

SF131 series of Two-point float level switches

Introduction

Magnetic float-level switches principle: the float which link to rod equipped with a constant magnetic field, Because of the liquid level rise or fall, make the float internal generated magnetic field, thus triggered the reed which inner rod action. Widely application to liquid level measurement, liquid level alarm and level security control field.



Features

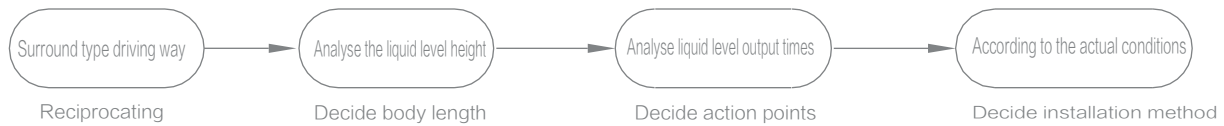
- No standby power requirement, N.O., N.C. and S.P.D.T optional
- Customer can defined measurement range and connection mode
- Shell material: engineering plastic
- High cost performance, high stability, long service life

Applications

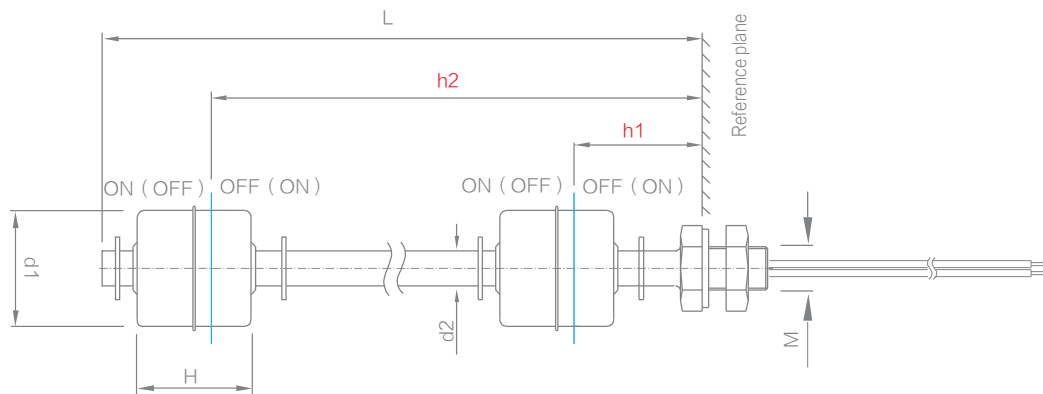
- Level control, level measurement
- Home appliance level detection
- Water heater, coffee machine, water dispenser, humidifier, etc
- Container level detection

Level switches selection rules

While using permanent magnet as a trigger to drive the Mount switches, they usually according to the following method and order



Dimensions and Operation Demonstration

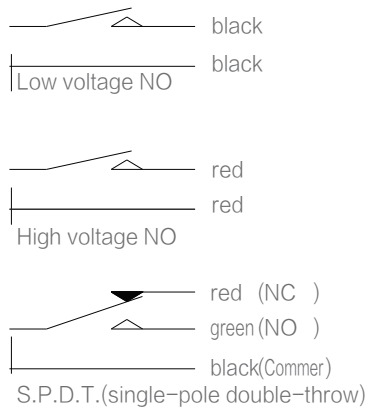


Unit: mm

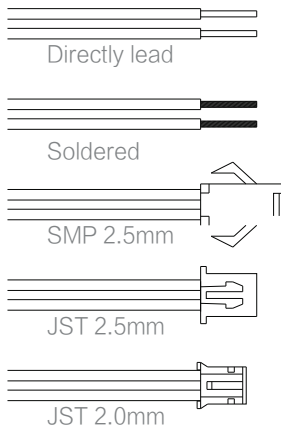
Code	Dimensions (material : stainless steel)							
	L	d1	H	d2	M	h1	h2	Cable length
SF131	187.0	Φ24.0	22.0	Φ8.0	M10×1.0	71.0	170	250
	226.0	Φ28.6	28.0	Φ8.0	M10×1.0	140.0	200	350
	230.0	Φ19.0	16.5	Φ8.0	M10×1.0	150.0	210	350
	133.0	Φ28.6	28.0	Φ8.0	M12×1.25	70.0	113	350
	167.0	Φ24.0	22.0	Φ8.0	M10×1.0	22.0	141	350

Note: Above the specifications can be defined by customer

Connection mode



Outlet Mode



Electrical Specification

Electrical Specification			
Model	1	2	3
Switched Power(max)	10W	70W	5W
Switched Voltage (max) (DC)	200V	200V	175V
Switched Voltage (max) (AC)	140V	250V	125V
Switched Current (max) (DC)	500mA	1000mA	400mA
Switched Current (max) (AC)	500mA	1000mA	280mA
Breakdown Voltage(min)	250V DC	580V DC	200V DC
Carry Current (max)	1.0A	2.25A	0.5A
Contact Resistance (min)	200mΩ	200mΩ	200mΩ
Insulation Resistance (min)	10 ⁶ MΩ	10 ⁶ MΩ	10 ⁶ MΩ
Operating Temperature	-40°C~+80°C	-40°C~+80°C	-40°C~+80°C

Note: Above the wire color, model and outlet mode can be customized

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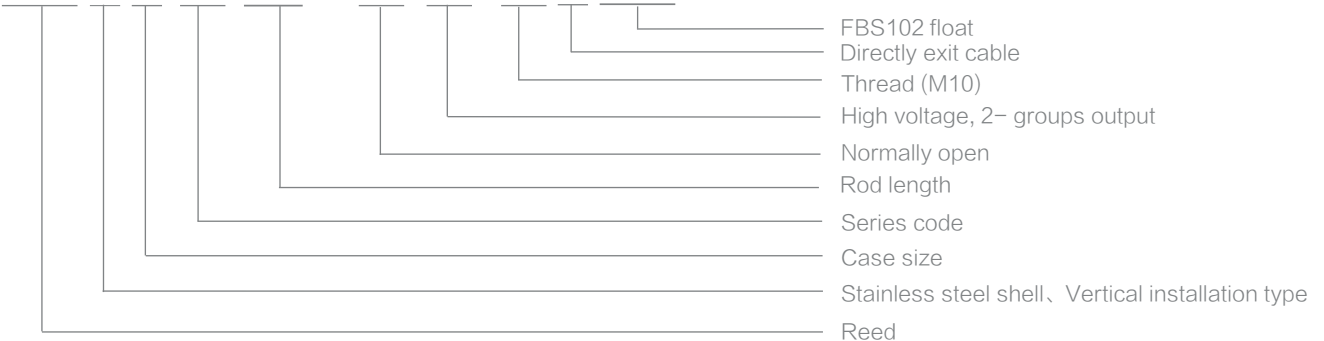
Products selection table

SF1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Selection description	
Level switches installation method	1																				Vertical installation type plastics shell	
	2																					Horizontal installation type plastics shell
	3																					Vertical installation type stainless steel shell
	4																					Horizontal installation type stainless steel shell
Level switches sizes code	X																					Sizes Code
Series code		X	X																			01~99
Body length					X	X	X	X														Unit:mm
Output signal									X	X	X	X										Appendix 7-1
Installation										X	X											Appendix 7-2
Wiring												X	X									Appendix 7-3
Float Type																				P		PP float
																				N		NBR float
																				S		Stainless steel float
Float code																X	X					Float code
Other else																					T	Thermal resistance

Example: SF13101 - 1000 - K1H1 - MAP-S02

Vertical installation type stainless steel shell level sensor, rod length 1000mm, switch output, normally open type, 2-groups output, installation Thread M10, standard PVC cable, FBS102 float.

SF1 3 1 01 1000 - K1 H1 - MA P - S02



Product Selection table

Appendix 7-1

Output signal selection table			
Output model	Output status	Power	Output group
K	1: N.O. 2: N.C. 3: S.P.D.T	L: Low power output signal H: High power or Large current M: Lots of testing points and each point of power is different	1: Signal group 2~9: 2-9 groups A~W: 10-32 groups

Appendix 7-2

Installation and specifications table								
Installation	Specifications							
	Code	Thread (outer diameter)	DN	BSP	Code	Thread (outer thread)	DN	BSP
C:Cylindrical								
M:Standard thread	1			1/8"	B	12	50	1 3/8"
T:Fine thread	2			1/4"	C	14	65	1 1/2"
S:Very fine thread	3		10	3/8"	D	16	80	1 5/8"
F:Flange DN	4		15	1/2"	E	18	100	1 3/4"
G:BSP thread	5		20	5/8"	F	20	125	1 7/8"
N:NPT thread	6	6	25	3/4"	G	22	150	2"
	7	7	30	7/8"	H	24	200	
	8	8	32	1"	I	27	250	
	9			1 1/8"	J	30	300	
	A	10	40	1 1/4"				

Appendix 7-3

Connector/ header or wiring			
D	J	M	P
Aviation plug	JSTplug	Transmitter header	Directly exit cable