earth safe
Fuel Systems for Critical Facilities

INSTALLATION, OPERATION, AND MAINTENANCE MANUAL

Model S100
Float Level Switch

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Damage Claims

Thoroughly examine all components and units as soon as they are received. If damaged, write a complete and detailed description of the damage on the face of the freight bill. The carriers agent must verify the inspection and sign the description. Immediately notify the delivering carrier of damage or loss. This notification may be given either in person or by telephone. Written confirmation must be mailed within 48 hours. Risk of loss, or damage to merchandise belongs with the buyer. It is the buyers responsibility to file a claim with the carrier involved. Immediately advise Earthsafe of the problem so that we may assist you.

Safety Information

Intended Use. Earthsafe float level sensors are intended for use with diesel fuel systems for emergency power generators. The sensors and devices are intended for operation only within ordinary electrical areas. Use of the sensors or devices within hazardous electrical areas is prohibited.

Intellectual Property

The equipment and described herein are the property of Earthsafe Systems, Inc. and are protected by various trademarks and patents.

Physical Description

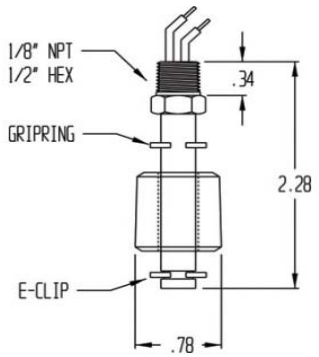
1. Cable: Quick-disconnect cable for removal to test.

2. Housing: Aluminum Housing with 2.00" NPT threaded connection and screw-cap.

3. Stems: Individual Aluminum Housing stem for each float with NPT threaded connection to housing. Single stems may be removed for maintenance or alteration.

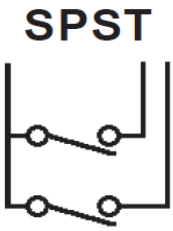
4. Floats: BUNA floats with Brass stem and clips NPT threaded connection to float stems.

Float Type

Float Material	Buna N
Float Dimensions	
Operating Temperature	Oil: -40°F to +230°F (-40°C to +110°C)
Min. Media Specific Gravity	0.75

Wiring Number Codes

Wire	Number
Common	#1
HL1	#2
HL2	#3
HL3/LL3	#4
LL4	#5
LL5	#6



Installation

1. Remove packaging and inspect for shipping damage. Note any shipping damage on the shipping ticket and notify Earthsafe within 24 hours of receipt.

2. Set unit at installation location. Use proper handling procedures to avoid damage to the unit.

3. Clean pipe thread and apply softset pipe sealer. Install vertically into 2.00" FNPT tank top opening.

4. Connect level switch wires using wire number code and #14 AWG wire.

Startup

1. Disconnect cable and remove sensors from tank.

2. Start with lowest level float. Move float down to simulate low fuel situation. Confirm desired output is activated. Repeat for each higher low level floats.

3. Move to high level floats. On lowest high level float, move float up to simulate high fuel situation. Confirm desired output is activated. Repeat for each higher

4. Reinstall sensor into tank and connect cable.