

MODEL FT

CABLE SUSPENDED FLOAT SENSOR



Features

- Usable in a wide range of liquids
- Available NO or NC contacts
- Adjustable switch points
- Reliable/Long life switch life
- Easy installation

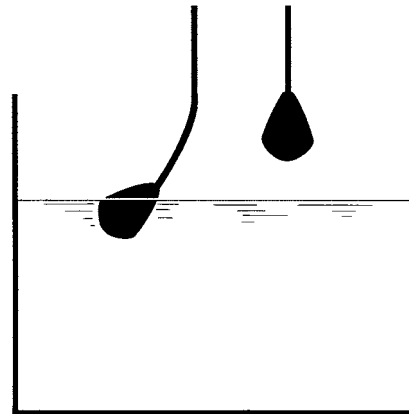
General Description

The FT series cable suspended float sensor is designed for high or low level indication. The FT series are miniature switch actuated design ideally suited to operate pumps, valves and similar equipment used in the sewage or municipal wastewater treatment plant. A high capacity micro switch in the ABS float provides a reliable long life level control.

A number of float units can be used together to give multiple level switch points in one flanged holder. Each float can be easily assembled on site and the switch operating points are adjusted by altering the length of the cable.

Operational Description

The buoyant float is weighted on one side. As the liquid rises, it tilts in a fixed direction to operate the micro switch, which uses a movable iron ball to actuate the switch.



Chemical Resistance

The ABS covered float and PVC cable are compatible with a wide range of liquids. However, there are some liquids that may damage these materials.

ABS can be quickly damaged by the following liquids:

- Aromatics (benzene, toluene, xylene) cause the float to dissolve.

- Esters and ketones cause the float to swell.

PVC cable can be used with the following cautions:

- Oils, especially vegetable oils and fats, tend to absorb the plasticizer of PVC cable. Consequently the cable stiffens.

If necessary, alternative Hypalon cable is available with FT-3A and FT-3B. In general, the resistibility depends on concentration, duration of immersion, presence of suspended solids and/or corrosive gasses and temperature. Although these cable suspended floats are designed for long life, we recommend that they are replaced at adequate intervals.

Technical Notes

- The FT-3 is ideal for direct pump control, with 3A 250V AC switch rating. For PLC and DCS usage, we recommend to use the FT-2, with 0.1A 125V AC rating.
- Hypalon cable is available with FT-3A and FT-3B.
- To avoid personal injury and protect the switch for electrical surges, connect the float to our relay unit model RE7000 or similar devices.

Specifications

Model	FT-2	FT-3	FT-5*1	FT-7*1	FT22/FT33/FT55/FT77
Drawing					
Operation Characteristic					
Operating Temperature	-10°C to 50°C				
Maximum Pressure	200kPa / 2bar				
Minimum S.G.	0.9		0.8		
Operational Characteristic	FT-□A	Up ON, 100±15		Up ON, 186±40	
	FT-□B	Down ON, 80±10		Down ON, 123±20	
	FT-□C	Up ON or Down ON		Up ON or Down ON	
Cable Length	6 meter (Max. 20 meter)				
Life Expectancy	2 × 10 ⁵ Operations				
Material	Cable	φ 8.1, PVC*2			
	Float	ABS			
	Housing	ABC			
	Flange	PVC			
	Weight	3kg, PVC (build in steel)			
	Rope	PE			
Mounting	JIS10K100A (4 holes)				
Cable Entry	JIS F 20a (G3/4)				
Protection	IP45*3				
Maximum Detection Points	6				

*1 FT-5/FT-7 are only available for maintenance and repair parts of FT55/FT77.

*2 Hypalon (2-core) cable is optionally available.

*3 IP65 is optionally available.

Contact Rating

Model		FT-2	FT-3	FT-5	FT-7
Max. Current	AC	0.1A	3A	0.1A	3A
	DC	0.1A	3A	0.1A	3A
Max. Voltage	AC	125V	250V	125V	250V
	DC	30V	30V	30V	30V
Max. Load		5mW(5V DC Min.)	0.8W(5V DC Min.)	5mW(5V DC Min.)	0.8W(5V DC Min.)

Minimum setting point

Model	Min. l 1		Min. $l \sim l$	Min. $L \sim l$ n	
	↑ ON, OFF	↓ ON, OFF		↑ ON, OFF	↓ ON, OFF
FT22, FT33	270mm	290mm	300mm	260mm	240mm
FT55, FT77	200mm	260mm	275mm	160mm	140mm