

I. Product Features

- Special conductive cables to eliminate the influence of atmospheric pressure on measurements in different regions.
- All stainless steel laser welding, no leakage, anti-seismic and anti-corrosion.
- Dedicated digital processing circuit, reliable and stable.
- This product consists of circuit boards, sensors and other important components.

II. Uses

Widely used in urban water supply and sewage treatment projects to measure the level of liquid.

III. Technical parameters

Main parameters:

1. Output Form: 4mA~20mA
□RS-485
2. Power supply: DC 24V (9V~32V)
3. Range: 0m~20m within each range (minimum range 2m)
4. Accuracy grade: 0.5 level
5. Media temperature: 0°C~60°C
6. Ambient temperature: 0°C~60°C
7. Response time: ≤50ms
8. Load capacity (DC 24V): Current type ≤ 500Ω
9. Reproducibility: ±0.2%F·S
10. Annual long-term stability: ±0.5%F·S
11. Nonlinear: ±0.2%F·S
12. Overload pressure: 2 times the range
13. Electrical connection: cable connection
14. Measuring medium: water and sewage
15. Shell material: ordinary 304 stainless steel
16. Protection level: IP 68

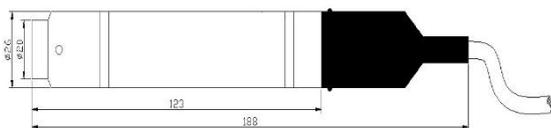
Working conditions:

Avoid installation in environments with mechanical vibration and strong electromagnetic interference.

Shape drawing



Size Chart



IV. Installation

1. Transmitter can be vertical in the tank, tank, should ensure to avoid mud and other impurities buried or blocked transmitter probe part.

2. in the medium fluctuations, measures should be taken to fix the probe part of the transmitter, such as adding counterweights to the transmitter, etc.;

3. Conductive gas cable, in addition to serving as power and signal transmission, also plays a key role in atmospheric compensation, and should be installed to avoid locking the cable too tightly or bending at too sharp an angle to prevent the conductive gas tube from not working or breaking;

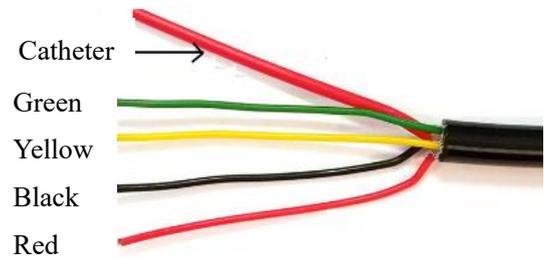
4. The housing is mounted vertically on a bracket above or near the tank, while ensuring sunlight protection and ventilation, and the mounting position is convenient for wiring and commissioning.

5. It is forbidden to install the transmitter in a frozen medium, otherwise the transmitter will be damaged.

V. Wiring

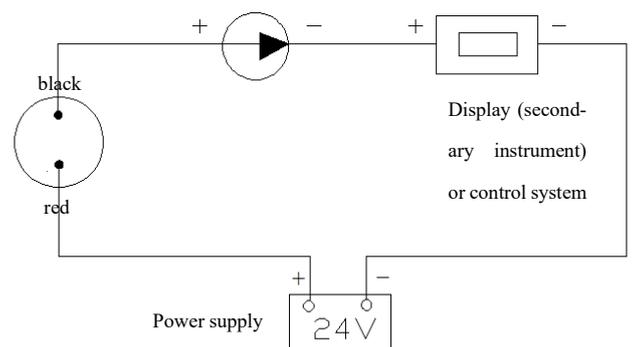
(This wiring diagram is a schematic, the field wiring to the actual product as the standard)

Cable schematic



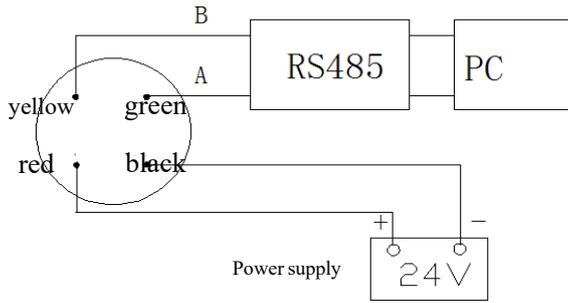
Two-wire current 4mA to 20mA output wiring diagram (JYB-CO-SAG)

- Red line: Power +
- Black line: current output
- (yellow and green lines empty)



Network type RS485 output (JYB-CO-SW1G)

- Red line: Power +
- Black line: Power -
- Green line: RS485 A+
- Yellow line: RS485 B-



1. Please note that the cable should be correctly connected with reference to the wiring diagram, such as the use of shielded cable. The shielding layer should be connected to the shielding ground and ensure reliable connection.

2. For network-based communication protocols see:

《Pressure (level) transmitter network type communication protocol accessories V3.3》

VI. Trial run

To ensure that the transmitter can work stably and accurately, it should be energized and preheated for 15min before testing the liquid level.

VII. Safety instructions

1. The installation process should ensure that the transmitter is tightened firmly before powering on and measuring; disconnect the power supply before disassembly.

2. This product is not explosion-proof, and its use in explosion-proof areas can cause serious personal injury and significant material damage.

VIII. Product maintenance and troubleshooting

If the transmitter is faulty, please contact our after-sales service to confirm the problem and send the transmitter back to our company for repair, please include the following information:

- Site Environment Description;
- Failure phenomenon;
- Description of the measurement medium and its physical and chemical properties;

When the transmitter needs to be repaired or calibrated, please be sure to clean the residual media before sending it back, especially substances that are harmful to human health, such as corrosive, toxic, carcinogenic or radioactive substances. Toxic, carcinogenic or radioactive substances.

Common fault analysis and troubleshooting

Failure phenomenon	Cause Analysis	Exclusion method
No output signal from transmitter	Transmitter not powered Wiring error	Power the transmitter correctly according to the wiring diagram

Irregular jump in output at constant level	Transmitter shell grounding end is not grounded Site RF interference is strong not using shielded cable	Use shielded cable and ground the shield Transmitter housing ground terminal and earth reliable connection
Transmitter is not put into the water level, the corresponding output value zero point is not correct	Transmitter is not working in its required environment	Move the transmitter to the specified environment or take measures to make the environment meet the requirements
Transmitter output does not match the measured level	Incorrect supply voltage External load is too large	Make the supply voltage DC 24V to adjust the external load

If the failure phenomenon does not belong to the above scope, please contact our after-sales service.

IX. Maintenance

Only use neutral reagents to clean the transmitter, avoid using with corrosive of reagents to clean, such as acid, alkaline solvents, household detergents, etc. Transmitters are precision instruments, should be stored in a dry and ventilated indoor environment, avoid direct sunlight.

X. Points to note

1. Please check whether the package is intact and check whether the transmitter model matches with the product you have purchased;
2. Confirm that the power output voltage is correct; the positive and negative of the power supply corresponds to the product's positive and negative wiring correspond; the maximum height of the liquid level is within the range of the product;
3. The sensor of the probe is a precision device, users should not disassemble it by themselves when using it, not to mention touching the diaphragm, so as not to cause damage to the product;
4. Please avoid water immersion in the level transmitter cable terminal (where the warning sign is affixed), which may cause water in the ventilation line and lead to water damage to the transmitter;
5. Please avoid the level transmitter cable being scratched by knives or other sharp metal objects, causing water damage to the transmitter;

6. Please keep the test certificate and certificate of conformity and return it with the product when repairing.

Packing list.

- | | |
|---|-----------|
| 1.Universal Level Transmitter | 1 set |
| 2.Instructions for use | 1 serving |
| 3.Certificate of Conformity | 1 serving |
| 4.Water level cable installation right angle bracket
(black) | 1pc |