



## VERTICAL BUOYANCY AND FLOAT LEVEL SWITCHES



- The dampened float switch solution for clean, non-coating or scaling liquids
- Baffle body dampens switch chatter caused by agitation
- All plastic construction with PP or PVDF wetted materials
- Dynamically stabilized and weighted float resists process turbulence
- Sensor and cable rated IP68 for submersible operation in tanks or sumps
- Reliable reed switch output for interface with PLC or relay control devices
- Selectable normally open or normally closed output states

### APPLICATION

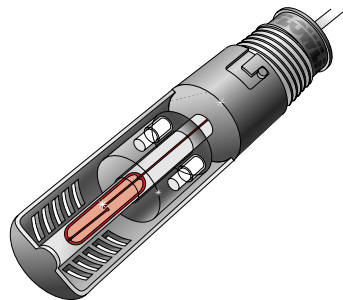
The vertical buoyancy and float level switches are an excellent choice for a broad range of liquids relatively clean, non-coating or non-scaling type liquids in small tanks. The reed output provides a reliable switch interface with remote devices such as PLC, SCADA or alarm. The general purpose sensor features a PP submersible probe and cable, and is designed for vertical installation inside the tank.

General Purpose	Yes	Reed	Yes
Foam	Yes	PP sensor	Option
Bubbles	Yes	PVDF sensor	Option
Conductive	Yes	Intrinsically safe	No
Non-conductive	Yes	Dirty	No
Clean	Yes	Relay	No
Turbulent*	Yes	FET	No
Turbulent**	No	Light coating	No
Non-coating	Yes	Medium coating	No
Metallic tank	Yes	Heavy coating	No
Non-metallic tank	Yes		



### Approvals

CE compliance: EN 50082-2 immunity  
EN 55011 emission



The vertical buoyancy and float switches consist of a float, magnet, reed switch and baffle body which dampens turbulence and eliminates the negative effects of switch chatter. When the probe is dry, the float rests on the bottom of the baffle body such that the magnet does not influence the reed switch. As the probe becomes immersed in liquid, the float becomes buoyant and the magnet elevates causing the reed switch to change state.

### SPECIFICATIONS

Accuracy: ± 2 mm in water  
 Repeatability: ± 1 mm in water  
 Extreme orient.: ± 20° from vertical  
 Specific gravity: 0.8 minimum  
 Reed type: Dry contact, SPDT  
 Reed rating: Buoyancy: 120 VAC, 120 VDC @ 15 VA, Float: 120 VAC, 120 VDC @ 15 VA  
 Reed CE rating: 30 Vrms and 42.2 Vpeak or 60 Vdc  
 Reed output: Selectable NO or NC states  
 Temp. rating: F: -40° to 194°  
 C: -40° to 90°  
 Pressure rating: 25 psi (2 bar) @ 25 °C., derated @ 1.667 psi (.113 bar) per °C. above 25 °C.  
 Sensor material: PP or PVDF  
 Sensor rating: NEMA 6 (IP68)  
 Mount threads: 3/4" NPT (3/4" BSP)  
 Cable type: 8 ft. (2.5 m), 3-wire, 22 gauge with ground, shield & PP or PFA jacket

\* LV10\_3\_1 only      \*\* LV10\_2\_1 only



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This document is provided for reference and is believed to be accurate at the time of publication. However, Flowline reserves the right to change the product specifications at any time without notice. Additional information may be obtained on the Internet at <http://www.flowline.com> or by contacting Flowline.

Buoyancy Level Switch		STARTS FROM
LV10 - <input type="checkbox"/> 3 <input type="checkbox"/> 1		\$ 85
Sensor Material (1)		Add \$ _____
1 - PP		
5 - PVDF (add \$100)		
Mounting Thread		Add \$ _____ n/a
0 - 3/4" NPT		
5 - 3/4" BSP		Total \$ _____

Float Level Switch		STARTS FROM
LV10 - <input type="checkbox"/> 2 <input type="checkbox"/> 1		\$ 65
Sensor Material (1)		Add \$ _____
1 - PP		
5 - PVDF (add \$100)		
Mounting Thread		Add \$ _____ n/a
0 - 3/4" NPT		
5 - 3/4" BSP		Total \$ _____

To special order a 25' or 50' sensor cable, place the cable length at the end of the part number (ex: LV10-1301-25') and add the following: 25' add \$15.00 for PP or \$50.00 for PFA; 50' add \$30.00 for PP or \$100.00 for PFA.

LEVEL SUPERSTORE