

GF

GF Multi-point Float Level Switch

The working principle of Multi-point Float Level Switch is direct and simple. Set one point or multi-point of magnetic switch in sealed unmagnetic metal or industrial plastic tube. Fix the float with inner magnetic system in a certain place of magnetic switch in the pipe and let the float drift up and down; utilize the inner magnetic system in the float to trigger the open and close of magnetic switch to operate and control the liquid level. The working principle is simple and proved to apply to liquid measuring under various conditions. Normal open and close is the state with inserting liquid, multi-point float level switch is widely used in level control and alarm of all kinds of industry such as electronic, electric power, chemical, water treatment, water supply and drainage, multi-point float level switch is custom-made product. In order for the convenience of customer, arrange the specification of float, material and characteristic, junction box specification, connect specification and

referred kit specification to a diagram to select the right model for the customer. Choose the right specification of float according to the using temperature, pressure, specific gravity, acid and alkali resistance of tested liquid. It is also need to select the contact specification, all operation point, operation style (normal open or normal close) and total length when purchase.

Product Series











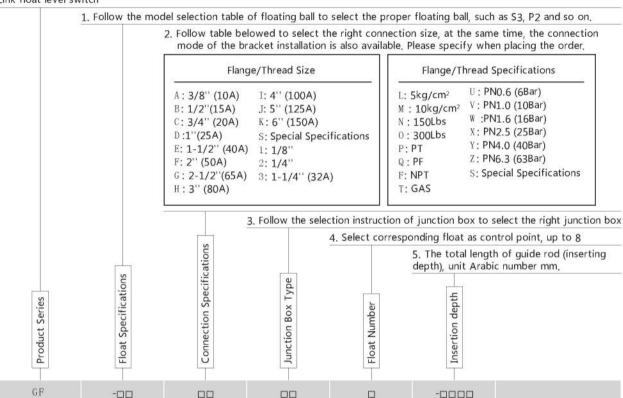


Product Features

- Vacuum structure applies to any liquid testing operation.
- Switch does not contact with the liquid directly, no abrasion and laceration.
- It is no power joint without any power supply and communicating signal treatment with voltage contact, such as PLC
- Testing is not mattered by foam, conductivity, medium constant, pressure, vacuum, temperature, evaporate, condensing liquid, bubble, boiling effect and vibration
- → It can set several switch point (1 to 8) in a single fixation to realize multi-point control and the location of every point can be custom made.
- All outlet wire of switch is concentrated in the junction box. Protection class is IP65; construction is very simple and convenient; wiring cost is reduced
- ◆ It is easy to install and use. Close and open once to regulate before use and no need to maintain; overall performance is reliable. There are materials of SUS304, SUS316L, PP, PVDF, PTFE to choose.

Model Selection

Link float level switch



Selection Diagram of Junction Box



NG Type



EA Type



HG Type



F2 Type



SA Type



F3 Type



PR Type

Selection Diagram of Magnetic Float

Size	Φ×H×d(mm)	Material	Density (g/cm³)	Max, Temp, (°C)	Max, Pressure (Kg/cm²)	Figure			
S1	Ф24×H24×d9.5	SUS304, 316L	0.8	150	10				
S2	Ф25×H28×d9.5	SUS304, 316L	0.7	150	10				
S3	Ф28×H28×d9.5	SUS304, 316L	0.55	150	10				
S4	Ф38×H26×d9.5	SUS304, 316L	0.7	150	10	н + + + + + + + + + + + + + + + + + + +			
S5	Φ40×H36×d15.5	SUS304, 316L	0.7	150	10				
S6	Φ40×H50×d15.5	SUS304, 316L	0.55	150	10				
S7	Φ45×H56×d15.5	SUS304, 316L	0.55	150	10				
S8	Ф30×H29×d9.5	SUS304, 316L	0.6	150	25				
S9	Ф52×H52×d15.5	SUS304, 316L	0.7	150	25	•			
S10	Ф52×H62×d15.5	SUS304, 316L	0.7	150	25	Н (
S11	Φ75×H75×d15.5	SUS304, 316L	0.7	150	25				
S12	Ф125×H125×d15.5	SUS304, 316L	0.7	150	25				
P2	Φ40×H52×d20	PP	0.65	75	5	Φ =			
P3	Ф48×H52×d20	PP	0.65	75	5				
F1	Ф55×H70×d23	PVDF	0.85	150	5				
F2	Ф40×H52×d20	PVDF	1.0	150	5	- d -			

^{*}Special specifications of floating ball can be customized.

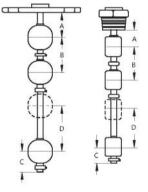
Note

Users should pay attention to the minimum distance and minimum distance in the lowest point when order. If the distance is too short, we can't produce. Users can confirm these sizes according to the below data:

A=the minimum distance apart to the continuing bottom B=the minimum distance between two adjacent float

C=the minimum distance apart to the end of the pipe body D=the minimum distance between two liquid levels of a float

Float Gap	S1	52	S3	54	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	P1	P2	P3	F1
A(MM)	17	19	19	18	20	30	33	20	31	36	43	68	36	43	14	30	30	40
B(MM)	44	48	48	46	50	70	76	50	72	82	96	146	82	96	38	70	70	90
C(MM)	27	29	29	28	30	40	43	30	41	46	53	78	46	53	24	40	40	50
D(MM)	34	38	38	36	40	60	66	40	62	72	86	136	72	86	28	60	60	80



Property relationships and liquid float

Users select corresponding specification of float according to the working temperature, pressure, gravity, acid and alkali etc. properties of the tested liquid.

Temperature : the maximum temperature of PVC is 80°C, the maximum temperature of PP is 80°C, the maximum temperature of PVDF is 150°C, the maximum temperature of SUS 304/316L floating ball is 200°C.

Pressure : the maximum pressure resistance of plastic floating ball is $5kg/cm^{-2}$, the maximum pressure resistance of SUS floating ball is $40kg/cm^{-2}$

Viscosity: for viscous liquid, it is better to choose float with big diameter and small gravity to overcome the surface tension.

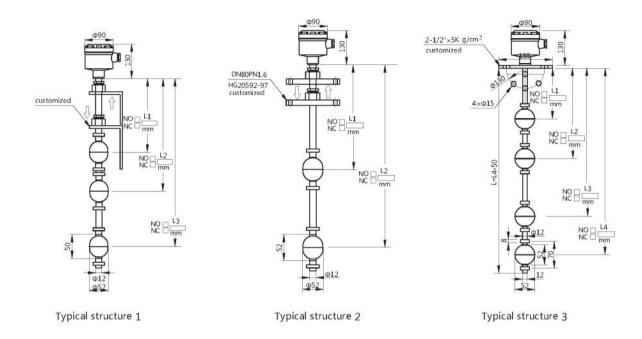
Acid and alkali characteristic polypropylene is suitable for strong acid and alkali occasion while choose PVDF in strong acid and alkali occasion of above 80°C temperature.

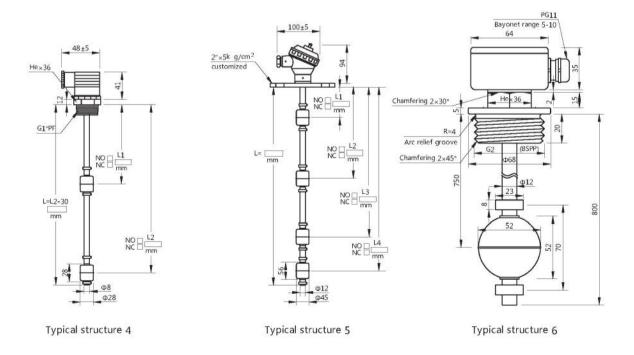
Alcohol and oil etc: it is suggested to use stainless SUS, and use food grade of SUS316L in food industry.

Gravity: float's gravity S.G. should be less than tested liquid's, otherwise the float cannot drift.

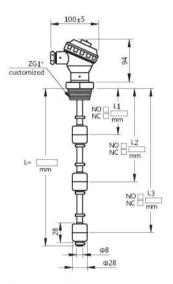
Users select corresponding specification of float according to the working temperature, pressure, gravity, acid and alkali etc. properties of the tested liquid.

Typical structure of product appearance



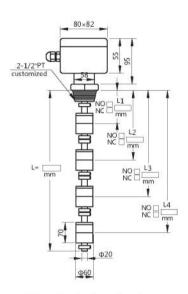


Typical structure of product appearance



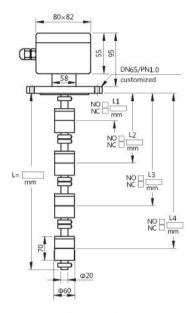
SUS304 and SUS316L is optional for Liquid material

Typical structure 7



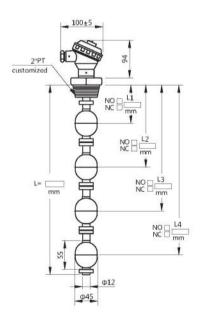
PP and PVDF is optional for Liquid material

Typical structure 8



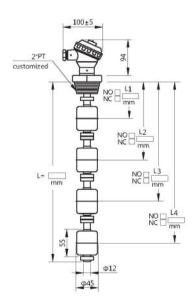
PP and PVDF is optional for Liquid material

Typical structure 9



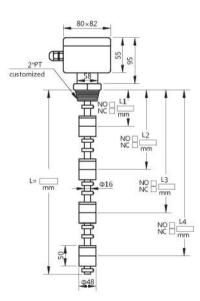
SUS304 and SUS316L is optional for Liquid material

Typical structure 10



SUS304 and SUS316L is optional for Liquid material

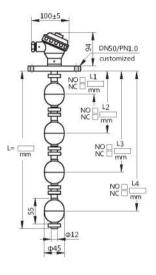
Typical structure 11



PP is optional for Liquid material

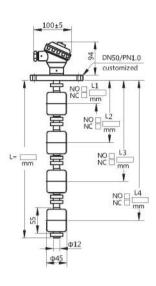
Typical structure 12

Typical structure of product appearance



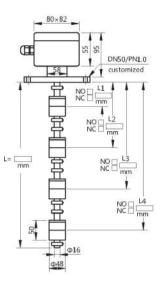
SUS304 and SUS316L is optional for Liquid material

Typical structure 13



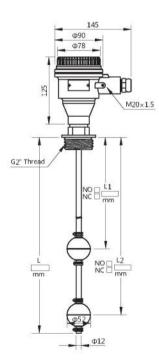
SUS304 and SUS316L is optional for Liquid material

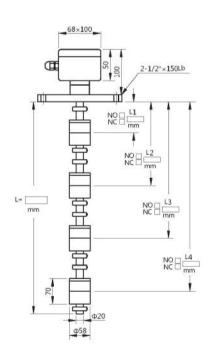
Typical structure 14



PP and PVDF is optional for Liquid material

Typical structure 15





PVDF is optional for Liquid material

Typical structure 16

Typical structure 17

Typical structure 18