Process mount:	3/4" NPT (3/4" G / Rp)
Mount. gasket:	Viton®
Classification:	Intrinsically safe
Certificate:	CSA, LR 79326
Compliance:	CE
Approvals:	Class I, Groups A, B, C & D; Class II, Groups E, F & G; Class III
Parameters:	Vmax = 32V, Imax = 300 mA, Pmax = 1.3W, Ci = 0 µF, Li = 0 µH

## Dimensions



## Fittings

For optimum performance, install the level sensor using the below recommended or direct equivalent fittings.

	P/N	Description
		<b>Switch-Pak Single-Point Switch Fitting</b>
	LM45-7001	2" NPT Plug, 3/4" NPT Adapter & Nipple, PVC
	LM45-1001	2" NPT Plug, 3/4" NPT Adapter & Nipple, PP
		<b>Smart Trak Multi-Point Switch Fitting</b>
	LM10-1201	2' Track, 2" NPT Plug, 3/4" NPT Nipple, PP
	LM10-1401	4' Track, 2" NPT Plug, 3/4" NPT Nipple, PP
	LM10-1601	6' Track, 2" NPT Plug, 3/4" NPT Nipple, PP
	LM10-1801	8' Track, 2" NPT Plug, 3/4" NPT Nipple, PP
	LM10-1001	10' Track, 2" NPT Plug, 3/4" NPT Nipple, PP
	LM10-1101	1m Track, 2" NPT Plug, 3/4" NPT Nipple, PP
	LM10-1301	2m Track, 2" NPT Plug, 3/4" NPT Nipple, PP
		<b>Smart Trak Level Switch Car Kit</b>
	LM30-1001	Switch Car Kit, 3/4" NPT, Polypropylene
	LM30-1061	Switch Car Kit, 3/4" Rp, Polypropylene
	LM52-2890	2" NPT Bulkhead Fitting, PVC

## Ordering

LU10-5

- Sensor material (1)**
- 1 PP
- 2 PFA
- Sensor length**
- 3 Short
- 4 Long
- Process mount (2)**
- 0 NPT (US)
- 2 G / Rp (Metric)

### Notes

- 1) To special order a 25' (7.6m) or 50' (15.2 m) level sensor cable, place the cable length at the end of the part number (ie: LU10-1305-25'). For PP, add \$20 for 25' (7.6m) or \$40 for 50' (15.2m) to the price. For PFA, add \$75 for 25' (7.6m) or \$150 for 50' (15.2m) to the price.
- 2) The short Metric level sensor has conical Rp threads on both sides of the wrench flat. The long Metric level sensor has straight G threads on the sensing side and conical Rp threads on the cable side of the wrench flat.