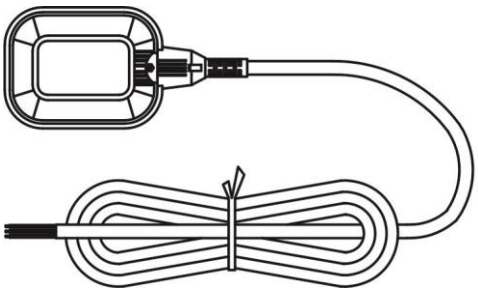
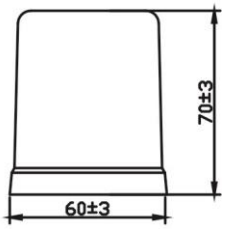
Quick Guide

Remote Float Switch for Water Pump Solar Inverter

1. Product Overview



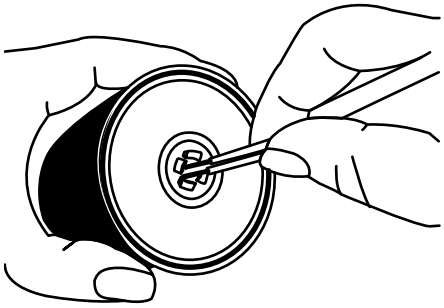
Float ball

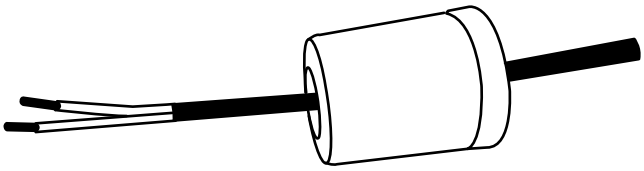


Plummet

2. Assembly

Simply insert the cables through plummet and fixing rings will automatically clutch the cables. If the fixing rings on the plummets are damaged or loose, use bare copper wires or nylon ropes to fix them. Refer to below charts for assembly.





3. Technical Parameters

Nominal Voltage & Current	250V/4A
Lifespan	≥50000
Operation Temperature	-10°C ~+60°C
Weight	1300g
Length of connecting cable	The standard length of float switch is 4M. The maximum length should be less than 50m.
Spec of Cable	Color: Brown, Black, Blue Diameter: 0.5m^2

4. Safety Installation (For further information, please consult with float provider)

When installing level switch, please pay attention to the following.

1) It should be installed far away from water intake. Otherwise, the switch will be activated by fault due to vibration of the water. (This should be considered if it's applied to other type of float switch)
2) Use Multi-core cables for installation. (This can ensure the safety when installing outdoors. For example, cable-type float switches use multi-core cables.)

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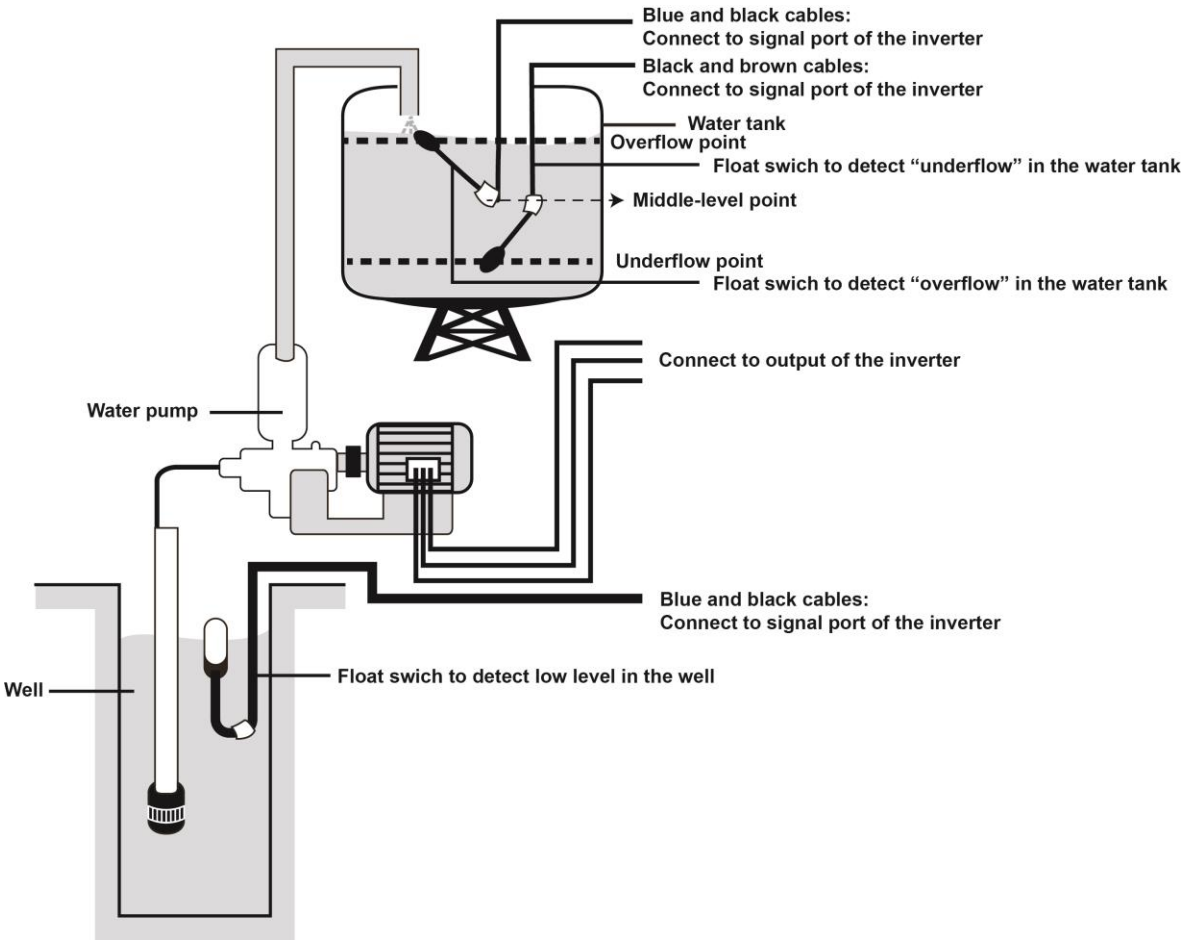
3) The motion point of floating ball is adjusted before it is shipped out from the factory, so please don't adjust it at will. (If it's required to do so, please contact the vendor to see if it's adjustable or reconfirm before you purchase it.)
4) If the cable length is not long enough, it's necessary to connect intermedia joint. Be sure that the connector can not be exposed in the water.

5. Installation



Float switch in water tank:

Please install two sets of float switches in the water tank: one to detect "underflow" and the other to detect "Overflow". Be sure to put the plummet in the middle of overflow and underflow points in the water tank. For the length of cable from plummet to the float ball, please follow below formula:

Overflow point in the water tank - Middle level in the water tank + 0.2m(buffer value) = cable length

Or

Middle level in the water tank – underflow point in the water tank + 0.2m(buffer value) = cable length

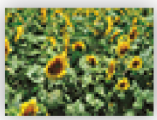
NOTE: ***Buffer value*** should be based on real situation. 0.2m is a reference value.

Float switch in the well

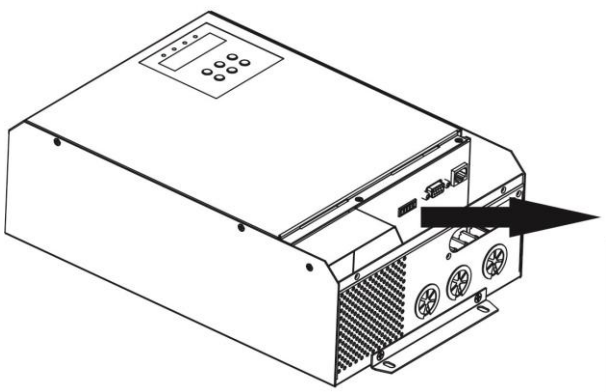
Please install one float switch in the well. It's to detect low level in the well. Once low-level water is detected, it will send signal to inverter and stop pumping to avoid damage.

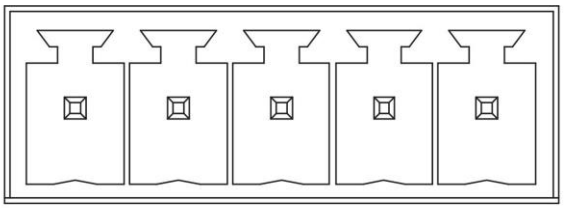
Plummet height in the well – Low level in the well + 0.2m (buffer value) = cable length



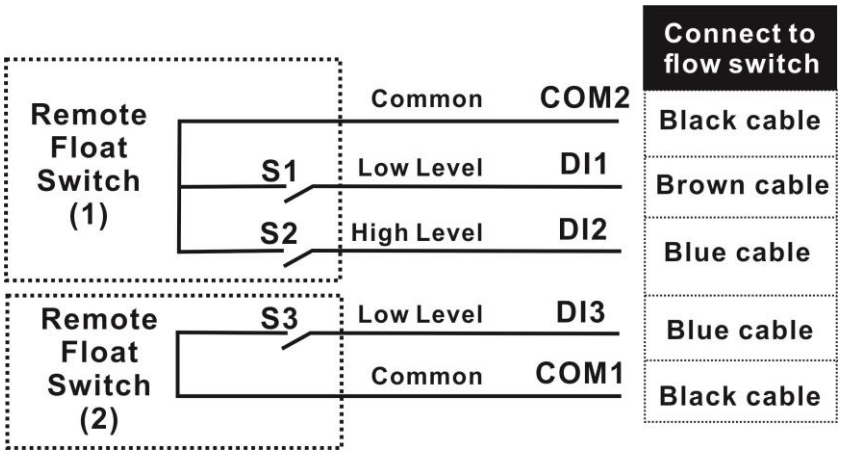


6. Wiring





COM2	DI1	DI2	DI3	COM1
Remote float switch (1)			Remote float switch (2)	



Cable wiring diagram between remote float switch and control signal port

CAUTION: Do not mis-connect the cables between flow switch and inverter.

CAUTION: Never expose the conductor into the air. Be sure all conductors are insulated.

Remote float switch (1) in water tank: It's necessary to use two sets of remote float switches to detect overflow and underflow in the water tank.

(1) Overflow detection: The black cable of float switch is connected to the Terminal COM2 of control signal port in the inverter. The blue cable of float switch is connected to the Terminal DI2 of control signal port in the inverter. And leave the brown cable floating. Be sure that conductors inside of floating cable can't be exposed. When water level is high in the water tank, it will cause the blue cable and black cable connected together.

(2) Underflow detection: The black cable of float switch is connected to the Terminal COM2 of control signal port in the inverter. The brown cable of float switch is connected to the Terminal DI1 of signal port in the inverter. And leave the blue cable floating. Be sure that conductors inside of floating cable can't be exposed. When water level is low in the water tank, it will cause the black cable and brown cable connected together.

Remote float switch (2) in the well:

The blue cable of float switch is connected to the Terminal DI3 of control signal port in the inverter. The black cable of float switch is connected to the Terminal COM1 of control signal port in the inverter. And leave the brown cable floating. Be sure that conductors inside of floating cable can't be exposed. When water level is low in the well, it will cause the blue cable and black cable is connected together.