



FT-50 Series

Low Flow Switch Fitting for use with FST-211 and FST-212 only



INSTRUCTION
SHEET

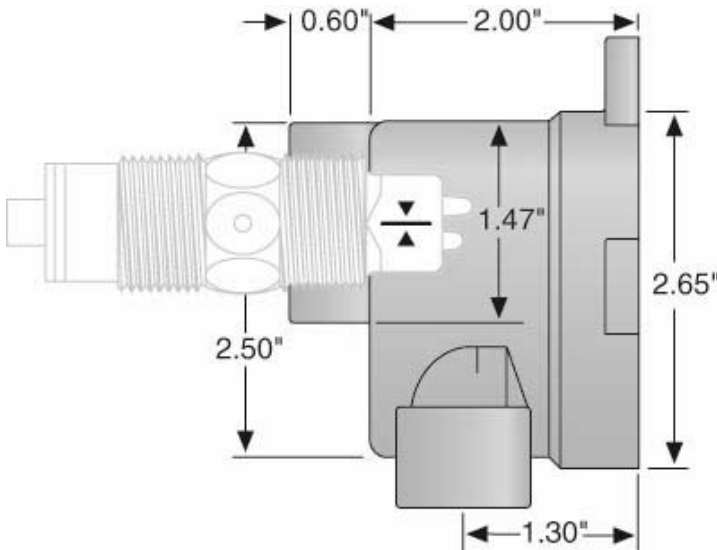
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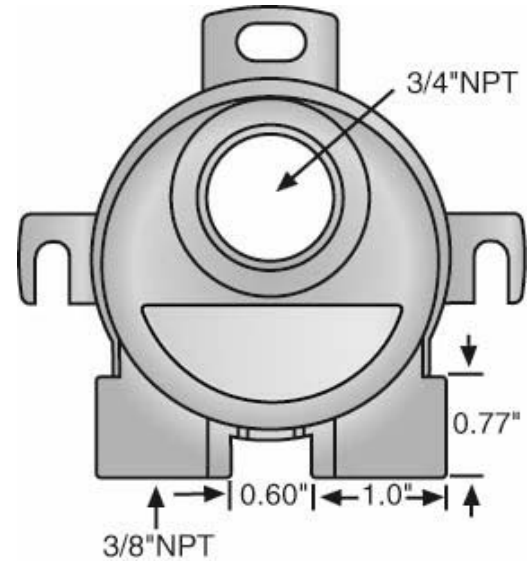
⚠ About This Manual: PLEASE READ THE ENTIRE MANUAL PRIOR TO INSTALLING OR USING THIS PRODUCT.

Dimensions:

Side View:



Top View:



Components: Check to make sure that all the parts are included in the kit before proceeding. One flow switch fitting (FT-50 series) includes the following parts:

- 1 – Flow Switch Fitting
 - FT-51 - Polypropylene Fitting
 - FT-52 - Polyvinylidene Fluoride Fitting
- 1 – O-ring for sensor

Specifications:

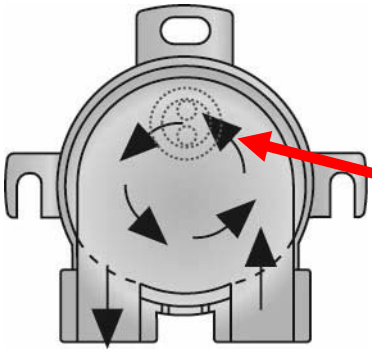
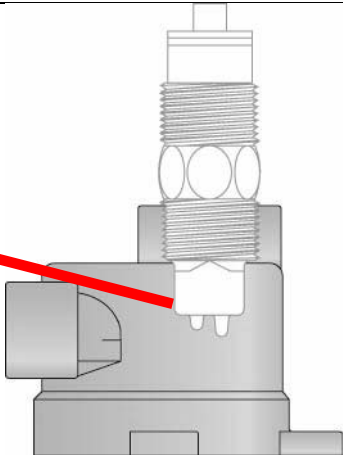
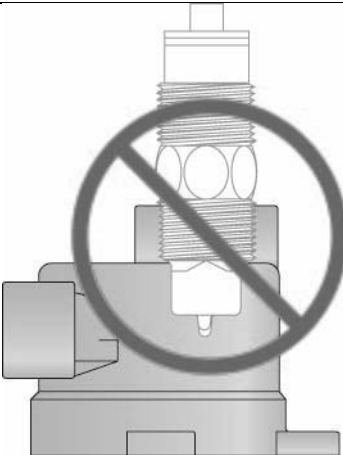
Housing materials:	FT-51: Polypropylene FT-52: Polyvinylidene Fluoride
Insertion port:	Located on bottom
Temperature rating:	F: 32 to 194° C: 0 to 90°
Pressure rating:	150 psi @ 25 °C, derated @ 1.644 psi per °C above 25 °C
Connections:	3/8" NPT, Female

Compatibility: The FT-50 series flow switch fitting is compatible with the following series of flow switches from Omega Engineering:

- FST-210-R
- FST-211-SPST
- FST-212-R
- FST-212-SPST

⚠ Make a Fail-Safe System: Design a fail-safe system that accommodates the possibility of sensor or power failure. In critical applications, Flowline recommends the use of redundant backup systems and alarms in addition to the primary system.

About the Flow Switch Fitting: Omega Engineering’s Flow Switch Fitting is designed for use with the Omega Engineering Thermal Dispersion liquid flow switch (FST-200 series). A very economical and accurate method of sensing flow is created when using the FT-50 series with the FST-200 series flow switch. Liquids from 0.4 to 1.2 SG and a 1 to 300 cp can be monitored. Also, pulsating flows from 10 to 100 pulses per minute can be monitored. The 3/8” NPT female inlets allow for easy connections to line sizes from 1/8” to 1/2”.

		
<p>FT-50 series unique design creates a vortex inside its chamber. The vortex uses its stored energy to create a flow pattern. This design is ideal for pulsating flows and low flow conditions.</p>	<p>Insert the FT50 into the 3/8” NPT sensor port taking care to orientate the two temperature probes perpendicular to the flow of the vortex.</p> <p>Note: Be sure to remove/bleed all air from the inside of the chamber for operation of the flow switch.</p> <p>Note: The flow switch fitting can be mounted in any orientation.</p>	

⚠ User’s Responsibility for Safety: FLOWLINE manufactures several models of flow switches and liquid level sensors, controller and mounting systems. It is the user’s responsibility to select components that are appropriate for the application, install it properly, perform tests of the installed system, and maintain all components. The failure to do so could result in property damage or serious injury.

⚠ Proper Installation and Handling: Use a proper sealant with all installations. Never over tighten the sensor within the fitting beyond a maximum of 80 inch-pounds torque. Always check for leaks prior to system start-up.

⚠ Material Compatibility: The flow switch fitting is available in two different wetted materials. Model FT-51 is made of PP (polypropylene, a polyolefin). Model FT-52 is made of PVDF (Polyvinylidene Fluoride). Make sure that the application liquids are compatible with the materials that will be wetted.

⚠ Flammable or Explosive Applications: The FT-50 series fitting *may be used within flammable or explosive applications. In hazardous applications, use redundant measurement and control points, each having a different sensing technology.*



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WARNING: These products are not designed for use in, and should not be used for, human applications.

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If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

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