

## Specialty Switches – Continued

### Portable Level Switch — Integral Mounting Magnet



Precisely monitors liquid level and is ideal for controlling filling operations and preventing overflows. Permanent magnet attaches unit securely to steel tank wall at exact level required.

### LS-750 Series — Weighted for Suspension Cable



With a compact-sized float, slosh shield and weighted collar, the LS-750 provides liquid level detection for a wide variety of applications. Suspend in stand pipes or sumps for leak detection duty, or drop into wells for ground-water monitoring. Supplied with 25 feet of waterproof cable.

U.L. Recognized—  
File No. E-45168.  
CSA Listed-File No.  
LR-30200.

### LS-700F Series



Overfill Protection for Refrigerant Tanks. The LS-700F enables safe compliance with EPA directives to recover refrigerants. These units are designed to fit standard 30# and 50# D.O.T. approved refrigerant tanks. They provide 80% full shutoff capability when used as an integral part of a recovery system.

U.L. Recognized—  
File No. SA8857.  
CSA Listed-File No.  
LR-30200-31.

### Dimensions

Portable Level Switch	LS-750	LS-700F
SJO, 18/2 10'L., Neoprene	22 AWG, 2-Wire Cable	3- or 4-Pin, Quick-Connect Receptacle

t<sub>L</sub> = Switch actuation level. In liquid with specific gravity of 1.0, switch actuation is approximately half the distance from end of stem to mounting, or at the halfway point of float travel.

### How To Order — Select Part Number based on specifications required.

Series	Material			Min. Liquid Sp. Gr.	Operating Temperature	Pressure PSI, Max.	Switch*	Electrical Termination Option	Part Number
	Stem and Mounting	Float	Other Wetted						
Portable	Brass	Buna N	Aluminum, 316 S.S.	.85	Oil: -40°F to +230°F (-40°C to +110°C) Water: to 180°F (82°C)	10	SPST, 20 VA N.O., Dry	—	15208
LS-750	Brass	Buna N	Nylon, PVC, Beryllium Copper	.45		150	SPST, 20 VA N.C., Dry	PVC Cable Jacket	149350 ⚡
	316 S.S.**	316 S.S.	PVDF, Viton®	.65	-40°F to 212°F (-40°C to +100°C)	375	SPST, 10 VA N.C., Dry	Teflon® Cable Jacket	197433
LS-700F	Brass	304 S.S.	—	.98	-40°F to +221°F (-40°C to +105°C)	400	SPST, 20 VA N.C., Dry	3-Pin	128500 ⚡
								4-Pin	144900 ⚡

\*See "Electrical Data" on Page X-5 for more information.

⚡ – Stock Items.

\*\* Stainless steel is generally recognized as safe (GRAS) with FDA for food contact regulations.

Order from: **C A Briggs Company**; 622 Mary Street; Suite 101 - Warminster, PA 18974  
Phone: 267-673-8117 - Fax: 267-673-8118; E-Mail: [Sales@cabriggs.com](mailto:Sales@cabriggs.com) - [www.cabriggs.com](http://www.cabriggs.com)

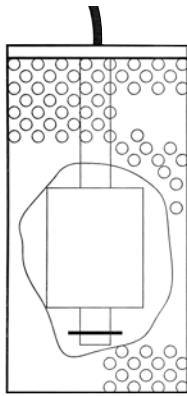
# Leak Detection Sensors

- ▶ Compact Size
- ▶ Low Cost
- ▶ Reliable
- ▶ Hydrocarbon Detection

Warrick® Leak Detection Sensors are designed for single wall piping, sump alarms and other small areas. Combine with Warrick Monitoring Panels for complete leak detection systems.

LEVEL SWITCHES – SINGLE POINT

DLP-1 & DLP-2



Designed to detect presence of liquid in sumps, attached access pipes, annular spaces, or locations requiring a small float-operated sensor. Two models to fit 1-1/2' and 2' standard piping.

DWP-25



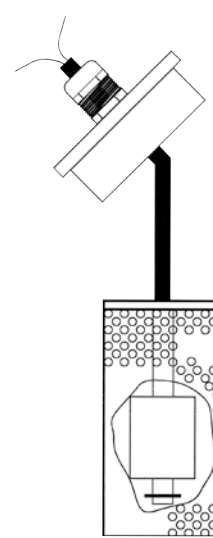
Designed for use in the annular space of double wall fiberglass tanks to detect the presence of conductive liquid. When combined with Warrick DMS or TA alarm panel, DWP-25 sensors can detect the presence of water or other conductive liquids in normally dry annular spaces.

DFP-25



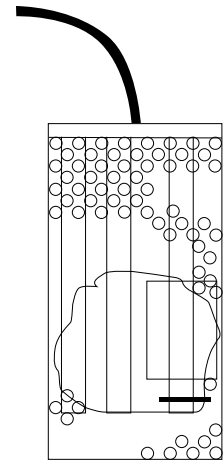
Designed for use in the annular space of double wall fiberglass tanks to detect hydrocarbon liquids. When hydrocarbons are present, a hydrocarbon wax pellet dissolves and closes a springloaded switch to signal a leak. This sensor is not reusable after exposure to hydrocarbons.

SVP-2



Designed to monitor hydrocarbon vapors in wells or sumps by absorbing the vapors and triggering a switch. Should not be used where vapors are continuously present. Fits in standard 2' pipe with cover.

DSP-2



Utilizes conductivity probes and a reed switch based float switch to detect the presence of liquid and differentiate between hydrocarbons and water. When combined with Warrick DMS or TA two-channel alarm panel, the DSP-2 can discriminate between water and hydrocarbon liquids causing fault condition.

## How to Order

Order by Part Number (same as Series Name for these products).

Series	Body Components	Number of Sensor Wires	Wire Length	O.D.	Part Number
DLP-1*	Buna-N float, Stainless Steel and plastic housing	2 (N.O. in resting position)	16 ft.	1.22"	DLP-1
DLP-2*				1.88"	DLP-2
DSP-2*					DSP-2
DWP-25	Stainless Steel probes in plastic housing	2	25 ft.	.625"	DWP-25
DFP-25	Spring-loaded switch, plastic housing, wax pellet	2	25 ft.	.625"	DFP-25
SVP-2	Chemical-resistant plastic and Stainless Steel housing	2	16 ft.	2"	SVP-2

\* EPA Approved when used with Warrick TA or DMS panel. See pages E-27 and E-28 respectively.

## Applications

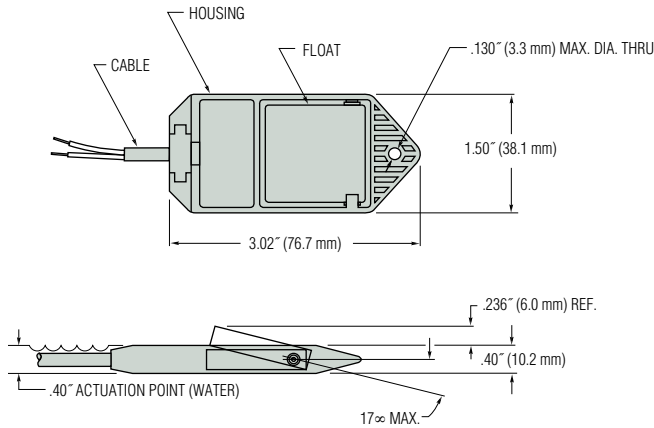
- Above Ground Storage Tanks
- Underground Storage Tanks
- Sumps
- Dry Annular Spaces

## LS-10 Series – Slim Profile for Interstitial Liquid Sensing

The Gems LS-10 liquid sensor accurately detects the presence of liquid in fiberglass double-wall tanks, containment sumps and double-wall pipes. Dry contact switching ensures dependability throughout its long service life. This reusable sensor easily fits small, interstitial spaces and senses liquid hydrocarbons or water. The unit is unaffected by hydrocarbon vapor, thereby reducing the risk of false alarms.

The LS-10 sensor's rounded design makes it easy to remove, clean and reinstall after an alarm condition is triggered, or for maintenance.

### Dimensions



### Specifications

#### Wetted Materials:

**Housing:** Valox®

**Float:** Foamed Polyethylene with Solid Polyethylene Pin

**Tape:** UHB Double-Sided 3M Tape

**Cable:** PVC

**Pressure:** Atmospheric

**Operating Temperature:** -40°F to +176°F (-40°C to +80°C)

**Accuracy:** ±1/8 inch

**Switch Rating:** 10W, 50-100 VDC Resistive Only, N.C. (opens on rising)

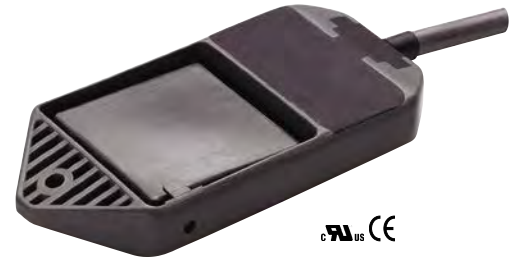
**Cable:** Two (2) Conductor PVC Jacketed 25 ft. Extended

**Approvals:** UL Recognized

### How to Order – Select Part Number based on mounting option

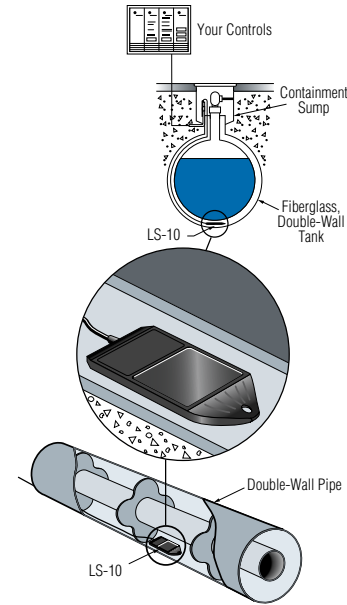
Series Number	Mounting Option	Part Number
LS-10	25' PVC Jacketed Cable	156000 ⚡

Note: The LS-10 sensor is a non-voltage producing device and does not contain energy storing components. However, since primary use is in hazardous locations, an appropriate intrinsically safe interface device is required for its use.



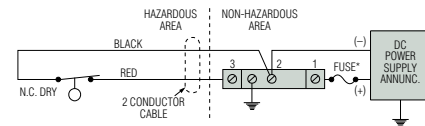
### Typical Applications

- ▶ Fiberglass Double-Wall Tanks
- ▶ Double Wall Pipes
- ▶ Containment Sumps
- ▶ Piping Sumps

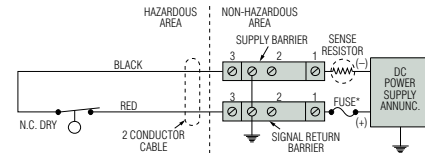


### Typical Wiring Diagrams

#### Non-Isolated System—Single Zener Barrier

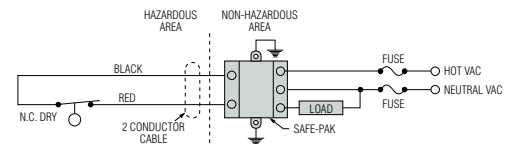


#### Isolated System - Dual Zener Barrier



If two signal lines must be maintained above ground potential, an individual zener barrier is required per single line.

#### Single Safe-Pak® Relay



Safe-Pak® is an intrinsically safe, solid state relay

LEVEL SWITCHES – SINGLE POINT