

# AUTOMATION

PRODUCTS  
GROUP, INC.

## Operator's Manual

# LF Series

## Model LFS-H-10

## Side Mounted Level Switch

Rev. A1, 4/07



Automation Products Group, Inc.  
*APG...Providing tailored solutions for measurement applications*

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## • **Warranty and Warranty Restrictions**

APG warrants its products to be free from defects of material and workmanship and will, without charge, replace or repair any equipment found defective upon inspection at its factory, provided the equipment has been returned, transportation prepaid, within 24 months from date of shipment from factory.

THE FOREGOING WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES NOT EXPRESSLY SET FORTH HEREIN, WHETHER EXPRESSED OR IMPLIED BY OPERATION OF LAW OR OTHERWISE INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

No representation or warranty, express or implied, made by any sales representative, distributor, or other agent or representative of APG which is not specifically set forth herein shall be binding upon APG. APG shall not be liable for any incidental or consequential damages, losses or expenses directly or indirectly arising from the sale, handling, improper application or use of the goods or from any other cause relating thereto and APG's liability hereunder, in any case, is expressly limited to the repair or replacement (at APG's option) of goods.

Warranty is specifically at the factory. Any on site service will be provided at the sole expense of the Purchaser at standard field service rates.

All associated equipment must be protected by properly rated electronic/electrical protection devices. APG shall not be liable for any damage due to improper engineering or installation by the purchaser or third parties. Proper installation, operation and maintenance of the product becomes the responsibility of the user upon receipt of the product.

Returns and allowances must be authorized by APG in advance. APG will assign a Return Material Authorization (RMA) number which must appear on all related papers and the outside of the shipping carton. All returns are subject to the final review by APG. Returns are subject to restocking charges as determined by APG's "Credit Return Policy".

## • 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 through 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 / 300 VAC (max.) / 0.5 A AC (max.)  
50 W / 300 VDC (max.) / 0.5 A DC (max.)

Min. specific gravity: ..... 0.6

Operating temperature: ..... 14 to 250°F (-10 to 120°C)

Max. pressure: ..... 145 psi

Min. life expectancy: ..... 1 x 10(7) operations (12 V, 5 mA DC)

### Physical Attributes

Wetted parts: ..... SS316

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:

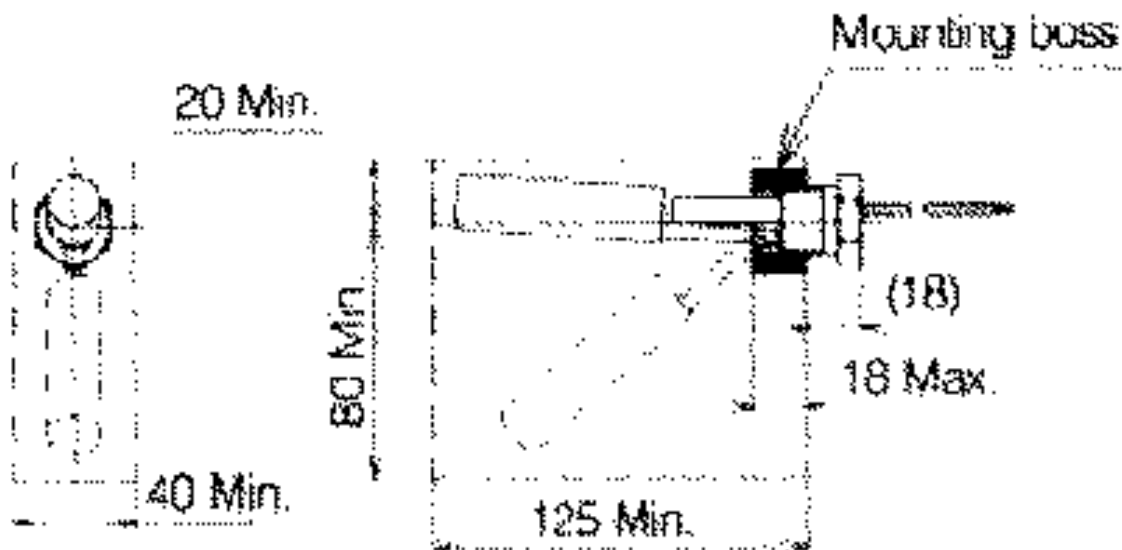
- Liquid temperature range of -10 to +120°C.
- Located away from any strong magnetic field.
- Located away from drop, splash or vapor around the lead wire egress.  
Note: Apply the proper sealing compound over the lead wire egress if necessary. Liquid penetration may ruin insulation.
- Clean liquid, free from any foreign matter.
- Ample space for maintenance/inspection.

### Location

DO NOT locate near liquid inlets/outlets.

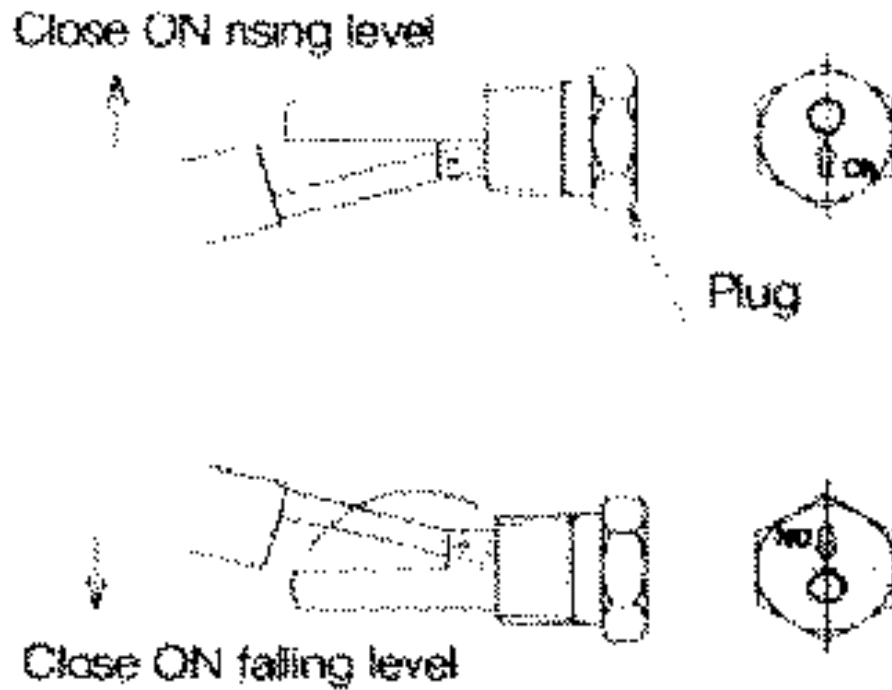
If there is surface wave motion, use a time delay relay to dampen the switch action.

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.



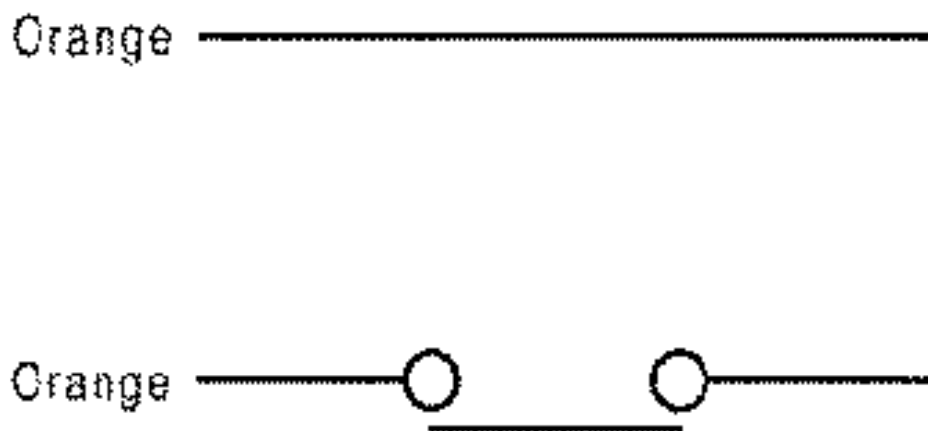
- **Wiring**

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.

Switch Rating (Resistive)

	AC	DC
Max. Capacity	50 VA	50 W
Max. Current	0.5 A	0.5 A
Max. Voltage	300 V	300 V

NOTE: Max. pull load of the lead wire is 20 N. Excessive pulling or kink the lead wire may break the switch.



Caution: Do not exceed the contact ratings!

1. Overvoltage

Reed switches are not designed for the direct starting of inductive loads such as motors, contractors, solenoid valves, etc.

2. Overcurrent

Momentary surge current may be produced by switching lamps or stray capacity from long cable length.