



Recorder



Flow



Pressure



Temp



Analyzer



Level

Datasheet

Submersible Liquid Level Transmitter

SUP-P260-B

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Datasheet**Submersible Liquid Level Transmitter
SUP-P260-B**

The submersible liquid level transmitter uses a high-performance diffused silicon piezoresistive pressure sensor as the measuring element, which accurately measures the hydrostatic pressure proportional to the liquid level depth, and converts it into a standard (current, voltage, RS485) through a signal conditioning circuit.) signal output, establish a linear correspondence between the output signal and the liquid depth, and realize the measurement of the liquid depth. The product has high precision and small volume. It can be directly put into the liquid to measure the liquid height from the end of the transmitter to the liquid level. It is suitable for liquid level measurement and control in the fields of chemical industry, power plant, urban water supply, and hydrological exploration.

Applications

- Chemical Industry
- Power Plant
- Urban Water Supply
- Hydrological Exploration

**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.

Product name

Submersible Liquid Level Transmitter

Parameters	
Range	0~1m...200m
Accuracy	0.5%
Output	RS485, (4~20)mA, (0~5)V, (1~5)V, (0~10)V
Supply	(4~20)mA output,(10~32)VDC; (0~10)V output, (12~32)VDC; (0~5)V, (1~5)V, RS485 output: (8~32)VDC
Stability	± 0.2% FS/year (Note: The liquid level range below 3.5m shall be increased proportionally)
Response Time	Current and Voltage output: $T_{90} \leq 110\text{ms}$; RS485 output: $T_{90} \leq 100\text{ms}$
Overload Pressure	150%FS
Temperature Drift	$1\text{m} \leq \text{Range} \leq 6\text{m}$: 2%FS (Within the temperature compensation range); $\text{Range} > 6\text{m}$: 1.5%FS (Within the temperature compensation range)
Compensation Temperature	$1\text{m} \leq \text{Range} < 2.5\text{m}$: (0~60) °C $2.5\text{m} \leq \text{Range} \leq 6\text{m}$: (0~70) °C $\text{Range} > 6\text{m}$: (-10~70) °C
Insulation Resistance	20MΩ/250VDC
Operating Temperature	(-20~85)°C
Storage Temperature	(-40~85)°C
Medium Compatibility	Various medium compatible with 316L stainless steel
Ingress Protection	IP68(sensor)

Installation

- 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 is prohibited to insert 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 cable damage so that fluid could enter the damage and signal wire joint into 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 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.

Wiring

■ Current Output:

Red	Blue
24V +	Current output +

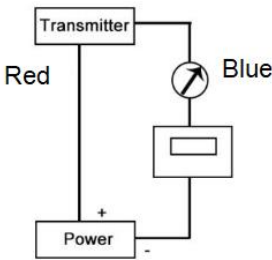
■ Voltage Output:

Red	Blue	Yellow
24V +	24V -	Voltage output +

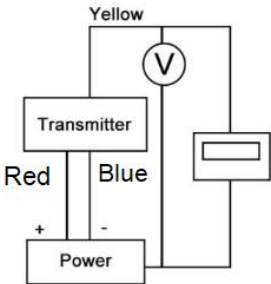
■ RS485 Output:

Red	Black	Blue	Yellow
24V +	24V -	485A	485B

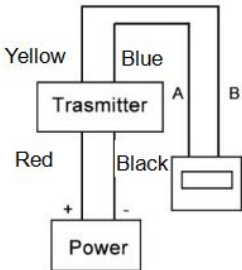
■ Current Output, 2-wire:



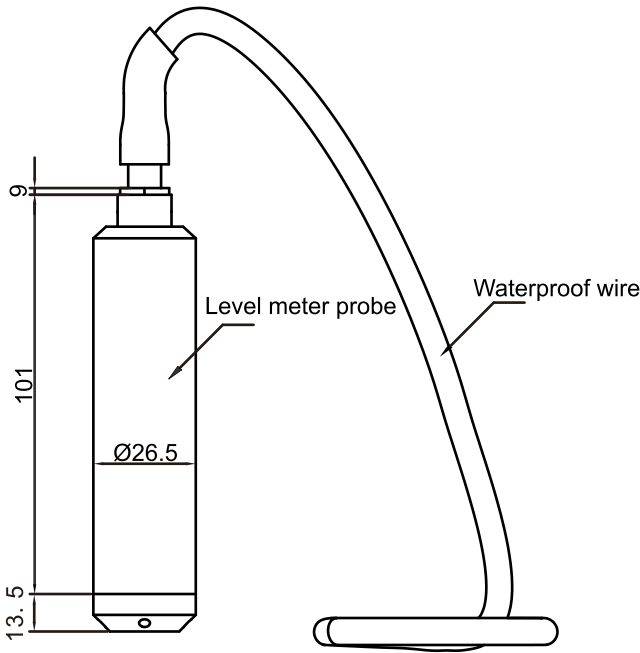
■ Voltage Output, 3-wire:



■ RS485 Output:



Dimension



Ordering code

SUP-P260-B-01-K-A1-M3-1-05-N9-00									Description
SUP-P260-B	-	-	-	-	-	-	-	-	
Measurement Range	01								1m
	02								2m
	03								3m
	05								5m
	07								7m
	10								10m
	15								15m
	20								20m
	25								25m
	30								30m
	40								40m
	50								50m
	80								80m
	1H								100m
	XX								Others
Accuracy		K							Level 0.5
		G							Level 0.25(Only for Measuring Range≥10m)
Output and Power Supply		A1							Two-Wire System 4-20mA
		V2							0-10V, 24VDC
		V1							0-5V, 24VDC
		R2							RS485, 24VDC
		R1							RS485, 12VDC
		XX							Others
Diaphragm Material			M3						316LSS
Probe Material and Level of Protection				1					304SS, IP68
				2					316LSS, IP68
Cable Length						05			5m(Cable Length ≥ Measurement Range)
						06			6m(Cable Length ≥ Measurement Range)
						07			7m(Cable Length ≥ Measurement Range)
						08			8m(Cable Length ≥ Measurement Range)
						10			10m(Cable Length ≥ Measurement Range)
						15			15m(Cable Length ≥ Measurement Range)
						20			20m(Cable Length ≥ Measurement Range)
						25			25m(Cable Length ≥ Measurement Range)
						30			30m(Cable Length ≥ Measurement Range)
						40			40m(Cable Length ≥ Measurement Range)
						50			50m(Cable Length ≥ Measurement Range)
						60			60m(Cable Length ≥ Measurement Range)

	80		80m(Cable Length ≥ Measurement Range)
	1H		100m(Cable Length ≥ Measurement Range)
	XX		Others(Cable Length ≥ Measurement Range)
Cable Sheath Material	N9		Polyvinyl Chloride (PVC)
	N2		Polyurethane(PU)
Probe Accessories	00		No
	EN		Filter Mesh