

# HANSEN TECHNOLOGIES CORPORATION

## Refrigerant Float Switches For Ammonia, R-12, R-22, R-502 And Similar Liquids

### FEATURES

Rugged 10 ampere switching capacity eliminates most switch burnouts due to overloads.

Transparent hermetic switch housing assembly prevents air and dirt entry as well as tampering.

High strength, large diameter ball stem eliminates potential stem bending or breakage.

Simple, direct, switch pivot-arm simplifies mechanical linkage.

Springs at top and bottom of float chamber prevent float ball damage caused by gas surges.

Optional switch housing heater prevents moisture penetration in humid environments.

Float switches as well as tank assemblies are exactly interchangeable with R/S LL Series float switches.

### ADVANTAGES

The Hansen refrigerant liquid level float switch (HLL Series) is used to electrically indicate or control a liquid level by opening or closing a SPDT switch. Its simple, reliable design provides long life performance for almost any application. Innovative features make these float switches the superior selection. To overcome the most common reason for existing float switch failure, switch burnout, a heavy duty 10 amp snap action Honeywell SPDT Micro Switch® is used. This switch is sealed in a clear housing to allow visual confirmation of switch action but protection from tampering. In addition, the switch is surrounded by an inert gas which provides an environment which inhibits corrosion. For ease of installation, switch assembly position rotates 360°. If the switch assembly should ever need to be replaced, it simply lifts off the top of the tank assembly, not requiring the refrigeration system to be opened.

Tank assembly is rugged, steel bodied with unique combination 3/4" FPT/1" Butt Weld connections. Inside, a high pressure tested float ball moves up and down via a large diameter stem. Its movement is accurately guided by the attractor and an alignment guide. Therefore, the float ball assembly is not subject to the common, adverse effects of normal oil and sludge build-up on the tank interior walls. A deflector plate across the inlet of the tank assembly protects the float ball against sudden surges and provides smoother operation. In addition, lower and upper cushioning springs provide improved protection for the float ball. A standard 2" differential prevents most short cycling due to momentary changes in liquid level; other differentials down to 1/2" are available. Because the tank assembly is one piece, it eliminates leaky gasket potential as well as tampering.

### APPLICATIONS

Level control via liquid fill solenoid valve  
High level cut-out or alarm  
Low level cut-out or alarm  
Low level pump cut-out  
Level control via liquid exit solenoid valve  
Level indicator via pilot light  
Transfer Drum operation



### SPECIFICATIONS

Safe Working Pressure: 400 PSIG

Operating Temperature: -50°F to +150°F

Connections: 3/4" FPT/1" Butt Weld combination

### ORDERING INFORMATION

| Cat. No. | Description   | Weight |
|----------|---|--------|
| HLL      | Standard Float Switch with side and bottom connections        | 12 lbs |
| HLLS     | Universal Float Switch with 2 side & 1 bottom connection      | 13 lbs |
| HLLC     | HLL with protective metal cover                               | 13 lbs |
| HLLSC    | HLLS with protective metal cover                              | 14 lbs |
| HLLSW    | Switch Assembly only (fits all above & R/S LL Float Switches) | 2 lbs  |
| COV      | Metal Cover Only (fits all HLL)                               | 1 lb   |
| HTR1*    | 10 Watt 115V Heater (fits all HLL)                            | 1 lb   |
| HTR2*    | 10 Watt 230V Heater (fits all HLL)                            | 1 lb   |

\*To order float switch with heater, add H suffix. Example: HLLH and specify voltage.

TO ORDER: Specify Catalog Number.

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