

## FM19/29 - Offset Multi-Level Liquid Sensor

The FM19/20 offset multilevel liquid level sensors mainly consists of internal magnetic reed switches and up to 4 floats for the FM19 and up to 5 floats for the FM29 model. The offset stem allows for incorporating a multilevel liquid height detection using a side mount configuration. This sensor has designed characteristics such as compact size, simple working principle, highly reliable and inexpensive. The electrical parameters can be changed in accordance with client's requirement, and special specification can also be customized.

When the level of the tank's liquid rises or falls past the level of the float, the float will rise and fall with it, activating the switch. Wires then send an electric signal to the outside of the tank through the watertight seal, making these components essential for accurate monitoring or regulation of fluid levels in many contexts. Like side-mounted switches, 90 degree mount float switches are mounted through the side of a tank. However, they function as vertically mounted switches, with doughnut-shaped floats rising and falling with the level of the liquid around stems, actuating reed switches inside the stems.



## **Application**

This product can be used in liquid level control for:

- humidifiers,
- water dispensing equipment
- water heater
- solar energy
- air conditioning
- oil tank
- water tower

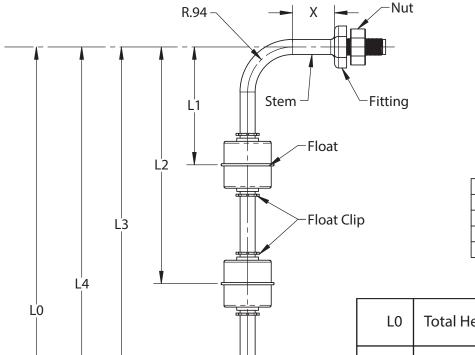
FM19 - Stainless steel four multi-level floats with offset stem

FM29 - Stainless steel five multi-level floats with offset stem

Part Number	Switch Type	Max Switching Current	Max Switching Voltage	Max Temp	Max Pressure	Specific Gravity
FM19-XXXX	50 Watt	0.5 Amps	250 VDC	150° C	250 psig	0.60
FM29-XXXX	50 Watt	0.5 Amps	250 VDC	105° C	100 psig	0.70

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Materials		
Stem		
Float	SS 316L	
Float Clip		
Wires	24AWG, TEFLON	

LO	Total Height	*Max Total Height 90" [7.5']
L1-L4	Level Height	2.5" between levels
Х	Stem Length	Min 15/16" Straight Length Tubing

Ø1.10 [29.94 mm]

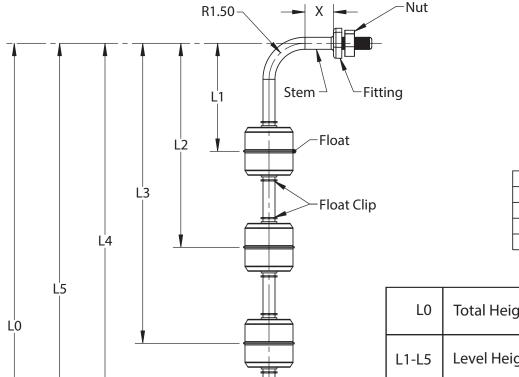
FM19

L1″	□ NC [	NO [	SPDT
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NOTE:

ACTUAL COMPONENTS (FITTING, NUT, ETC) MAY NOT APPEAR AS SHOWN





→ Ø 2.12 → [53.84 mm]

Materials		
Stem		
Float	SS 316L	
Float Clip		
Wires	24AWG, TEFLON	

L0	Total Height	*Max Total Height 90" [7.5']
L1-L5	Level Height	2.5" between levels
Х	Stem Length	Min 1 3/16" Straight Length Tubing

L1″	□ NC □	] NO [	] SPDT
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FM29

NOTE:

ACTUAL COMPONENTS (FITTING, NUT, ETC) MAY NOT APPEAR AS SHOWN



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

Choose a Part	Float Stops	Wire Type
☐ FM19	300 Series SS Grip Rings (Standard)	
15/16" Stem Diameter	316 SS Collars with Set Screw	22 Awg Teflon (Standard)
FM29 1 3/16" Stem Diameter		Lead Lengthinches 24" (Standard)
		Wiring Configuration
<b>Mounting Type</b>		Separate (Standard)
2.0	24 \rightarrow LEAD WIRES 22 AWG	Common L1 L2

Standard mounting type

3/8-24

STEM-

NUT-J 3/8-24

**NOTE:** Switch Points measured from bottom of mounting surface to switch actuation at °oa t center. Please check Normally Closed (NC), Normally Open (NO) or Single Pole Double Through (SPDT)





## **Application Specification Sheet**

Name:	Company:	
Address:		
City:	State: Zip:	
Email:	Telephone:	
Application Description:		
Fluid Type:	Temp: □°C or □°F Pressure: psi	ig
Tank or Contact Materials:	Voltage:	
Application have a Pump? If Yes:	☐ Pump Up ☐ Pump Down	
Electrical Device or Output to be Controlled:	Power:	
Estimated Purchase Quantity:	Price Target:	