

DATASHEET**Level**

Single Electrode Capacitance Level Sensor

For high temp./high pressure/cryogenic Level Measure

Model PWL-CX

Applications

- High-pressure equipment
- High-pressure vessels
- High-temperature containers
- Cryogenic tanks
- Liquid gases: Liquid CO₂, liquid nitrogen, LNG
- Sealed pressure tanks and vessels

Features

- Support local ZERO and SPAN calibration
- Easy to install no need any settings
- No elastic or movable parts, impact of resistance
- Customize max 250°C high Temp liquid
- No effect from different medias, temps
- Anti-adhesion, anti-hanging, anti-foam

**Level Sensor PWL-CX****Description**

PWL-CX series single-electrode capacitive level sensor is suitable for continuous measurement of the level of conductive media in various high-pressure equipment and containers during industrial production processes. It transmits a 4-20mA DC standard signal. The probe is made of imported PTFE material and can operate continuously at 250°C. An automatic sealing structure prevents media leakage.

Except being used in high temperature and high pressure containers/vessels, it is a special level sensor for cryogenic applications, basing on radio frequency capacitance measurement technology and is used for precise measurement and control of liquid levels in specific applications.

Model	PWL-CX	
Probe Diameter	Φ8, Φ12, Φ14,Φ16, Φ19	
Order Length	50-10000mm	
Working Pressure	≤0.6MPa, ≤32MPa (in normal temperature)	
Accuracy	±1.0%FS(Typical), ±2.5%FS for Cryogenic	
Environmental Temp.	-40℃~+85℃	
Temp. Resistance of Electrode	-60℃~+120℃, -200℃~+200℃, -200℃~+250℃	
Electrical Connection	Fixed cable by stainless steel cap or industrial wire interface	
IP Rating	IP67, IP65	
Cable Length	1000mm or by customized	
Signal Output & Power Supply	4-20mA 2 wires 18-28VDC	RS485 Modbus 12-28VDC
Pressure Connection	M20*1.5, M27*2 Flange connection by customization	
Long-term Stability (%FS/year)	≤0.1	
Temp Drift (%FS/℃)	≤0.02	
Probe Material	SUS304, PTFE covered SUS304	
Explosion Proof	Exia II CT6 Ga	

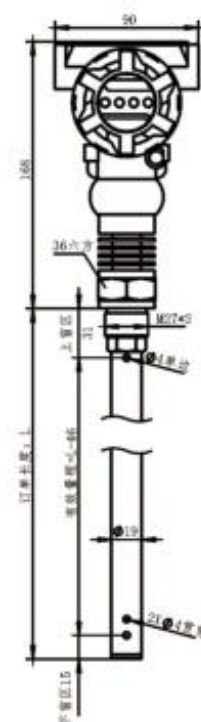
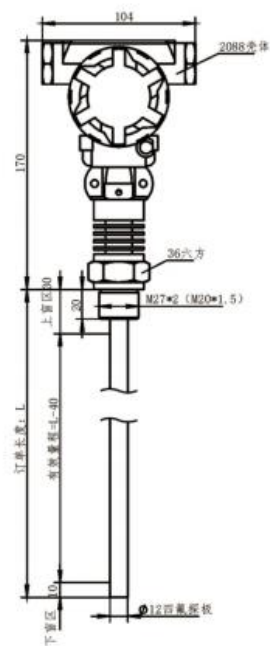
Technical drawings of two types of immersion heaters. The left drawing shows a heater with a threaded top and a long probe. The right drawing shows a heater with a flanged top and a long probe. Both drawings include dimensions in millimeters and labels for various parts.

Left Drawing Dimensions and Labels:

- Top flange diameter: $\phi 29$
- Top flange thickness: 27.50
- Top flange to probe start distance: 45.50
- Probe diameter: $\phi 8$
- Probe length: L
- Probe to bottom distance: 43
- Bottom flange diameter: $\phi 8$
- Bottom flange thickness: 8
- Bottom flange to probe start distance: 25
- Bottom flange to probe start distance: 35
- Bottom flange to probe start distance: 63
- Bottom flange to probe start distance: 30 六方
- Bottom flange to probe start distance: G1/2 螺紋

Right Drawing Dimensions and Labels:

- Top flange diameter: $\phi 29$
- Top flange thickness: 27.50
- Top flange to probe start distance: 45.50
- Probe diameter: $\phi 14$
- Probe length: L
- Probe to bottom distance: 47
- Bottom flange diameter: $\phi 14$
- Bottom flange thickness: 8
- Bottom flange to probe start distance: 25
- Bottom flange to probe start distance: 35
- Bottom flange to probe start distance: 63
- Bottom flange to probe start distance: 30 六方
- Bottom flange to probe start distance: G1/2 螺紋
- Bottom flange to probe start distance: 4 螺紋
- Bottom flange to probe start distance: 3/8 螺紋



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Electrical Connection

Wire Color	Current 2wires	RS485
Red	Vcc+	Vcc+
Black	Vcc-/Signal+	Vcc-
Yellow	/	RS485 A
Green(Blue)	/	RS485 B

You may also Need

Reference Picture	Description	Product
	To connect with pressure transmitter and to have a site indicator of the measured value, have high&low value alarms, record and control.	Display/indicator/controller
	Cast aluminum material with IP67 protection level for submersible pressure transmitter. Moisture-proof sealing design, insulation protection against electric shock. To be placed in dry environment or in a cabinet.	Terminal box 0010

***Tell us medium / which application / measuring range / working temperature / signal output / what you wanna to realize, our sales engineer will recommend suitable model for you.*