

SFLS300 Float Level Switch

**WORKING PRINCIPLE**

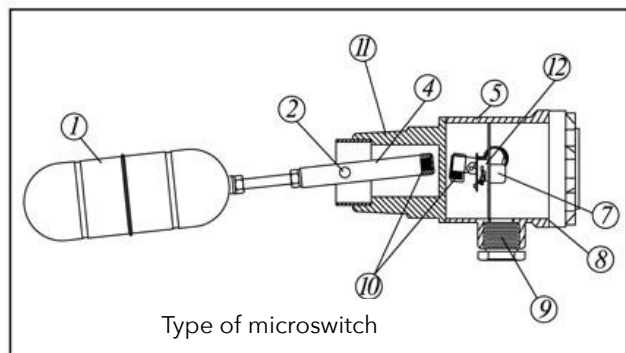
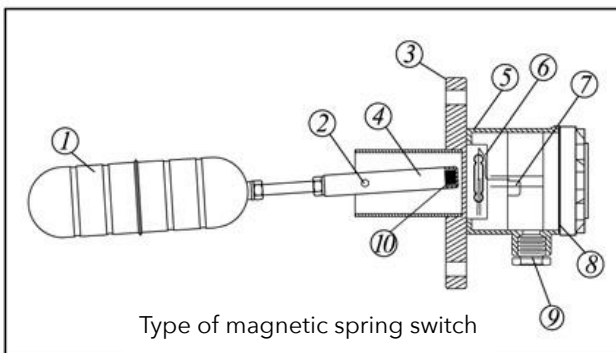
SFLS300 series side mounted floating ball liquid level switch is based on the liquid buoyancy principle. When the floating ball moves up and down due to the buoyancy, the magnetic spring switch in the junction box is affected by the arm end magnet, and the "no" and "NC" contacts are exchanged. The same principle is applied to the microswitch device. The magnet in front of the microswitch and the magnet at the arm end push the microswitch, resulting in "no" and "NC" actions.



**MAIN FEATURES**

- "Microswitch" or "magnetic spring switch" can be selected. The operating temperature is below 100 °C
- SUS304, PP and SUS316 can be selected for liquid connection part, and explosion-proof type (except PP) can also meet the requirements
- A variety of floating ball specifications, can be applied to a variety of different specific gravity liquid
- Multi material and multiple connection modes can meet the needs of different environments
- Long working life, the control part is completely isolated from the probe, high temperature and high pressure resistance
- Simple structure, stable and reliable performance, convenient installation

**CONSTRUCTURE**

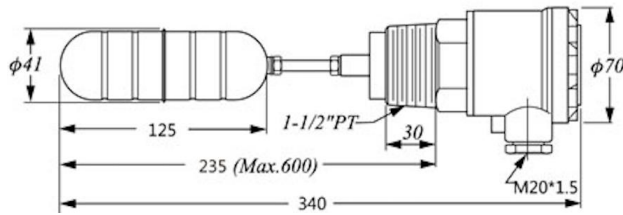


1. Floating ball 2. Fixed shaft 3. Flange 4. Ball pole 5. Junction box 6. Magnetic spring switch 7. Terminal 8. O-ring 9. Outlet 10. Magnet 11. Thread 12. Microswitch

TYPES & SPECIFICATION

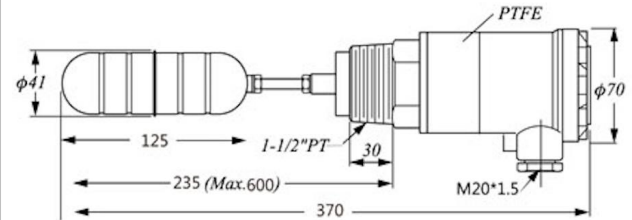
**SFLS310 thread type**

Junction box: aluminum alloy (IP65), contact capacity: 5A / 250VAC  
 Contact material: SUS304 or SUS316  
 Connection specification: 1-1 / 2 "PT teeth (customized)  
 Contact type: SPDT temperature resistance: - 10 ° C-100 ° C  
 Applicable specific gravity:  $\geq 0.6g/cm^3$ ; installation method: side mounting;



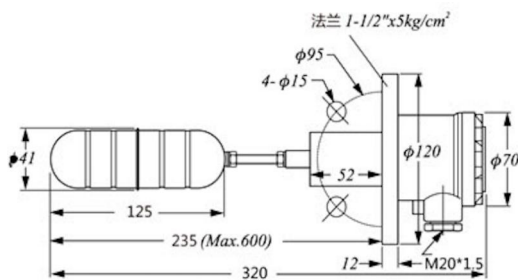
**SFLS311 thread high temperature type**

Junction box: aluminum alloy (IP65)  
 Contact capacity: 30W / 200VDC  
 Contact material: SUS304 or SUS316  
 Connection specification: 1-1 / 2 "PT teeth (customized)  
 Contact type: SPDT  
 Temperature resistance: - 10 ° C - 200 ° C  
 Applicable specific gravity: 20.6g/cm3 installation method: side mounted



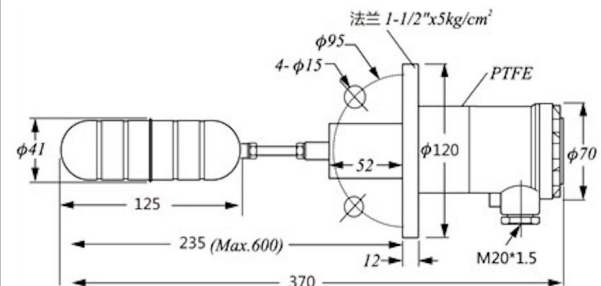
**SFLS320 flange type**

Junction box: aluminum alloy (IP65), contact capacity: 5A / 250VAC  
 Contact material: SUS304 or SUS316  
 Connection specification: 1-1 / 2 " \* 5kg flange (can be customized)  
 Contact type: SPDT temperature resistance: - 10 ° C - 100 ° C  
 Applicable specific gravity: 20.6g/cm3  
 Installation method: side mounted



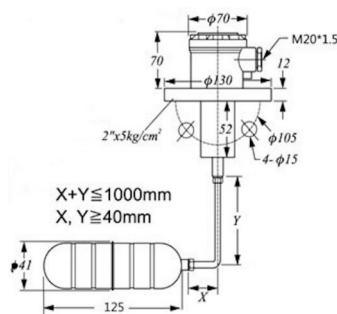
**SFLS321 flange high temperature type**

Junction box: aluminum alloy (IP65), contact capacity: 30W / 200VDC  
 Contact material: SUS304 or SUS316  
 Connection specification: 1-1 / 2 " \* 5kg flange (can be customized)  
 Contact type: SPDT  
 Temperature resistance: - 10 ° C - 200 ° C  
 Applicable specific gravity: 20.6g/cm3  
 Installation method: side mounted



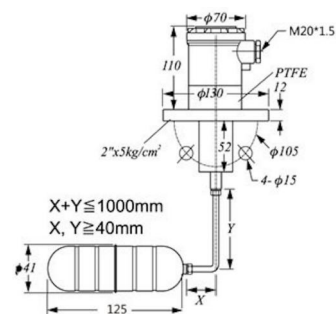
**SFLS330 top mounted type**

Junction box: aluminum alloy (IP65)  
 Contact material: SUS304 or SUS316  
 Contact type: SPDT  
 Applicable specific gravity:  $\geq 0.6g/cm^3$   
 Connection specification: 2 " \* 5kg flange (can be customized)  
 Installation method: top mounting  
 Contact capacity: 5A / 250VAC  
 Temperature resistance: - 10 ° C-100 ° C



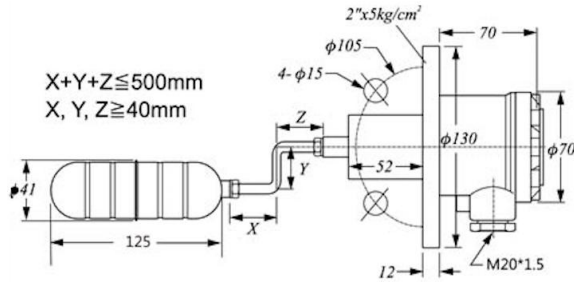
**SFLS331 top mounted type**

Junction box: aluminum alloy (IP65)  
 Contact material: SUS304 or SUS316  
 Contact type: SPDT  
 Applicable specific gravity:  $\geq 0.6g/cm^3$   
 Connection specification: 2 " \* 5kg flange (can be customized)  
 Installation method: top mounting  
 Contact capacity: 30W / 200VDC  
 Temperature resistance: - 10 ° C-200 ° C



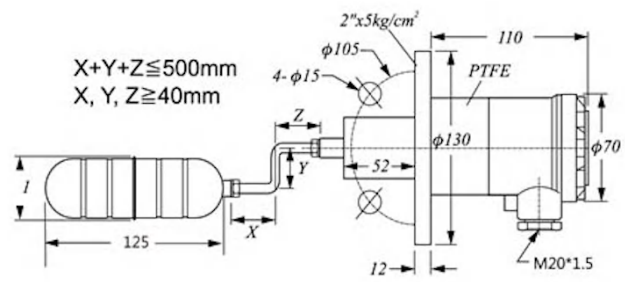
**SFLS340 hyperbolic**

Junction box: aluminum alloy (IP65), contact capacity: 5A / 250VAC  
 Contact material: SUS304 or SUS316  
 Connection specification: 2" \* 5kg flange (can be customized)  
 Contact type: SPDT T  
 Temperature resistance: - 10 ° C-100 ° C  
 Applicable specific gravity:  $\geq 0.6\text{g/cm}^3$  installation method: side mounting



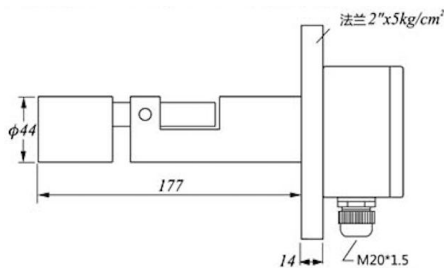
**SFLS341 hyperbolic high temperature type**

Junction box: aluminum alloy (IP65), contact capacity: 30W / 200VDC  
 Contact material: SUS304 or SUS316  
 Connection specification: 2" \* 5kg flange (can be customized)  
 Contact type: SPDT  
 Temperature resistance: - 10 ° C-200 ° C  
 Applicable specific gravity:  $20.6\text{g/cm}^3$  installation method: side mounted



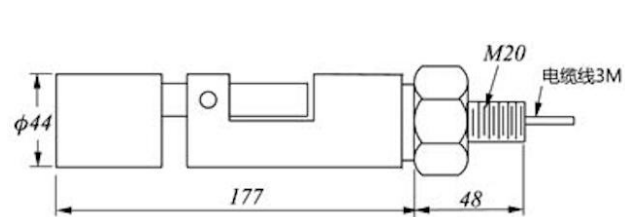
**SFLS380 acid and alkali resistant flange type**

Junction box: PC  
 Contact capacity: 5A / 250VAC  
 Contact material: PP  
 Connection specification: 2" \* 5kg flange  
 Contact type: SPDT  
 Temperature resistance: - 10 ° C-80 ° C  
 Applicable specific gravity:  $\geq 0.6\text{g/cm}^3$   
 Installation method: side mounted



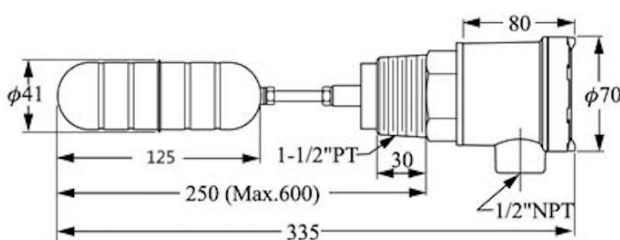
**SFLS381 acid and alkali resistant threaded type**

Junction box: aluminum alloy (IP65), contact capacity: 5A / 250VAC  
 Contact material: SUS304 or SUS316  
 Connection specification: M20 \* 1.5  
 Contact type: SPDT  
 Temperature resistance: - 10 ° C-80 ° C  
 Applicable specific gravity:  $20.6\text{g/cm}^3$   
 Installation method: side mounted



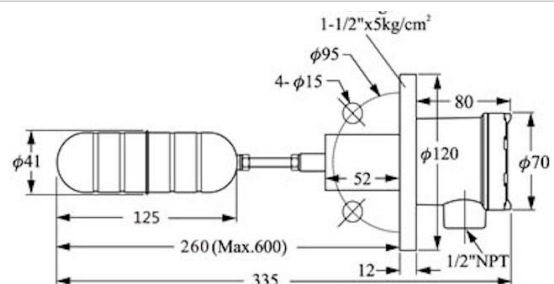
**SFLS370 explosion proof threaded type**

Junction box: stainless steel (IP65), contact capacity: 5A / 250VAC  
 Contact material: SUS304 or SUS316  
 Connection specification: 1-1/2" PT teeth (custom made)  
 Contact type: SPDT  
 Temperature resistance: - 10 ° C-100 ° C  
 Applicable specific gravity:  $\geq 0.6\text{g/cm}^3$   
 Installation method: side mounting;  
 Explosion proof grade: Exdiict4-6



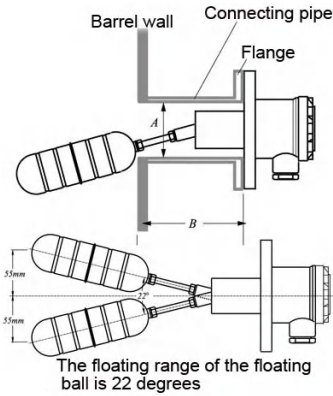
**SFLS371 explosion proof flange type**

Junction box: stainless steel (IP65), contact capacity: 5A / 250VAC  
 Contact material: SUS304 or SUS316  
 Connection specification: 1-1/2" \* 5kg flange (can be customized)  
 Contact type: SPDT  
 Temperature resistance: - 10 ° C-100 ° C  
 Applicable specific gravity:  $20.6\text{g/cm}^3$   
 Installation method: side mounted  
 Explosion proof grade: Exdiict4-6



### INSTALLATION INSTRUCTIONS

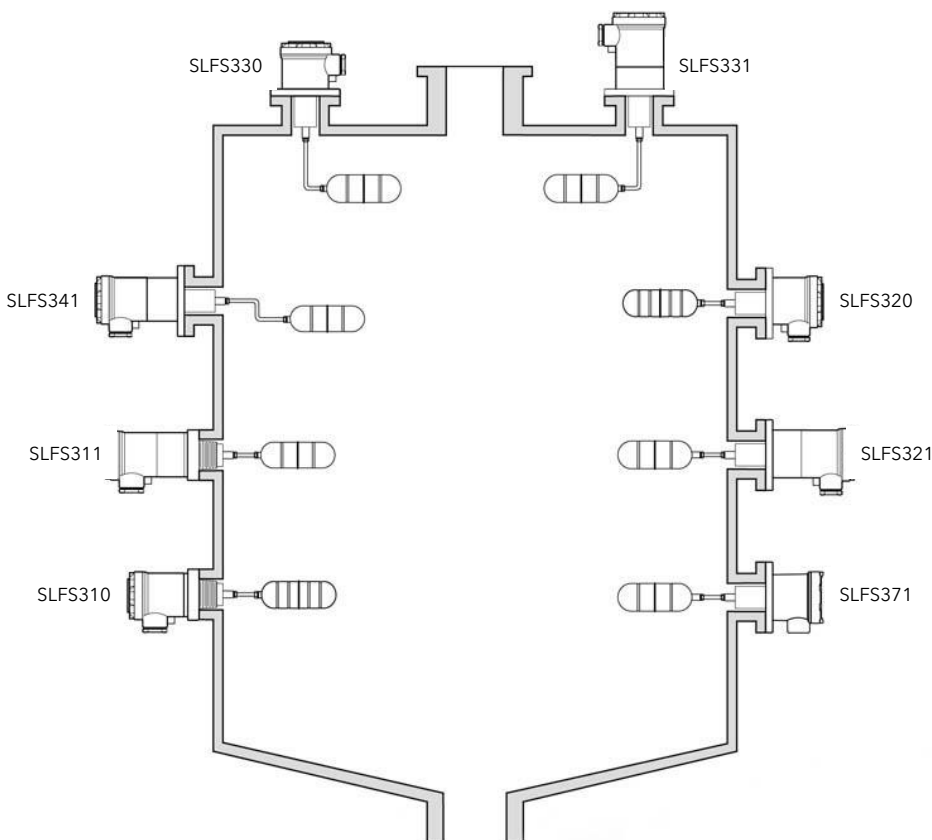
The length of the connecting pipe used by customers is directly proportional to the diameter of the pipe. Please refer to the table below for the matching size



Unit: mm

Tube diameter (A)	45-50	50-55	55-60	60-65	65-70
Lengthy (B) (Max.)	130	140	150	160	170

### INSTALLATION ATTENTIONS



1. Plastic material should be used in acid and alkali solution
2. The inlet of the junction box should face downward
3. All floating balls and clubs must enter the tank
4. The specific gravity of liquid should be considered before installation
5. The reserved hole for installation must be larger than the outer diameter of floating ball
6. Do not install near the liquid inlet when installing
4. The moving range of floating ball and connecting rod is 22 degrees
7. The action point is that the floating ball is in horizontal position

**ORDER CODE**

SFLS	Float level switch				
	<b>CODE</b>	Model type			
	310	Thread high temperature type			
	311	High temperature type			
	320	Flange type			
	321	Flange high temperature type			
	330	Top mounted			
	331	Top mounted high temperature type			
	340	Hyperbolic			
	341	Hyperbolic high temperature type			
	370	Explosion proof threaded type			
	371	Explosion proof flange type			
	381	Acid and alkali resistant threaded type			
	<b>CODE</b>	Float type			
	A	Φ 75 * 120 (withstand voltage 5kg / cm <sup>2</sup> , specific gravity 0.25)			
	B	Φ 41 * 150 (withstand voltage 15kg / cm <sup>2</sup> , specific gravity 0.65)			
	C	Φ 50 * 150 (withstand voltage 15kg / cm <sup>2</sup> , specific gravity 0.55)			
	D	Φ 41 * 125 (withstand voltage 30kg / cm <sup>2</sup> , specific gravity 0.65)			
	<b>CODE</b>	Connection mode			
	-	A: 1-1/2" (40A) B: 2" (50A) C: 2-1/2" (65A) D: 3" (80A) E: 4" (100A) F: 5" (125A) G: 6" (150A) H: 92x92	M: 5kg/cm <sup>2</sup> N: 10kg/cm <sup>2</sup> O: 150Lbs P: 300Lbs Q: PT T: BSP U: NPT S: customized	W: PN10 (10Bar) X: PN16 (16Bar) Y: PN25 (25Bar) Z: PN40 (40Bar)	
	<b>CODE</b>	Length (mm)			
	-	Customized according to request			
SFLS	330	A	A	100	Order example

\*Float type as follows:

