



FM - Series Multi-Level Float Switches

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Dependable and rugged 316 Stainless Steel float level switches for replacement or custom applications.

FM20-xxxx 2" Diameter 316SS Float Switch

These larger, more buoyant floats are perfect for years of corrosive resistant service. Configurable for 1 to 5 levels, these switches may be used to control pumps, alarms or indicate general fluid levels.

FM22-xxxx 1 1/4" Diameter Buna Float and SS Stem

These highly buoyant floats are ideal for heavy equipment, generators and fluid recovery involving lubricating oils, fuels and wastewater. Easily configured for oil water interface detection.

Part Number	Switch Type	Maximum Switching Current	Maximum Switching Voltage	Maximum Temperature	Maximum Pressure	Specific Gravity
FM20-xxxx	50 watt	.5 Amps	250 VDC	150 C	250 psig	.60
FM22-xxxx	50 watt	.5 Amps	250 VDC	120 C	150 psig	.50

Standard Features:

- 50 Watt Resistive SPST Switches
- 2.5" min. required between levels
- Up to 5 levels, 10' long

Other Available Switches: (UL rated for resistive loads)

- 100 Watt, Full Size SPST, Switch 3Amps (3 levels)
- 100 Watt, Full Size SPDT, Switch 3Amps (3 levels)Up



FM10-xxxx 1" Diameter, SS Multi Level Float Switch

This durable design is ideal for corrosion resistant applications in restrictive spaces

FM11-xxxx 1" Diameter PP Float with SS Stem

The Polypropylene float makes this ideal for general use and potable water applications.

FM12-xxxx 1" Diameter Buna Float with SS Stem

This miniature multi-level is ideal for petroleum products, hydraulic oils and wastewaters.

Part Number	Switch Type	Maximum Switching Current	Maximum Switching Voltage	Maximum Temperature	Maximum Pressure	Specific Gravity
FM10-xxxx	50 watt	.5 Amps	250 VDC	150 C	250 psig	.60
FM11-xxxx	50 watt	.5 Amps	250 VDC	105 C	100 psig	.70
FM12-xxxx	50 watt	.5 Amps	250 VDC	120 C	150 psig	.50

Standard Features:

- 50 Watt Resistive SPST Switches
- 1.5" min. required between levels
- Up to 4 levels, 6' long



Notes:

- Standard fittings, flanges or custom mounting configurations available. Use an adjustable compression fitting to provide more flexibility.
- Temperature devices can be incorporated with your float switch to reduce tank intrusion and assembly costs. See Combination sensors.
- Other switch types and materials available. Contact our technical sales department or submit a custom application



SMD FLUID CONTROLS

FM - Series Multi-Level Float Switches

Please fill in configuration sheet and application specifications and return for quote or order.

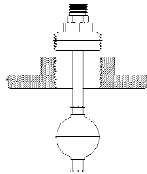
Select Part

FM20 2" 316 Stainless Steel (Requires 2.1" hole for external mount)
 FM22 1 1/4" Buna-N / SS (Requires 1.3" hole for external mount)

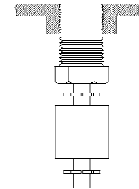
FM10 1" 316 Stainless Steel
 FM11 1" PP / SS
 FM12 1" Buna-N / SS

Mounting Type

External



Internal



Standard Fittings

Pipe Plugs 1/4" npt 1/2" npt 1" npt 2" npt
 Bulkhead 1/2"-13 3/4"-10
 150# Flange 1" 3"
 Adjustable compression fitting Adjustability + _____"

Other: _____

Float Stops

300 Series SS Grip Rings (Standard)
 316SS Collars with Set Screw

Wire Type

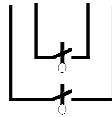
_____ 22 Awg. Teflon (Standard)

Lead Length _____ inches

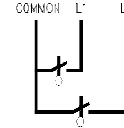
24" (Standard)

Wiring Configuration

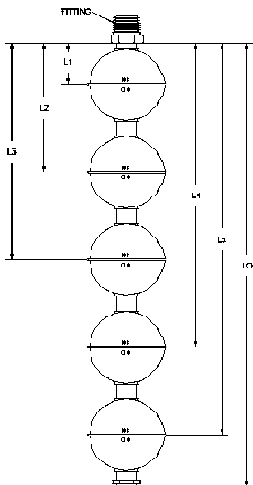
Separate (Standard)



Common



NOTE: Switch Points measured from bottom of mounting surface to switch actuation at float center. Please check Normally Closed (NC), Normally Open (NO) or Single Pole Double Through (SPDT). (FM20- 5 levels Max, FM10- 4 Levels Max.)



L1 _____" NC / NO / SPDT
 L2 _____" NC / NO / SPDT
 L3 _____" NC / NO / SPDT
 L4 _____" NC / NO
 L5 _____" NC / NO
 L0 _____" Length Overall
 (+1.5" for FM20, +1" for FM10, Unless Specified)

- FM20 and FM22 Require 2.5" min. between levels
- FM10,11, and 12 Require 1.5" min. between levels
- Other switches and options available, please contact us or submit your requirements using our Application Specifications Sheet



FM - Series Multi-Level Float Switches Application Specification Sheet

Company:

Address:

City: _____ **State:** _____ **Zip:** _____

Contact:

Tel: _____ **Fax:** _____

E-Mail:

Application Description:

Fluid Type: _____ **Temp:** _____ []C / []F **Pressure:** _____ psig

Tank or Contact Materials:

Electrical Device or Output to be controlled:

Voltage: _____ **Power:** _____

Notes and Special Requirements:

Estimated Purchase Qty:

Price Target:

Installation Instructions

SMD Fluid Controls USA
SMD Fluid Controls UK

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FM - Series Multi-Level Float Switches

- Remove Switch assembly from package and inspect for dimensional and switch levels per the Customer Quote or Customer Part Sheet. (Note: An Ohm Meter or Continuity tester can be used to check switch operation)
- Install Switch as required for the ordered fitting type (See “App Notes” for additional information.)
- To insure that liquids do not get to the back of the wire exit, connect a conduit fitting or J-Box to conduit fitting provided if required. For Explosion Proof applications, a conduit seal or J-Box seal is recommended to be attached within 18” of the wire exit.
- Connect wires before powering units electronics and dry test by moving floats if accessible.
 1. If any failures, discrepancies or damage has occurred upon receipt, contact us for guidance or a RGA # before returning any product to SMD, Inc.
 2. If Stem or Float becomes coated with Scale or Debris, a preventative clean and maintenance schedule is recommended to insure floats are free to move.