


## User Manual of Submersible pressure level transmitter

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### Version

U-TSWP260-MYEN1

## 1. Function and application

The level transmitter is used for fluid depth measurement in industrial areas, transfers measured depth value to standard signals such as 4~20mA/0-5V/RS485, matches various instruments, and is applied 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℃

Storage temperature: -20~65℃

Medium Temperature: -10~65℃

Zero temperature drift:  $\pm 2\%$ FS

Sensitivity temperature drift:  $\pm 2\%$ FS

Overload pressure: 150%FS

Mechanical vibration: 20g (20-5000HZ)

Impact: 100g (11ms)

Stability:  $\pm 0.2\%$ FS/year

Response time:  $\leq 10$ ms (up to 90%FS)

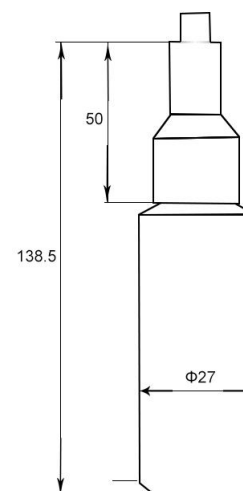
Insulation: 500M $\Omega$ /100VDC

Material: Junction box with low copper aluminum alloy; all stainless steel probe; polyurethane conductor cable.

Medium compatibility: Various mediums 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 +

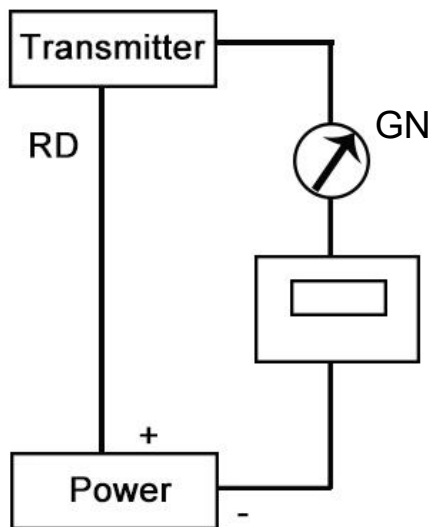
Green: 24V -

Yellow: 485A

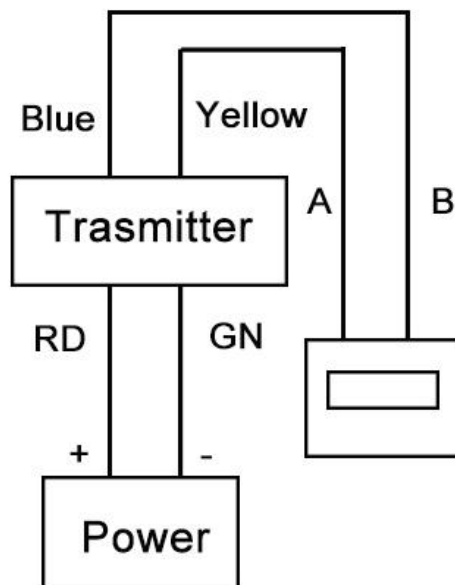
Blue: 485B

Black: GND

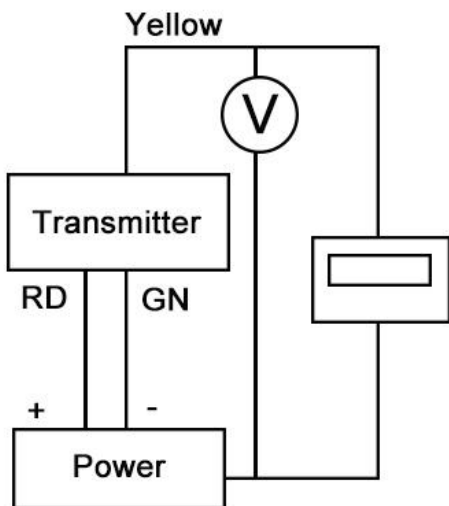
**Current output, 2-wire**



**RS485 output**



**Voltage output, 3-wire**



**6. Installation method and precautions for use and safety**

- Read the wiring diagram carefully before installation.
- Turn off the power and the value 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 installation; avoid vibration, heat

source, and a 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 a 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 inserting hard objects into the pressure hole to prevent damage to 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 damage so that fluid could enter the damaged signal wire joint into the transmitter cavity, which will damage the product.
- Do not use cable to lift heavy objects other than the product.

- Regularly desilt the level probe to avoid blocking the 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.