

**User's Manual of
Submersible pressure
level transmitter**

1. Function and application

The level transmitter is used to fluid depth measurement at industrial areas, transfers measured depth value to standard signal such as 4~20mA/0-5V/RS485, matches various instruments, and apply to transportation, oil, chemical metallurgical, light industry and other fields.

2. Features

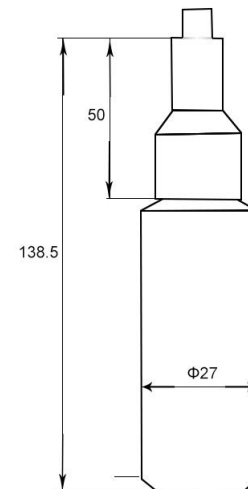
- High performance diffusion silicon piezoresistive sensor
- Probe with submersible measurement, convenient for installation
- Multiple protection structure design, high protection capacity
- Various types, suitable for different industrial fields
- Use anti-corrosive stainless steel material, suitable for a variety of conditions

3. Parameters

Model: SUP- P260
 Range: 0~0.5m...200m
 Output: RS485、 4~20mA、 1~5V、 0~5V
 Accuracy: 0.3%、 0.5%
 Supply: 24VDC、 12VDC
 Pressure type: Gage pressure、
 absolute pressure
 Compensation temperature: -10~70℃

Operating temperature: -20~60℃
 Storage temperature: -40~125℃
 Zero temperature drift: ±2%FS
 Sensitivity temperature drift: ±2%FS
 Overload pressure: 150%FS
 Mechanical vibration: 20g (20-5000HZ)
 Impact: 100g (11ms)
 Stability: ±0.2%FS/year
 Response time: ≤10ms (up to 90%FS)
 Insulation: 500MΩ/100VDC
 Material: Junction box with low copper aluminium alloy; all stainless steel probe;polyurethane conductor cable.
 Medium compatibility: Various medium compatible with 316L stainless steel
 Ingress Protection: IP68(sensor)

4. Dimension



5. Wiring

Current output:

Red: 24V +
 Green: Current output +
 Black: GND

Voltage output:

Red: 24V +
 Green: 24V -
 Yellow: Voltage output +
 Black: GND

RS485 output:

Red: 24V +
 Green: 24V -
 Yellow: 485A
 Blue: 485B
 Black: GND

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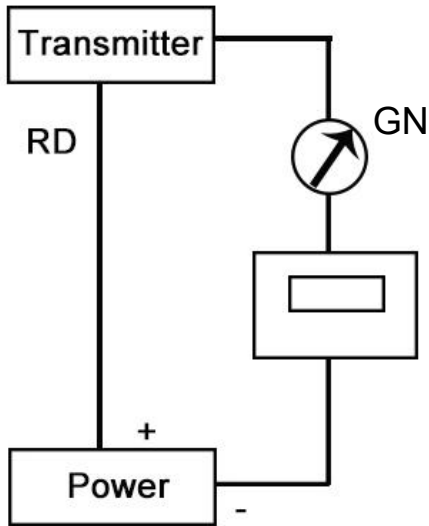
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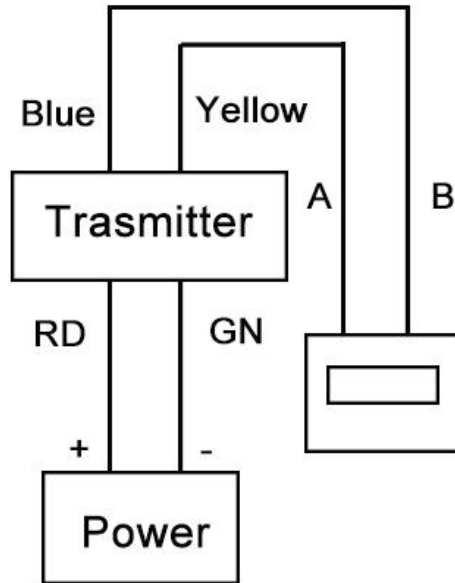
Version

U-TSWP260-MYEN1

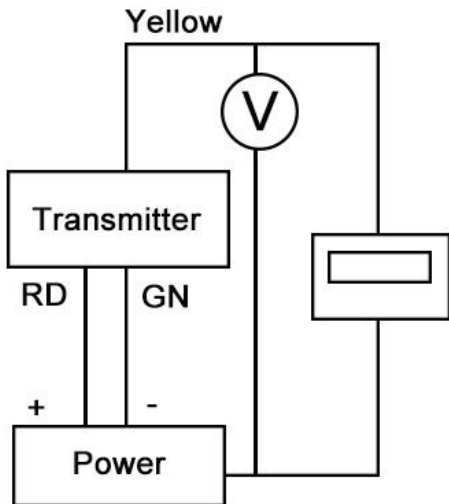
Current output, 2-wire



RS485 output



Voltage output, 3-wire



6. Installation method and precautions for use and safety

- Read wiring diagram carefully before installation.
- Turn off power and the valve of the tested medium during installing and disassembling, the pressure is reduced to atmosphere pressure to avoid accidents caused by medium ejection.
- Choose a place that is easy for operation and installation
- Make sure the transmitter is firmly connected and grounding properly during installing; avoid vibration, heat

source and strong EMI environment. Need good grounding when outdoor installation, lightning protection measures should be taken to prevent lightning from damaging products.

- The metal probe on the bottom of the container during submersible level meter installation
- If the customer needs additional wires , must take waterproof measures (such as closed junction box, etc.).If it is not available or relatively simple, the wire can be bent downward and installed to prevent water inflow and avoid failure.
- The level probe is dropped into the water, preferably fixed and away from the inlet.
- To ensure the accuracy of measurement, the fluidity of the medium is needed.
- It prohibited insert hard objects into the pressure hole to prevent damage the sensor diaphragm.
- Please strictly follow the wiring method for the electrical connection, wrong wiring may cause damage to the amplifying circuit.
- Prevent the cable damages so that fluid could enter the damages and signal wire joint into transmitter cavity, which will damage the product.
- Do not use cable to lift heavy objects

other than the product.

- Regular desilt the level probe to avoid blocking inlet.
- The conductor is a special waterproof cable; Wear, puncture and scratch should be avoided in the process of installation and use.If any of the above problems exist on site, protective measures should be taken for the conductor. If such problems cause faults, the manufacturer will charge for maintenance.
- Ensure right product selection and operation correctly to prevent serious personal injury and damage.
- Please contact our company if you encounter any problems in the installation and use. When the product is abnormal, please do not open it for repair without authorization.