# PM Series Water Level Sensor Switch Manual

1.Introduction:

Water level sensor switch is a kind of safe，reliable and easy to use water level controller with simple structure. Compared with normal mechanic switch, it has smaller size, faster response and longer life time, and when compared with electronic switch, it has advantages of better load impact resistance ability.

2.Product Specifications:

S-FS-P-01

    Model No.(01)
    Material (P:PP B:SS)
    Float Series
    Solar Pump Accessory
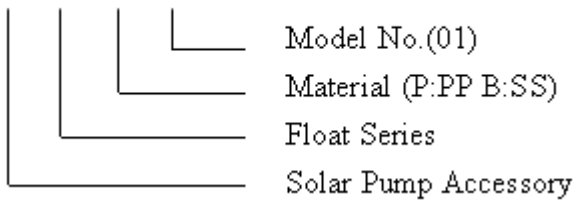
2.Technique Parameters：

Serial No.	Parameter	Parameter Value	Serial No.	Parameter	Parameter Value
1	Contact Capacity	10W	6	Working Pressure	1.0～3.0MPa
2	Rated Voltage	24VDC	7	Operating Temperature	-10～75℃
3	Insulation Resistance	＞100MΩ	8	Medium Gravity	＞0.55
4	Rated Current	0.5A	9	Material	PP
5	Operating Life	1 million times	10	Control Precision	±2mm

Note: This product is not suitable in strong magnetic environment and water environment with too much rust.

4.Working Principle:

Water level sensor switch is made up of magnetic reed switch and float. There is magnetic material inside float, and when float moves with the water level changing, it can trigger the magnetic reed switch and detect the water level accordingly.

Float

Reed Switch

Ring Shaped Magnet

☑ NO
☐ NC

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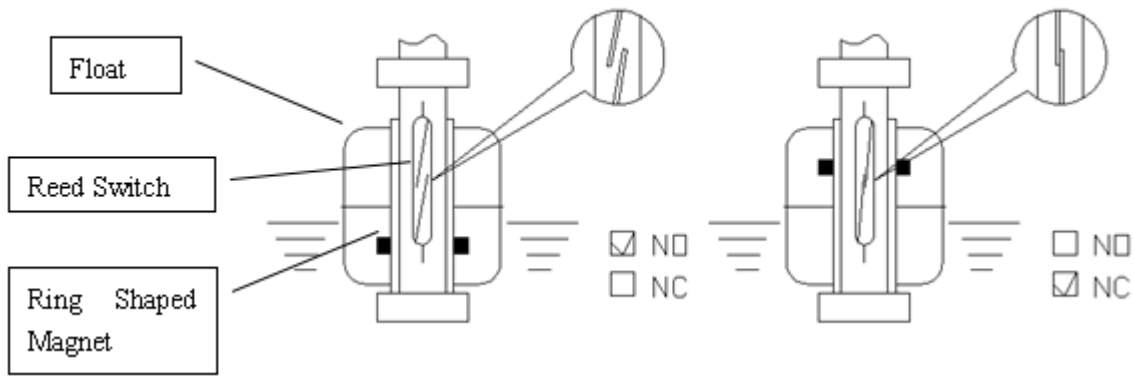
Note: Water level sensor switch is divided into normally open and normally closed types, and related parameter and wiring differ. More details refer to installation instructions in the following.

5.Applications:

●Suitable for water tower, reservoir (anti-overflow), water well (anti-dry running) applications.

●**Installations**: Along the vertical direction.

Water Tower Installation Diagram

Well Installation Diagram

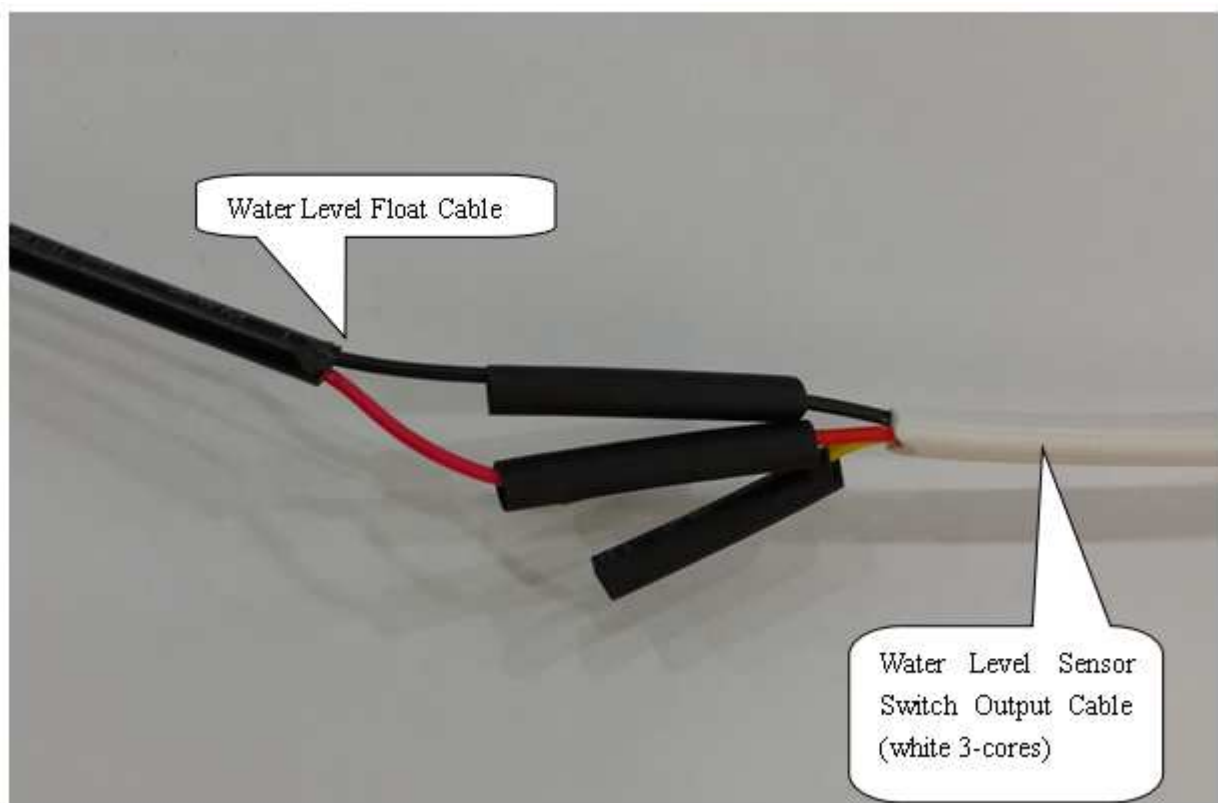## ●Parameter Settings and Connections：

I. Well Use: (anti-dry running)

Parameter settings:

For normally open type, refer to inverer manual and set the value of Pr.31 to 1 on inverter.

For normally closed type, set the value of Pr.31 to 2.

Connections:

Notes: Black core and red core of white 3-cores water level sensor switch output cable (drew from inverter) need to be connected to the normal open water level float cables (a fasten connection), yellow core need to be wrapped with water proof insulating tape. Inverter will start to work when the actual water level is higher over water level set, and stop working when actual water level is lower than the water level set, after a period of 600s delay, inverter will restart to work.
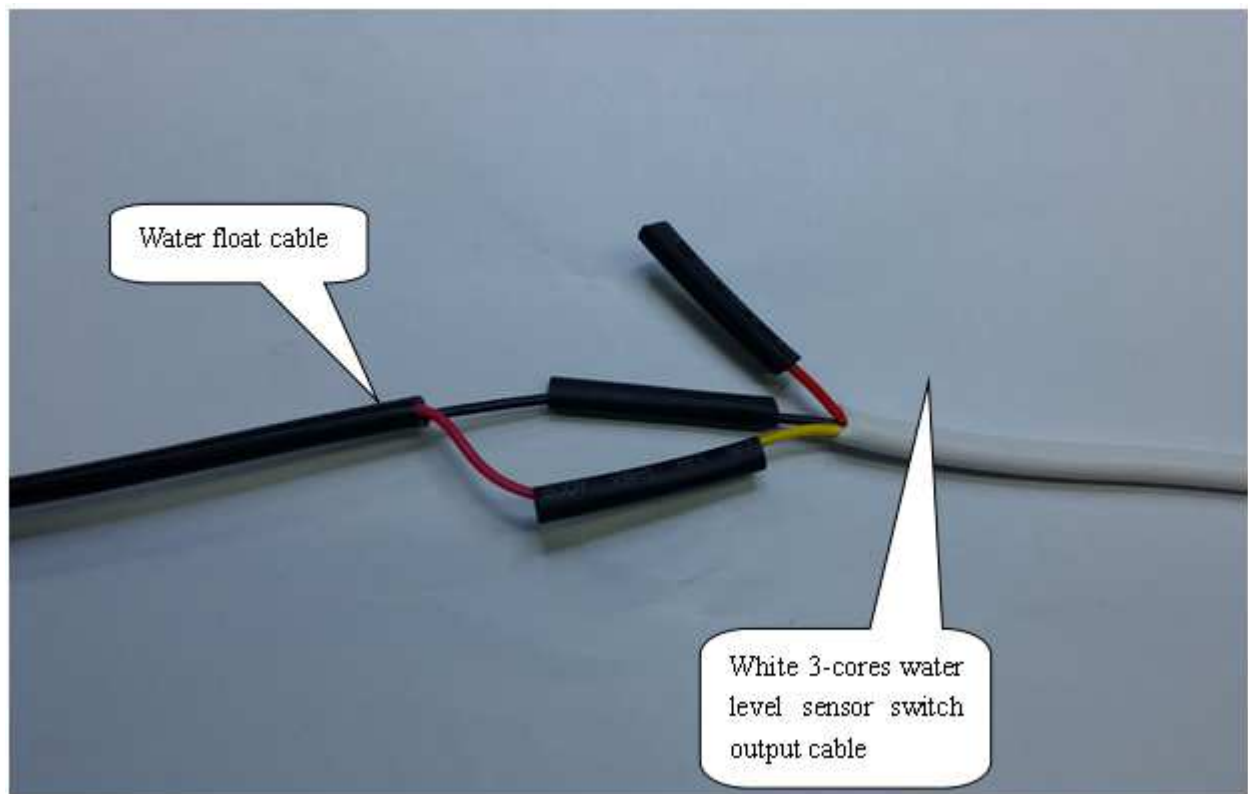
II. **Water Tower Use(anti-overflow)**

Parameter setting on inverter:

For normally open water level float switch need to set the value of Pr32 to 1.

For normally close water level sensor switch need to set the value of Pr.32 to 2.

Cable Connections:

Notes: Yellow and black cores of white 3-core cable (drew from Inverter) need to be connected with normal water level float cable, red core need to be wrapped by water proof insulating tape. When actual water level of water tower is lower than the water level set, inverter will work, when actual water level of water tower is higher than the water level set, than inverter will stop working. After a period of 600s delay inverter will restart to work again.