

# Switch-Tek™ LZ12

Vibration Liquid Level Switch

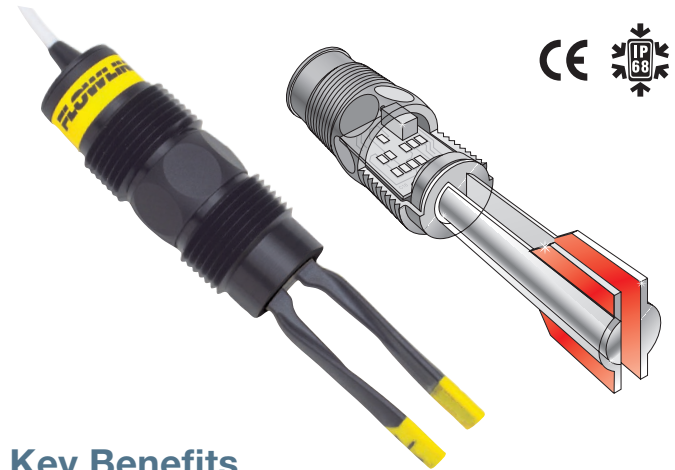


## Application

The general purpose vibration level switch provides high or low liquid level detection of dirty liquids or those with light to medium coating or scaling characteristics with a 1A relay output. Media examples include wastewater, diluted caustic soda and copper sulfate. For optimum performance, the sensor automatically adjusts for coating build up, and if necessary, outputs a proactive maintenance alarm to request cleaning. The submersible PP-Ryton® level switch sensor is universally mounted through the tank wall or inside the tank, and connected to a PLC or relay controller.

## Features

- Automatic coating adjustment optimizes sensor performance
- Submersible Ryton® sensor with polypropylene cable for corrosive liquids
- Maintenance alarm proactively alerts user if sensor cleaning is required
- 60VA SPST relay selectable NO or NC via power supply wiring polarity
- Compatible with Smart Trak and Switch-Pak installation fittings



## Key Benefits

- Ideal for coating, scaling or crystalizing liquids
- Sensor measures and adjusts for material build up over time
- Plastic vibration sensor is well suited for use in corrosive liquids

## Compatible Products

### SWITCH-PRO™

Remote Level Controller



LC4X

The general purpose remote level controller is offered in three configurations for pump and valve control. The LC40 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 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 or low level alarm. For field mount installation, add a single or dual indicator NEMA box.

### SWITCH-PRO™

Compact Level Controller



LC1X

The general purpose compact 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 alarm conditions. Package this level controller with our liquid level switch sensors and fittings.

# Switch-Tek™ LZ12

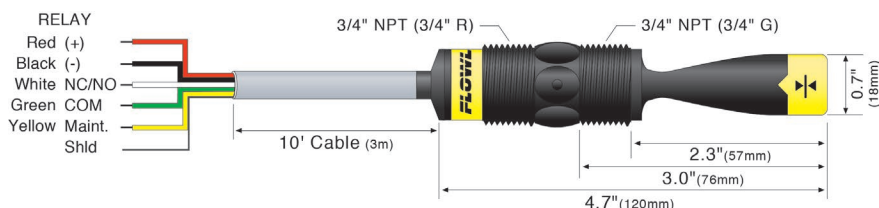
Vibration Liquid Level Switch



## Specifications

<b>Orientation:</b>	Universal
<b>Accuracy:</b>	± 1mm in water
<b>Repeatability:</b>	± 0.5mm in water
<b>Supply voltage:</b>	12-30 VDC
<b>Consumption:</b>	25 mA maximum
<b>Contact type:</b>	(1) SPST relay
<b>Contact rating:</b>	60 VA, 1A maximum
<b>Contact output:</b>	Selectable NO / NC
<b>Maint. alarm:</b>	NPN transistor, 10 mA maximum
<b>Process temp.:</b>	F: -40° to 176° C: -40° to 80°
<b>Pressure:</b>	150 psi (10 bar) @ 25° C, derated @ 1.667 psi (0.113 bar) per °C above 25° C
<b>Sensor rating:</b>	NEMA 6 (IP68)
<b>Sensor material:</b>	Ryton® (glass filled)
<b>Grommet mat.:</b>	Viton®
<b>Cable jack. mat.:</b>	Polypropylene
<b>Cable type:</b>	5-conductor, shielded #24 AWG
<b>Cable length:</b>	10' (3m)
<b>Process mount:</b>	3/4" NPT (3/4" G)
<b>Mount. gasket:</b>	Viton®
<b>Classification:</b>	General purpose
<b>Compliance:</b>	CE

## Dimensions



## Fittings

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

P/N	DESCRIPTION
<b>Switch-Pak™ Fitting Components</b>	
<b>LM45-7001</b>	2" NPT plug fitting, 3/4" NPT nipple, PVC
<b>LM45-1001</b>	2" NPT plug fitting, 3/4" NPT nipple, PP
<b>LM45-5001</b>	2" NPT plug fitting, 3/4" NPT nipple, PVDF
<b>Smart Trak™ Fitting Components</b>	
<b>LM10-1201</b>	2' track, 2" NPT plug fitting, 3/4" NPT nipple, PP
<b>LM10-1401</b>	4' track, 2" NPT plug fitting, 3/4" NPT nipple, PP
<b>LM10-1601</b>	6' track, 2" NPT plug fitting, 3/4" NPT nipple, PP
<b>LM10-1801</b>	8' track, 2" NPT plug fitting, 3/4" NPT nipple, PP
<b>LM10-1001</b>	10' track, 2" NPT plug fitting, 3/4" NPT nipple, PP
<b>LM10-1101</b>	1m track, 2" NPT plug fitting, 3/4" NPT nipple, PP
<b>LM10-1301</b>	2m track, 2" NPT plug fitting, 3/4" NPT nipple, PP
<b>LM10-1701</b>	3m track, 2" NPT plug fitting, 3/4" NPT nipple, PP
<b>Smart Trak™ Level Switch Car Kit</b>	
<b>LM30-1001</b>	Level switch car kit, 3/4" NPT, PP
<b>LM30-1061</b>	Level switch car kit, 3/4" Rp, PP
<b>Side Mount Bracket</b>	
<b>LM50-1001</b>	2" NPT bracket, PP

## Ordering

LZ12 - 14    5

### PROCESS MOUNT (1) (2)

- 0 NPT (US)
- 2 G (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: LZ12-1405-25'). Add \$50 for 25' (7.6m) or \$100 for 50' (15.2m) to the price.
- 2) The metric level sensor has straight G threads on the sensing side, and conical Rp threads on the cable side of the wrench flat.



Hitma Instrumentatie  
www.hitma-instrumentatie.nl  
info@hitma-instrumentatie.nl  
+31 (0)297 - 514 833

België / Belgique  
www.hitma-instrumentatie.be  
info@hitma-instrumentatie.be  
+32 (0)2 - 387 28 64

CA 90720 USA p 562.598.3015 f 562.431.8507 w flowline.com

DS301380 REV C3