Single or Dual Actuation Liquid Level Detection Solution

Reed Switch Reliability / Low Maintenance

The Float Type Level Switch by OleumTech is part of the H Series line of high quality instruments delivering unrivaled performance, reliability, and accuracy in the most demanding environments, including hazardous locations.

The float-based level switch is designed to be mounted on the top of a liquid storage tank and is used for detecting critical overfill conditions for high level alarm, monitoring, and control applications. The HLTFD can be ordered with either Normally Open (NO) or Normally Closed (NC) output type and supports inductive and capacitive loads.

Durable 316SS Construction / Explosion-proof

The H Series HLTFD Float Type Level Switch is certified for use in Zone 0 hazardous locations and is Explosion-proof/Flameproof.

The HLTFD is a simple apparatus and does not require power to operate. The level switch can be ordered with a single or dual actuation switching option along with customizable set points. The stem length is available from 1 ft to 9 ft lengths in 1” increments.

Highlights

▪ Provides high liquid level detection using reliable magnetic reed switch design
▪ Does not require power
▪ Single or Dual Actuation option for high/high-high
▪ 12“ to 108“ (30.5 to 274.3 cm) stem length option
▪ Switch Material: 316 Stainless Steel
▪ Process Temperature: -40 to 120 °C (-40 to 248 °F)
▪ Max Pressure: 497.8 PSI / 35 kg/cm² / 34.3 BAR
▪ Supports Normally Open (Normally Closed optional)
▪ Supports inductive and capacitive loads
▪ NEMA 4X, IP66
▪ Zone 0 / Explosion-proof / Flameproof

Reed Switch Reliability / Low Maintenance

Durable 316SS Construction / Explosion-proof
## Technical Specifications

### HARDWARE FEATURES
- **Device Functionality**: Liquid Level Detection Switch using Float-based Reed Switch Technology
- **Interface**: Relay

### CERTIFICATION & COMPLIANCE
- **Safety**:
  - Explosion-proof/Flameproof for Use in Hazardous Locations
  - IECEx TUR 19.0036
  - Ex db IIB T4 Gb, Ex tb IIIC T135 °C Db

### MECHANICAL SPECIFICATIONS
- **Dimensions (Head)**: 4.45” (W) x 4.25” (H) x 4.45” (D) / 113 mm (W) x 108 mm (H) x 113 mm (D)
- **Stem Length**: 12” to 108” (30.5 cm to 274.3 cm)
- **Float Dimensions**: 1.6 (W) x 1.5” (H) x 0.43” (ID) / 41 mm (W) x 38 mm (H) x 11 mm (ID)
- **Specific Gravity (SG)**: ≥0.7
- **Package Dimensions**:
  - Dependent on Switch Length (Ask Sales for Details)
- **Package Weight**:
  - Dependent on Switch Length (Ask Sales for Details)
- **Ports**:
  - Two 1/2” NPT (One Plug Provided)
- **Connection Fitting (Standard)**: 2” NPT
- **Connection Fitting Options**:
  - NPT, BSP, PF, 150 lbs, 300 lbs
- **Enclosure Casing Material**: Type 4X Aluminum; IP66
- **Switch Material**: 316 Stainless Steel
- **Operating Pressure**: 497.8 PSI / 35 kg/cm² (34.3 BAR)

### ELECTRICAL SPECIFICATIONS
- **Signal Output**: SPST Reed Switch, 240 Vac / 200 Vdc, 50 W, 0.5 A
- **Output Types**:
  - Normally Open or Normally Closed

### GENERAL SPECIFICATIONS
- **Process Temperature**: -40 to 120 °C (-40 to 248 °F)
- **Ambient Temperature**: -40 to 70 °C (-40 to 158 °F)
- **Humidity**: 0 to 99 %, Non-Condensing

### Warranty
- 2-Year Parts and Labor

### ORDERING INFORMATION
- **Model Numbers Series**: HLTFD

### Dimensions

<table>
<thead>
<tr>
<th>Length</th>
<th>12” to 108” in 1” Increments</th>
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<tbody>
<tr>
<td>Actuation Points</td>
<td>High/High (H/H)</td>
</tr>
<tr>
<td></td>
<td>High/Low (H/L)</td>
</tr>
<tr>
<td></td>
<td>1.5” (38 mm)</td>
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<tr>
<td></td>
<td>1.6” (41 mm)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Float Quantity</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>0 = Normally Open</td>
<td>1 = Normally Closed</td>
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</table>

<table>
<thead>
<tr>
<th>XX” = Upper Actuation Point Length</th>
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<tbody>
<tr>
<td>Measured From Top to Upper Float</td>
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<tr>
<td>Applicable Only on Dual Actuation Models</td>
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