PCM260-W Submersible Level Pressure Transmitter

Features

- Adopting diffused silicon piezoresistive sensor
- Submersible probe design for easy installation
- For level measurement
- High accuracy, all stainless steel structure
- Small size and light weight
- Strong anti-interference, good long-term stability
- Vibration and shock resistance

Applications

- Water level measurement in rivers and lakes
- Level measurement of containers and storage systems
- Sewage lift pump and pumping station control
- Sewage, sediment, and flood drainage system monitoring

Notes:

1 Do not touch the diaphragm with hard objects, which may cause damage to the diaphragm.

2 Please read the Instruction Manual of the product carefully before installation and check the relevant information of the product.

3 Strictly follow the wiring method for wiring; otherwise, it may cause product damage or other potential faults.

4 Misuse of the product may cause danger or personal injury.



Product overview

The PCM260-W submersible level pressure transmitter equipped with high-performance diffused silicon piezoresistive pressure sensor as the measuring core, this unit adopts digital temperature compensation and nonlinear correction technologies. It is an all-stainless steel submersible transmitter with fully sealed glue potting construction.

All products undergo long-term aging and stability screening to deliver steady and reliable performance, making them ideal for harsh outdoor working conditions.

It is widely used for liquid level measurement and control in petroleum, chemical, power plant, municipal water supply and hydrological exploration sectors. The standard signal output enables convenient on-site deployment and automatic control integration.

Notes:

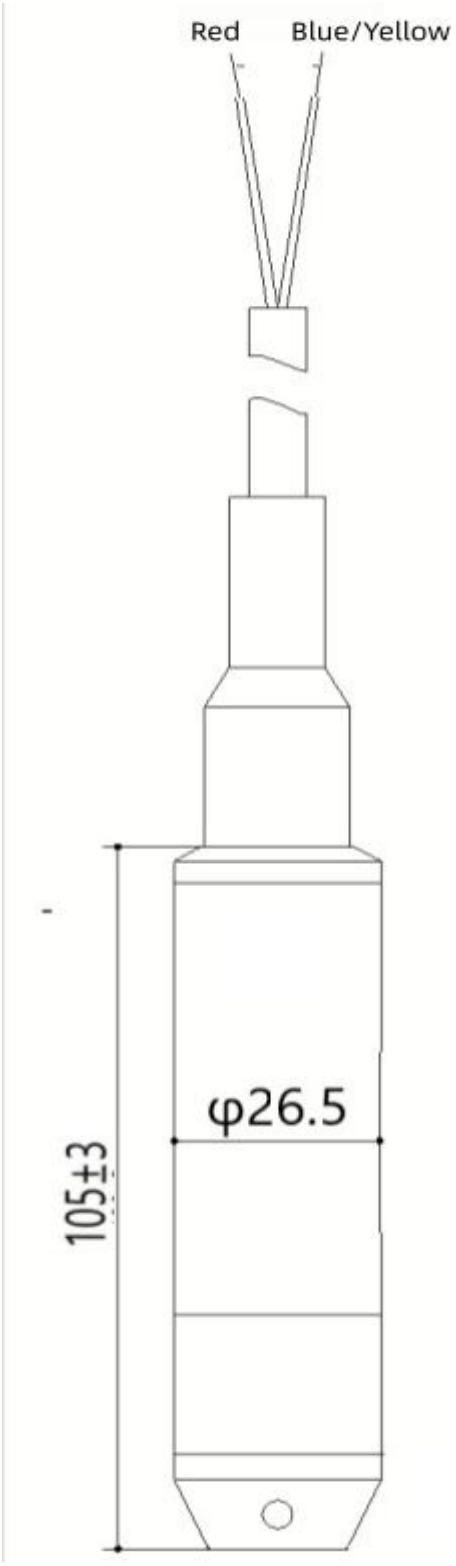
1 Do not misuse documentation.

2 The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.

3 Complete installation, operation, and maintenance information is provided in the instructions of the product.

4 Misuse of the product may cause danger or personal injury.

Performance parameters	
Pressure range	0~1m…100mH_2O. Other pressure ranges can be customized.
Pressure reference	Gauge pressure
Accuracy	0～3mH2O ±0.5%FS（@25±5℃） 0～5mH2O…100mH2O ±0.25%FS（@25±5℃）
Power supply	12～30V
Output signal	18～30V；4～20mA+Hart 12～30V；4～20mA 12～30V； RS485-MODBUS
Temp. drift	≤ ±2％ FS@(-10℃～70℃)≤ 5mH2O ≤ ±1.5％FS@(-10℃～70℃)＞5mH2O
Power-on response time	≤100ms (Up to 90%F.S.)
Overload pressure	(Please see “Pressure range selection” on page 3)
Service life	≥10^6 pressure cycles
Operating temp.	-10ºC ~70ºC
Medium temp.	-10ºC ~70ºC
Storage temp.	-40ºC ~70ºC
EMC	EM Immunity:IEC 61000-6-2; Radiated Emission: IEC 61000-6-3
Insulation resistance	4～20mA：≥100MΩ/250VDC RS485：≥100MΩ/250VDC 4～20mA+HART：≥50MΩ/100VDC
Vibration resistance	Sine curve: 20g, 25Hz～2kHz；IEC 60068-2-6 Random: 7.5g, 5Hz～1kHz；IEC 60068-2-64
Shock resistance	Shock: 20g/11ms；IEC 60068-2-27 Free fall: 1m；IEC 60068-2-32
Protection	IP68
Surge	IEC 61000-4-5 Level 3 2KV
Static electricity	IEC 61000-4-2 Level 4
Medium compatibility	All media compatible with SS304.(Protective cap material: PC+ABS)

Structure & connection diagrams	
Code	**J3: Cable outlet**
Dimension In mm	

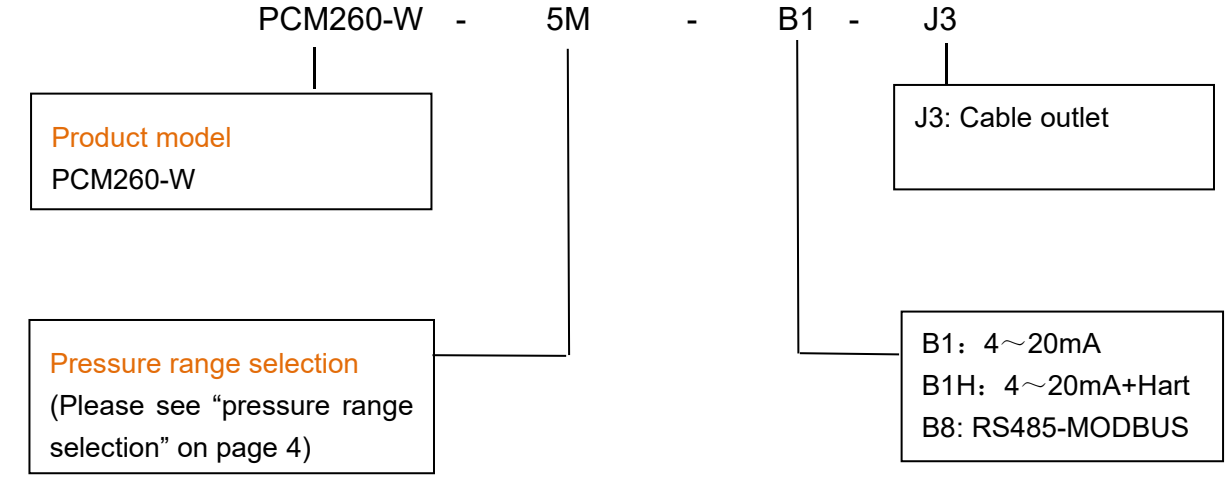
4～20mA	Red wire：Vcc Green wire/ Yellow wire：Iout
（4～20mA＋HART）	Red wire：Vcc Green wire/ Yellow wire：Iout
（RS485-MODBUS）	Red wire：V+ Green wire：V- Yellow wire：RS485-A White wire：RS485-B

Pressure range selection

Range	Pressure reference	Pressure range code	Overload pressure	Burst pressure	Note
2m	G	1mH2O＜X≤2mH2O	300％FS	600％FS	
5m	G	3mH2O＜X≤5mH2O	300％FS	600％FS	
10m	G	5mH2O＜X≤10mH2O	200％FS	500％FS	
20m	G	10mH2O＜X≤20mH2O	200％FS	500％FS	
50m	G	20mH2O＜X≤50mH2O	200％FS	500％FS	
100m	G	50mH2O＜X≤100mH2O	200％FS	500％FS	

Note: G: gauge pressure.

Ordering information



Please check the following questions according to your applications in order to provide more suitable products.

1 Accuracy: typical 0.5% F.S., customization for your accuracy 0.25%F.S. or higher?
2 Medium? Medium temperature range?
3 Please tell us your additional special application requirements, then we can customize sensors accordingly.

Example of ordering information: PCM260-W - 5M - B1 - J3

Product model: PCM260-W, 5M: pressure range is 0~5mH2O, B1: output signal 4~20mA, J3: electrical connection is cable outlet.

Ordering tips

1 Ensure the measured medium is compatible with the contacting part of the product when placing an order. The default material of the product is 304 (the protective cap material of the level probe: PC+ABS).
2 Cable length is not mentioned in the datasheet and should be confirmed based on the details provided in the task order. The available cable materials are PUR and PVC, with a diameter of 7.2±0.2mm. Cables with special specifications can be customized.
3 The sensor diaphragm should not be touched by foreign material. It is recommended to install a protective board inside the pressure port.
4 The standard cable length is 2 meters. Extra length is charged separately.
5 **If the product needs to be used in fields with frequent lightning, please choose the lightning protection level transmitter.**
6 The air vent should be open to the atmosphere, and there should be no water. Please make sure the outlet end is waterproof and moisture-proof when using the product.

Wotian reserves the right to make any change in this publication without notice. The information provided is believed to be accurate and reliable as of this product sheet.

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