Operator’s Manual

LF Series
Model LFS-H-10
Side Mounted Level Switch

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• Warranty and Warranty Restrictions

This product is covered by APG’s warranty to be free from defects in material and workmanship under normal use and service of the product for 24 months. For a full explanation of our Warranty, please visit https://www.apgsensors.com/about-us/terms-conditions.
Contact Technical Support to receive a Return Material Authorization before shipping your product back.

Scan the QR code below to read the full explanation of our Warranty on your tablet or smartphone.
• Introduction

This rugged model LFS-H-10 horizontal mounting float switch is all SS316 stainless steel construction. This float switch can be either NO or NC by rotating the float 180 degrees. It is designed to withstand temperature up to 250°F and pressure to 145 psi.

• Specifications

**Characteristics**
- Contact closure from centerline: -5 +5/-10 mm
- Contact rating (resistive load): 50 VA / 50 W
- Max voltage: 300 VDC / 300 VAC
- Max current: 0.5 A DC / 0.5 A AC
- Min. specific gravity: 0.6
- Operating temperature: 14 to 250°F (-10 to 120°C)
- Max. pressure: 145 psi
- Min. life expectancy: 1x10^7 operations (12 VDC, 5 mA)

**Physical Attributes**
- Wetted parts: 316 SS
- Process connection: R1/2
- Float: 17 mm dia. x 70 mm
• Installation

Installation
The LFS-H-10 should be installed in an area that meets the following conditions:
• Liquid temperature range of -10 to +120°C.
• Located away from any strong magnetic field.
• Located away from drop, splash or vapor around the lead wire egress.
  Note: Apply the proper sealing compound over the lead wire egress if necessary. Liquid penetration may ruin insulation.
• Clean liquid, free from any foreign matter.
• Ample space for maintenance/inspection.

Location
DO NOT locate near liquid inlets/outlets.
If there is surface wave motion, use a time delay relay to dampen the switch action.
Provide the R1/2” female boss and screw the LFS-H-10 with a suitable gasket or thread tape.
**Note:** Switch operation such as Close ON rising level or Close ON falling level can be changed by rotating the LFS-H-10.

Direction of close is marked on the surface of the plug.
• **Wiring**

Wiring should be in accordance with all local codes. Lead wires are 22 AWG, UL listed. We recommend the use of solderless lugs for connection.

![Diagram of wiring connections]

Switch Rating (Resistive)
- Max capacity 50 VA, 50 W
- Max current 0.5 A AC, 0.5 A DC
- Max voltage 300 V AC, 300 VDC

**Note:** Max pull-load of the lead wire is 20 N. Excessive pulling or kinking of the lead wire may break the switch.

**Caution!**

**Protection for electrical surges:**

- **Orevoltage**
  Reed switches are not designed for the direct starting of inductive loads such as motors, contactors, solenoid valves, and so on. They are susceptible to damage from overvoltages. **DO NOT EXCEED THE CONTACT RATINGS.** Contact should be wired to miniature relays, suppressors or similar devices.

- **Overcurrent**
  Momentary surge current may be produced by switching lamps or stray capacity from long cable length, consequently welding the reed switch. Contact should be wired to a relay unit, coils in series, or suppressors.