

# **DATASHEET**

# Level

# Capacitance Level Sensor For food and sanitary applications

**Model PWL-CS** 

## **Applications**

- Food
- Pharmaceutical
- Beverage processing
- Brewing
- Biological products
- Milk processing
- Juice and cooking oil

#### **Features**

- Sanitary type
- Support local ZERO and SPAN calibration
- Easy to install no need any settings
- No elastic or movable parts, impact of resistance
- No effect from different medias, temps
- Anti-adhesion, anti-hanging, anti-foam



### **Description**

PWL-CS sanitary level sensor is a special instrument customized for food and sanitary industries. It adopts standard sanitary stainless steel quick connector and automatic calibration sensor structure, and there is no sanitary dead corner in the contact between the whole machine and the medium.

It is based on the principle of radio frequency capacitance measurement and adopts tomography technology. It dynamically analyzes various parameters of the sensor in the medium, automatically performs accurate compensation, and the output signal changes linearly and continuously with the change of the liquid level.

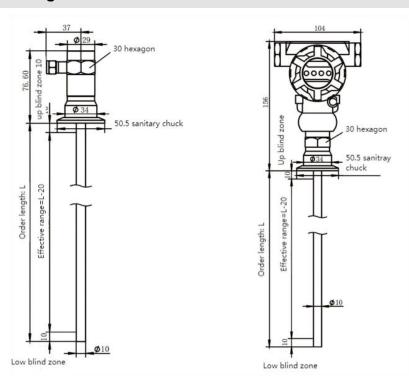
It has super anti-fouling ability such as anti-hanging, anti-condensation, and anti-bubble. It is an ideal product for measuring liquid level in related industries.



# **Specifications**

Model	PWL-CS
Probe Diameter	Ф10mm, Ф16mm
Order Length	50-2000mm
Working Pressure	-0.1MPa~1.6MPa
Accuracy	0.5%FS
Medium Temp.	-60℃~+120℃
Environmental Temp.	-40℃~+85℃
Measurement Cycle	0.1 second
Electrical Connection	Fixed cable by stainless steel cap or industrial interface
IP Rating	IP67/IP65
Cable Length	1000mm or by customized
Signal Output	4-20mA 2 wires, RS485 Modbus
Power Supply	18-36VDC
Process Connection	50.5mm Sanitary quick connector chuck
Probe Material	FTFE
Chuck Material	SUS304
Explosion Proof	Exia II CT6 Ga

# **Dimensions and Drawings**





# **Electrical Connection**

Wire Color	Current 2wires	Current 3wires	RS485
Red	Vcc+	Vcc+	Vcc+
Black	Vcc-/Signal+	Vcc-/GND	Vcc-
Yellow	1	Signal+	RS485 A
Green(Blue)	/	/	RS485 B

### **How to Order**

## Example Part Number: PWL-CS[600]D10P2T1S2A2M1C1001

Model No.	PWL-CS	PWL-CS	
Order Length	50-2000 mm	[000]	
(mm)	Directly write range in []	[600]	
Probe Diameter	D10=10mm	D10	
(mm)	D16=16mm		
	P1=Atmospheric pressure		
Working Pressure	P2=Sealed pressure (-0.1MPa~0.1MPa)		
	P3=Other pressure max 5Mpa		
Signal Output	T1=4-20mA(2wires) T2=4-20mA(3wires)	T1	
	T3=RS485(4 wires) T4=HART T0=Customized	11	
Power Supply	S1=12-28VDC		
	S2=24VDC		
	S3=12VDC		
Accuracy	A1=-/+0.5%FS	A2	
	A2=-/+0.2%FS by customization	AZ	
Probe Material	M1=PTFE(Typical)		
	M0=Customized	M1	
Process Connection	C1=50.5mm chuck		
	C0=Others	C1	
Cable Length	000=None 001= 1m cable 002= 2m cable 003= 3m cable	001	