

## Thank You

Thanks for purchasing a Series FS-500 Float Switch from us! We appreciate your business and your trust. Please take a moment to familiarize yourself with the product and this manual before installation. If you have any questions, at any time, don't hesitate to call us at 888-525-7300. You can also find a full list of our product data sheets at:

<https://www.apgsensors.com/resources/product-resources/data-sheets/>

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### 1 Description

Series FS-500 Stainless Steel Horizontal Float Switches are durable float switches with a wide range of uses. They are compact, feature all stainless steel wetted materials, and carry CSA and NSF 169 certifications. This makes the Series FS-500 an easy choice for OEM, water and wastewater, and chemical applications. All FS-500 switches are made in the USA.

### 2 How To Read Your Label

Each label comes with a full model number, a part number, and a serial number. The model number for the Series FS-500 Float Switch will look something like this:

SAMPLE: FS-500-HT-M1-M1-0.6-P1P1-48

The model number correlates with all the configurable options and tells you exactly what you have. Compare the model number to the options on the datasheet to identify your exact configuration. You can also call us with the model, part, or the serial number and we can help you.

### 3 Warranty

This product is covered by APC'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 [www.apgsensors.com/resources/warranty-certifications/warranty-returns/](http://www.apgsensors.com/resources/warranty-certifications/warranty-returns/). Contact Technical Support to receive a Return Material Authorization before shipping your product back.

## FS-500 SERIES

### Stainless Steel Horizontal Float Switch

### Installation Guide



Automation Products Group, Inc.

1025 W 1700 N Logan, UT 84321

[www.apgsensors.com](http://www.apgsensors.com) | phone: 888-525-7300 | email: [sales@apgsensors.com](mailto:sales@apgsensors.com)

Part # 200320

Doc #9005611 Rev C1

### 4 Installation Instructions

FS-500 switches should be installed in an area--indoors or outdoors--which meets the following conditions:

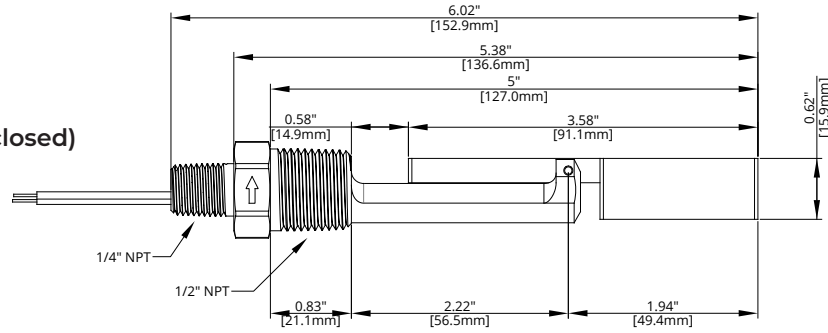
- Ambient temperature between -40°F and 368°F (-40°C to 187°C); up to 500°F (260°C) for HT
- Process pressure 300 psi (20.7 bar) or less; 100 psi (6.9 bar) or less for P58 fitting
- Relative humidity up to 100%
- Altitude up to 2000 meters (6560 feet)
- No chemicals corrosive to stainless steel (such as NH<sub>3</sub>, SO<sub>2</sub>, Cl<sub>2</sub>, etc.)
- 

Installing your horizontal float switch is easy if you follow a few simple steps:

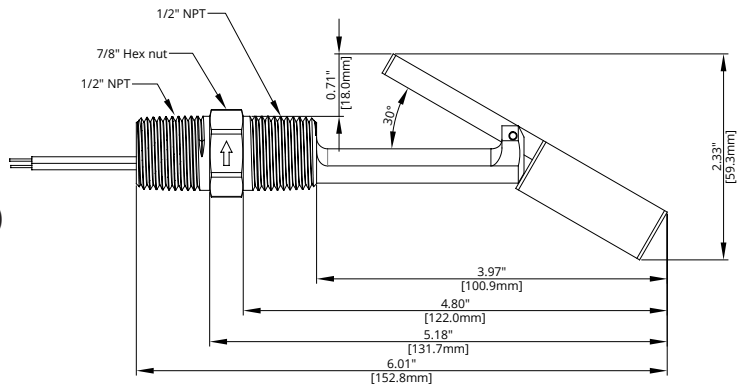
- Apply thread tape to tapered threads
- Insert the threads into the mounting hole and begin to turn by hand.
- Use an appropriately sized wrench on the hex nut to completely tighten the threads.
- Connect the switch wires to your control system.
- Equipment must be grounded through final installation.
- Adequate overcurrent protection must be provided at the supply.

## 5 Dimensions

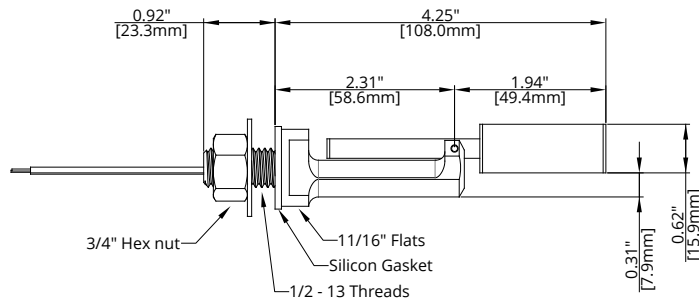
FS-500...P1P0 (closed)



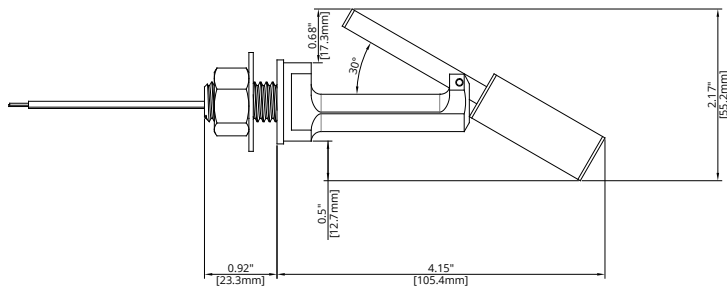
FS-500...P1P1 (open)



FS-500...P58 (closed)



FS-500...P58 (open)



## 6 Switch Operation Orientation (NO/NC)

Series FS-500 switches are closed when the float arm is level, and open when the float arm is tilted.

- For Normally Open operation (high-level alarm), install switch with float arm above stationary arm.
- For Normally Closed operation (low-level alarm), install with float arm below stationary arm.

## 7 General Care and Notes

Your float switch is very low maintenance and will need little care, as long as it was installed correctly. However, in general, you should:

- Keep the float arm and support arm generally clean.
- Avoid applications for which the switch was not designed, such as contact with incompatible corrosive chemicals, or other damaging environments.
- Inspect the threads whenever you remove the switch from duty or change its location.

See FS-500 Datasheet for the following specifications:

- Specific Gravity
- Actuation Angle and Hysteresis
- Electrical power rating, voltage ranges with frequencies and currents
- Full Hazardous Location ratings statements

## 8 Repair Information

If your float switch needs repair, contact us via email, phone, or on-line chat on our website. We will issue you an RMA number with instructions.

- Phone: 888-525-7300
- Email: [sales@apgsensors.com](mailto:sales@apgsensors.com)
- Online chat at [www.apgsensors.com](http://www.apgsensors.com)

## 9 Removal Instructions

Removing your float switch from service must be done with care. It's easy to damage your switch if you are not careful to follow these guidelines:

- Make sure the liquid is well below the level of the switch. Follow any and all procedures for safely isolating any media contained inside the line or vessel.
- Disconnect wires to switch.
- Loosen the switch with an appropriately sized wrench.
- Twist switch until completely free of threads.
- Pull wires out through mounting.
- Store your switch in a dry place, at a temperature between -40° F and 180° F.