LVH-200 Series
Single Station Horizontal Level Switch

M-4047/0413

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Specifications:
- **Accuracy:** ± 5 mm in water
- **Repeatability:** ± 2 mm in water
- **Extreme orientation:** ±20° 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:
1. Switches should be installed rigidly so the float or floats are free to move as the liquid level changes.
2. 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.
Components:

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Body Material</th>
<th>Cable Material</th>
<th>Thread</th>
</tr>
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<tbody>
<tr>
<td>LVH-200</td>
<td>PP</td>
<td>Polymeric</td>
<td>1/2” NPT</td>
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Switch Rating:

<table>
<thead>
<tr>
<th>Reed Switch Rating</th>
<th>Max. Resistive Load</th>
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<tbody>
<tr>
<td>VA</td>
<td>Volts</td>
</tr>
<tr>
<td>30</td>
<td>0-50</td>
</tr>
<tr>
<td>120</td>
<td>0.28</td>
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<tr>
<td>240</td>
<td>0.14</td>
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Normally Open Operation:
Orientation mark on the top of the float. In the dry state, the float rests on the bottom of the stem and the circuit is open.

As the switch becomes wet, the float becomes buoyant and circuit closes.

Normally Closed Operation:
Orientation mark on the bottom of the float. In the dry state, the float rests on the bottom of the stem and the circuit is closed.

As the switch becomes wet, the float becomes buoyant and circuit opens.

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 arcing. This can be accomplished through the use of a diode for DC circuits and a resistor-capacitor network for AC circuits.

DC Contact Protection:

AC Contact Protection:
OMEGA Engineering, Inc. warrants this unit to be free of defects in materials and workmanship for a period of 13 months from date of purchase. OMEGA’s WARRANTY adds an additional one (1) month grace period to the normal one (1) year product warranty to cover handling and shipping time. This ensures that OMEGA’s customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA’s Customer Service Department will issue an Authorized Return (AR) number immediately upon written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA’s WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA’s control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR WARRANTY RETURNS, please have the following information available BEFORE contacting OMEGA:
1. Purchase Order number under which the product was PURCHASED,
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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