

Refrigerant Recovery Level Switches*

Instruction Bulletin No. 146074

*For Use in 30# and 50# D.O.T. Cylinders, Only

Installation/Mounting

1. Install units vertically in tank top. Gems recommends the use of Loctite 592 (Pipe Sealant with Teflon), instead of teflon tape to thread mounting plug to tank.

2. Do not mishandle or abuse floats. Any dings or creases may cause improper operation.

3. Improper wiring of switch may cause switch failure.

(See Wiring Diagrams)

4. Gems LS-70OF (Refrigerant Recovery) level switches are UIL-Recognized under File No. SA8857 and CSA-approved under File LR-30200. Please contact Gems Sensors for specific model numbers of other tank sizes.

<u>Note</u> Failure to observe the following instructions may result in leakage.

1. Apply pipe thread sealant to male level switch threads.

2. Thread level switch into female coupling until hand-tight.

3. Using a suitable wrench on hex flats, tighten 1 to 2 additional turns past hand-tightness.



Specifications

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	P/N 128500	P/N 128600	P/N 144900
Mounting Size	3/4" NPT		
Stem/Mounting Material	Brass		
Mounting Attitude	Vertical		
Float Material	304 Stainless Steel		
Electrical	Electrical Rating: 20 Watt Switch (Resistive Load) Pilot Duty Rating: 20 VA, 120-240 VAC, 12-30 VDC		
Data			
Receptacle Type	3-Pin Receptacle	2-Pin Receptacle	4-Pin Receptacle
Max. Oper. Pressure	400 psig		
Temperature	-40°F to 300°F (-40°C to 149°C)		

Maintenance

Do not disassemble unit or reposition retaining grip rings. Return unit to Gems Sensors Inc. for any required service.

<u>Warning</u>

The LS-700F Series switches should only be installed (in the proper tank size) by a UL-approved facility. Failure to do so, may cause failure and possible overfill of tank. Improper installation shall void Gems' warranty. Use with proper mating plug and cord set, only. Switches are not repairable.

*Typical Wiring Diagrams



*<u>Note</u>: No polarity requirements for L1

Important Points!

Product must be maintained and installed in strict accordance with the National Electrical Code and GEMS product catalog and instruction bulletin. Failure to observe this warning could result in serious injuries or damages.

An appropriate explosion-proof enclosure or intrinsically safe interface device must be used for hazardous area applications involving such things as *(but not limited to)* ignitable mixtures, combustible dust and flammable materials.

Pressure and temperature limitations shown on individual catalog pages and drawings for the specified flow switches must not be exceeded. These pressures and temperatures take into consideration possible system surge pressures/temperatures and their frequencies.

Selection of materials for compatibility with the media is critical to the life and operation of GEMS flow switches. Take care in the proper selection of materials of construction; particularly wetted materials. Life expectancy of switch contacts varies with applications. Contact GEMS if life cycle testing is required.

Ambient temperature changes do affect switch set points, since the specific gravity of a liquid can vary with temperature.

Flow switches have been designed to resist shock and vibration; however, shock and vibration should be minimized.

Liquid media containing particulate and/or debris should be filtered to ensure proper operation of GEMS products.

Electrical entries and mounting points may require liquid/vapor sealing if located in an enclosed tank.

Flow switches must not be field repaired.

Physical damaged sustained by the product may render it unserviceable.



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