

CS-WPT400 Series Level and Temperature Transmitter

Product Features

- Silicon oil sensor
- Platinum temperature sensor
- Measuring range: 0~3.5m H₂O to 0~350m H₂O,
-40~60°C
- Accuracy: 0.5%BFSL, or 1.0%BFSL
- Output: 4~20 mA
- Electrical connection: Cable outlet
- Pressure connection: Standard connector
- High accuracy and high cost performance
- Suitable for mass production



Applications

- Level and temperature measurement in rivers and lakes
- Deep well and groundwater monitoring
- Level and temperature measurement in vessel and storage systems
- Monitoring of sewage, settling and storm-water retention basins

Product Description

Designed for level and temperature measurement application, CS-WPT400 series level and temperature transmitters feature compact structure, stable quality and high cost performance.

The model CS-WPT400 offers continuous measuring ranges between 0~3.5 m H₂O and 0~350 m H₂O. It has been designed to the current demands of the industry and has a 4~20 mA output as standard, an accuracy of 0.5%F.S and PE cable. With IP 68 ingress protection, it is suitable for measurement level up to 350 m water, with PUR or FEP cable.

All variants described in this datasheet are available on very short lead times. For particularly urgent demands, there is a sizeable stock available.

Performance Parameters

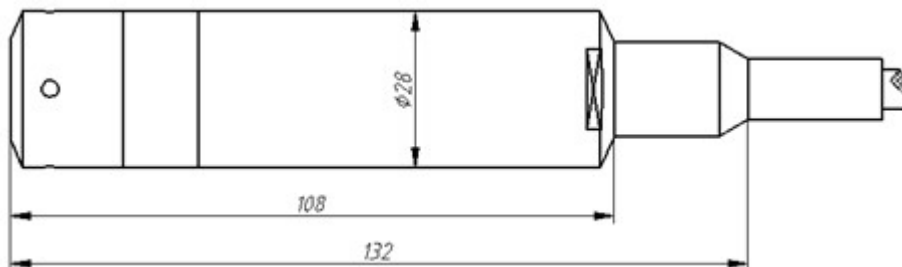
Temperature: 25°C, Power: 12VDC, RH: 45%~75%, Atmospheric pressure: 86KPa~106KPa

Pressure Range	0~3.5mH ₂ O to 0~350mH ₂ O
Temperature Range	-40~60°C, but can't beyond the temperature of seal material(Note1)
Pressure Output	4~20mA
Temperature Output	4~20mA

Power supply (U+)	10VDC~30VDC
Output Load	$\leq(U+ -10) / 0.023\Omega(\text{MAX}:600\Omega)$
Over Voltage	30VDC
Reverse Voltage	-30VDC
Pressure Accuracy at Room Temperature	$\pm 0.5\%F.S$ standard, $\pm 1\%F.S$ optional (include no-linearity, hysteresis, repeatability, and calibration error)
Storage Temperature	-40~100°C
Long-term Stability	$\pm 0.5\%F.S / \text{year}$
Settling Time	(10%~90%) $\leq 10\text{ms}$
Overload Pressure	$\geq 150\%F.S$
Burst Pressure	$\geq 200\%F.S$
Pressure Connection	Standard connector
Electrical Connection	Cable outlet
Insulation Resistance	$\geq 100M\Omega@50VDC$
Vibration Resistance	10g, 5~2000Hz
Shock Resistance	20g, 11ms half sine
Ingress Protection	IP68
Sealings Materials for Wetted Part	NBR O-Ring default, FKM optional
Housing Material	304 stain steel default, 316L stain steel and Titanium optional
Cable Material	PE default, PUR and FEP optional

Note 1: The operating temperature shall not beyond the temperature range of the seal materials, and it is the minimum range between the seal materials and the sensor. The default material is NBR, which is suitable for medium temperature of -20~100°C. If one chooses FKM seal ring, the medium temperature should be somewhere between -15~125°C.

Structures and Dimensions



Wiring Definition

Cable outlet

	Wire	Pin Definition
	Red	Pressure Signal Power Supply(VCCp)
	Black	Pressure Signal Output(Iop)
	White	Temperature signal Power Supply(VCCt)
	Blue	Temperature Signal Output(Iot)
	Yellow	Shield

Type Selected

WPT400	Electronic Pressure Switch
Mark	Pressure Range
X	Actual Pressure Range
Mark	Temperature Range
Y	Actual Temperature Range
Mark	Pressure Connection
T	Standard connector
Mark	Analogue Output
420	4~20mA
Mark	Supply Voltage
08	10~28VDC
12	12~28VDC
16	15~30VDC

guiding hole part in the liquid which can dissolve the blockage, and then the blockage will flow out easily.

- c. It's prohibited to open the transmitter by users for calibration or repair.
 - d. Please contact us if you're not sure whether the transmitter is suitable for the medium to be measured.
 - e. The transmitter should be installed in a location that is not easily bumped or stepped on.
 - f. Exceeding of the transmitter overload pressure may cause permanent damage.
 - g. Where lightning may occur, customers should consider lightning protection measures.
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