

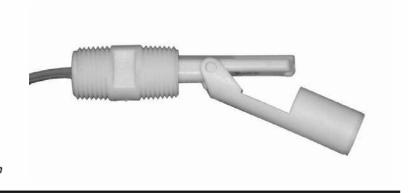
# **LVH-200 Series**

**Single Station Horizontal Level Switch** 

INSTRUCTION SHEET

M-4047/0413

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INTRODUCTION Step One

### **Specifications:**

Accuracy:  $\pm 5$  mm in water Repeatability:  $\pm 2$  mm in water Extreme orientation:  $\pm 20^{\circ}$  from horizontal

Specific Gravity: 0.6 minimum
Contact type: (1) SPST (reed)
Contact rating: 30 VA @ 0.5A

Contact output: Selectable NO or NC

Temperature range: F: -40° to 221° / C: -40° to 105°

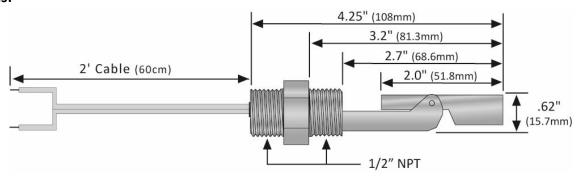
Pressure: 100 psi (6.9 bar)
Sensor rating: NEMA 6 (IP68)
Sensor material: Polypropylene
Wire jacket material: Polymeric
Wire type: 2-conductor
Wire length: 2' (61 cm)
Mounting threads: 1/2" NPT

Classification: General purpose, CE

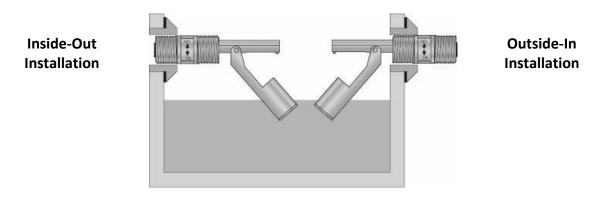
#### Installation:

- Switches should be installed rigidly so the float or floats are free to move as the liquid level changes.
- Switches should be mounted in a tank area free of severe turbulence or protected from such turbulence by appropriate and adequate slosh shields.
- 3. Switch stems must be mounted with the arrow vertically either up or down depending on switch operation.
- 4. Switch stems should be horizontal for best results, but satisfactory operation is possible in most liquids with the stem at up to a 20° angle.
- 5. Care should be taken that switches are always operated within electrical ratings.
- 6. Orientation for switches can be changed from normally open to normally closed dry or vice versa by rotating the float 180° across its axis.

### **Dimensions:**



**Through Wall Installation:** Omega Engineering's LVH-200 Series may be installed through the side wall of a tank. The LVH-200 series has dual male 1/2" NPT threads for installation from the outside of the tank in or the inside of the tank out. If the LVH-200 is installed in the Outside-In method, then the outer threads may be used for connection to conduit.



ELECTRICAL Step Two

### **Components:**

Part	Body	Cable	Thread
Number	Material	Material	
LVH-200	PP	Polymeric	1/2" NPT

### **Switch Rating:**

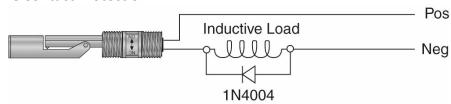
Reed Switch Rating		Max. Resistive Load	
VA	Volts	Amps (AC)	Amps (DC)
	0-50		0.28
30	120	0.28	0.07
	240	0.14	

## **Normally Open Operation: Normally Closed Operation:** Orientation mark on the top of the float. In the dry Orientation mark on the bottom of the float. In the state, the float rests on the bottom of the stem and dry state, the float rests on the bottom of the stem the circuit is open. and the circuit is closed. Power Power Supply Supply As the switch becomes wet, the float becomes As the switch becomes wet, the float becomes buoyant and circuit closes. buoyant and circuit opens. Power Power Supply Supply

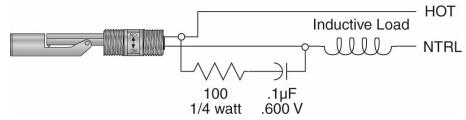
### Contact Protection (Reed Switch):

When current is interrupted, the inductance of the load generates a high frequency voltage, which appears across the switch contacts. If the voltage is large enough, it can cause arcing. Arcing can cause the contacts to weld to each other resulting in unreliable switching performance. It is essential to protect the circuit, by suppressing the voltage to prevent This can be accomplished arcing. through the use of a diode for DC circuits and a resistor-capacitor network for AC circuits.

### **DC Contact Protection:**



### **AC Contact Protection:**





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3. Repair instructions and/or specific problems relative to the product.

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- 1. Purchase Order number to cover the COST of the repair, 2. Model and serial number of the product, and
- 2. Model and serial number of the product under warranty, and
- 3. Repair instructions and/or specific problems relative to the product.

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