

User's Manual of Submersible pressure Level transmitter

Version

U-SYWP260-ZXEN1

This series level transmitter adopts high-performance piezoresistive silicon oil-filled pressure sensor as pressure sensitive core. The millivolt signal of sensor is transmitted into standard long-distance transmission current signal. This series level transmitter can be directly connected with computer interface card, control instruments, intelligent meters or PLC conveniently. The series of products are widely used in industrial process control, petroleum, chemical, metallurgical and other industries.

1. Features

- (1) High-performance diffused silicon piezoresistive sensor
- (2) Probe drop-in measurement method, easy to install
- (3) Multiple protection structure design, high protection ability
- (4) Diverse styles, suitable for various industrial occasions
- (5) Anti-corrosion stainless steel materials are required, suitable for various occasions

2. Parameter

- (6) Range: 0~1m...30m (Other range customizable)
- (7) Pressure type: Gauge pressure

- (8) Power supply: 24VDC, 12VDC
- (9) Output signal: 4~20mA, 1~5V, 0~5V, RS485
- (10) Operation Temperature: -20~85°C
- (11) Storage Temperature: -40~125°C (dry environment)
- (12) Zero temperature drift: $\pm 1.5\%$ FS
- (13) Sensitivity temperature drift: $\pm 1.5\%$ FS
- Overload pressure: 150%FS
- (14) Mechanical vibration: 20g (20-5000HZ)
- (15) Impact: 100g (11ms)
- (16) Accuracy: 0.5%FS
- (17) Long-term stability: $\pm 0.2\%$ FS/year
- (18) Response time: ≤ 1 ms (up to 90%FS)
- (19) Insulation: 100M Ω /250VDC
- (20) Material: The probe is all stainless steel, the cable is made of polyurethane wire
- (21) Media compatibility: Various media compatible with 304 stainless steel
- (22) Protection level: IP68

3. Wiring

Current output:

Red: 24V +

Green: Current output +

Voltage output:

Red: 24V +

Green: 24V -

Yellow: Voltage output +

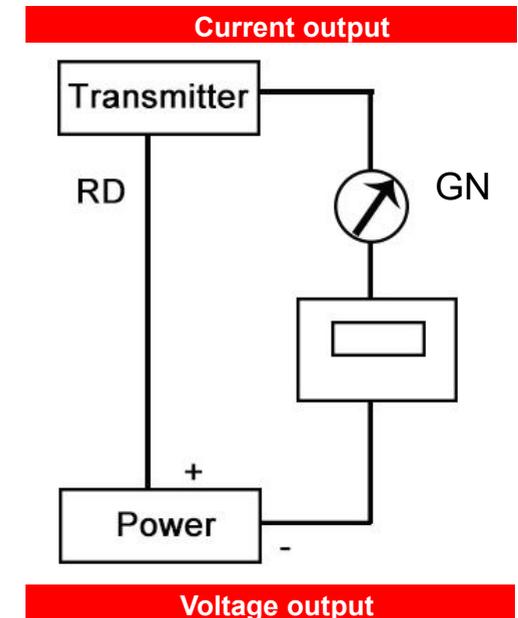
RS485 output:

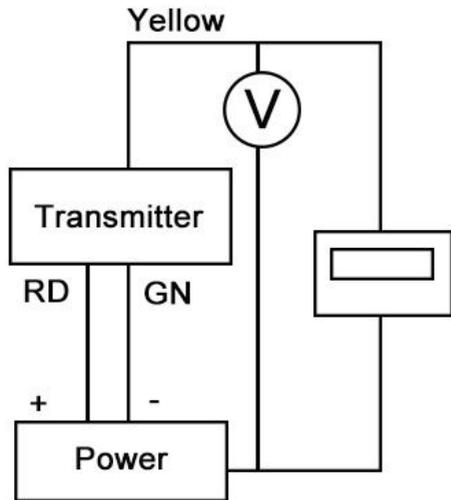
Red: 24V +

Green: 24V -

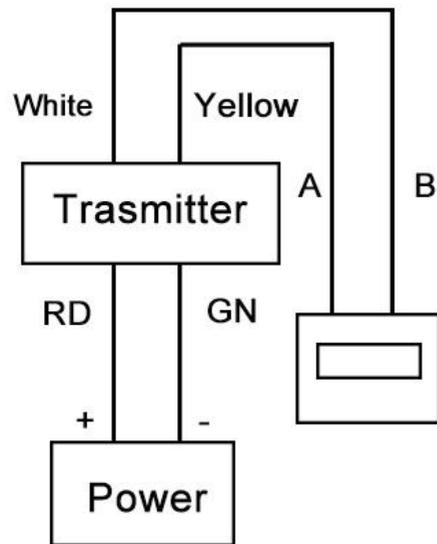
Yellow: 485A

White: 485B

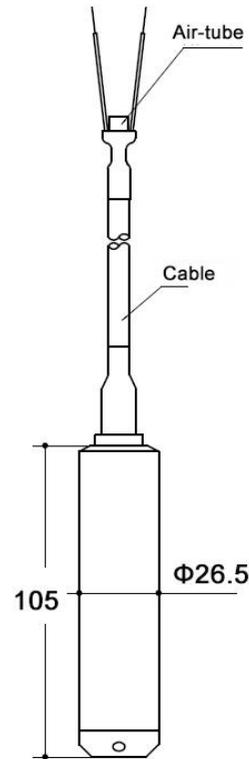




RS485 output



4. Dimension



5. Installation and precautions

- (1) Choose a place that is easy to operate and maintain for installation;
- (2) Install as far away as possible from the vibration source.
- (3) Keep away from heat sources as much as possible.
- (4) When installing the drop-in liquid level transmitter, the metal probe should sink into the bottom of the container.

- (5) If the customer connects separately, waterproof measures (such as sealing the junction box, etc.) must be taken. If it is not available or it is relatively simple, the wire can be bent down and installed to prevent water ingress and avoid malfunction.
- (6) When the liquid level probe is put into the water, it is best to be fixed and far away from the water inlet.
- (7) There is an isolation diaphragm in the pressure inlet of the transmitter. Do not touch it with other objects.
- (8) For electrical connection, please strictly follow the wiring method. Incorrect wiring will damage the amplifier circuit.
- (9) When installing the input type liquid level transmitter, please do not use the hanging wire to lift heavy objects other than the product.
- (10) The probe should be cleaned regularly to avoid blockage of the pressure inlet.
- (11) The wire is a special waterproof wire. During installation and use, the wire should be free from wear, puncture, and scratches. If the above problems exist on the site, the wire should take protective measures. Such problems cause failure, and the manufacturer will charge for repairs.
- (12) If you encounter any problems during

installation and use, please contact our company. When the product is abnormal, please do not open it for repair without authorization.

1. After-sales instructions

The company promises to customers that the hardware accessories provided by the instrument are free from defects in materials and manufacturing processes.

Calculated from the date of purchase of the instrument, if a user's notice about such defects is received during the warranty period, the company will implement unconditional free maintenance or free replacement for products that are indeed defective. The company guarantees 7-day return and lifetime maintenance for all customized products.

After-sales service commitment:

- (1) We promise to deal with customer's technical questions within 4 hours.
- (2) We promise to issue test results within 3 working days for the instruments returned to the factory for repair, and complete the repair within 7 working days.
- (3) Two weeks after the instrument is returned to the customer, we will return to the customer and provide free consultation on automation technology.