

PCM265 Submersible Lightning Protection Level Transmitter

Features

- High-performance diffusion silicon sensor
- With a waterproof sealing rubber ring
- With a lightning protection module
- Anti-condensation with molecular sieve
- Anti-electromagnetic and anti-RF interference
- Multiple protection structure design, strong protection ability
- Excellent long-term stability

Applications

- Level detection for marine environments (oceans, rivers, lakes), shipboard applications, and in areas prone to severe weather and thunderstorms.

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 PCM265 submersible lightning protection level transmitter encapsulates the OEM oil-filling sensor in a stainless steel shell and features a three-stage lightning protection module installed inside, which effectively prevents damage from an induced lightning strike. The front protective cap protects the sensor diaphragm, and can also ensure the liquid contact with the diaphragm smoothly. The waterproof wire features a sealed connection with the shell. The vent tube runs inside the cable and is connected to the outside, and the internal structure is designed to prevent condensation.

After long-term aging tests, the product has stable and reliable performance, and is widely used in marine, river, and other water conservancy and hydrological detection fields.

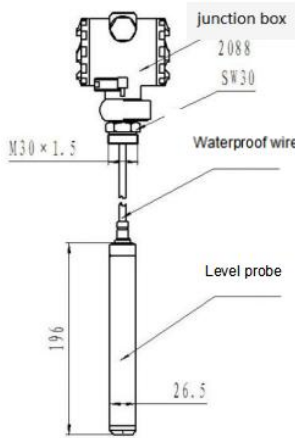
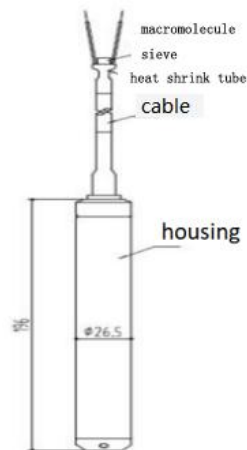
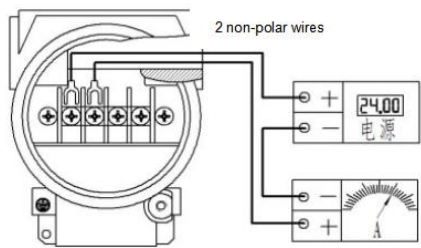
Notes:

- 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.

Performance parameters

Pressure range	0m~1m...20m H ₂ O
Supply & output signal	4~20mA (18~36V)
Operating temp.	-20℃~85℃
Medium temp.	-20℃~85℃
Storage temp.	-40℃~125℃
Compensated temp.	0m~10m H ₂ O: 0℃~60℃ 10m~20m H ₂ O: -10℃~70℃
Zero temp. coefficient	±2%FS (within compensated temp.)
Sensitivity temp. coefficient	±2%FS (within compensated temp.)
Overload pressure	150%FS
Mechanical vibration	20g (20~5000HZ)
Shock	100g (11ms)
Overall accuracy	0.5 level
Insulation	200MΩ/250VDC
Response time	≤1ms (up to 90%FS)
Long-term stability	±0.2%FS/year
Protection	IP68
Material	Junction box: low copper aluminum alloy; level probe: all stainless steel Cable: polyurethane wires and polyethylene wires
Medium compatibility	All kinds of materials compatible with the stainless steel

Electrical connection and wiring method

	J1: 2088 housing	J3: Cable outlet
Dimension In mm		
Wiring method		<p>Red: Supply+</p> <p>Green: Current output</p>

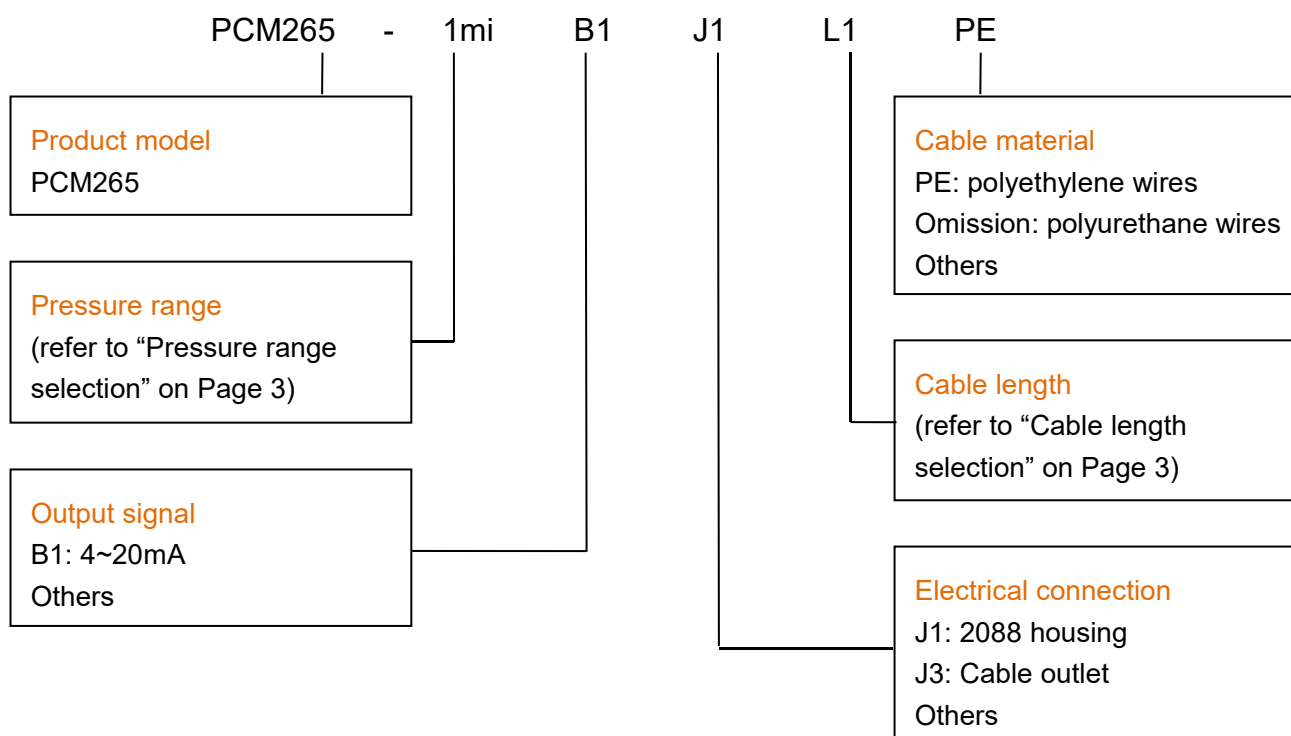
Pressure range selection

Code	Pressure reference	Pressure range	Overpressure	Burst pressure	Note
0.5mi	G	0.5meters H2O	300%FS	600%FS	
1mi	G	1meters H2O	300%FS	600%FS	
1.5mi	G	1.5meters H2O	300%FS	600%FS	
2mi	G	2meters H2O	300%FS	600%FS	
2.5mi	G	2.5meters H2O	300%FS	600%FS	
3mi	G	3meters H2O	300%FS	600%FS	
3.5mi	G	3.5meters H2O	300%FS	600%FS	
4mi	G	4meters H2O	300%FS	600%FS	
4.5mi	G	4.5meters H2O	300%FS	600%FS	
5mi	G	5meters H2O	300%FS	600%FS	
5.5mi	G	5.5meters H2O	300%FS	600%FS	
6mi	G	6meters H2O	300%FS	600%FS	
6.5mi	G	6.5meters H2O	300%FS	600%FS	
7mi	G	7meters H2O	300%FS	600%FS	
8mi	G	8meters H2O	300%FS	600%FS	
9mi	G	9meters H2O	300%FS	600%FS	
10mi	G	10meters H2O	200%FS	500%FS	
12mi	G	12meters H2O	200%FS	500%FS	
15mi	G	15meters H2O	200%FS	500%FS	
18mi	G	18meters H2O	200%FS	500%FS	
20mi	G	20meters H2O	200%FS	500%FS	

Cable length selection

Range Code	Standard cable length	Code	Definition
0.5mi	L1.5 L2 L3 L5 L6 L8 L10 L12 L15 L18 L20 L25	L1.5	Cable length 1.5m
1mi	L1.5 L2 L3 L5 L6 L8 L10 L12 L15 L18 L20 L25	L2	Cable length 2m
1.5mi	L2 L3 L5 L6 L8 L10 L12 L15 L18 L20 L25	L3	Cable length 3m
2mi	L3 L5 L6 L8 L10 L12 L15 L18 L20 L25	L5	Cable length 5m
2.5mi	L3 L5 L6 L8 L10 L12 L15 L18 L20 L25	L6	Cable length 6m
3mi	L5 L6 L8 L10 L12 L15 L18 L20 L25	L8	Cable length 8m
3.5mi	L5 L6 L8 L10 L12 L15 L18 L20 L25	L10	Cable length 10m
4mi	L5 L6 L8 L10 L12 L15 L18 L20 L25	L12	Cable length 12m
4.5mi	L5 L6 L8 L10 L12 L15 L18 L20 L25	L15	Cable length 15m
5mi	L5 L6 L8 L10 L12 L15 L18 L20 L25	L18	Cable length 18m
5.5mi	L6 L8 L10 L12 L15 L18 L20 L25	L20	Cable length 20m
6mi	L8 L10 L12 L15 L18 L20 L25	L25	Cable length 25m
6.5mi	L8 L10 L12 L15 L18 L20 L25	Fill in as an optional accessory if the length exceeds.	
7mi	L8 L10 L12 L15 L18 L20 L25		
8mi	L10 L12 L15 L18 L20 L25		
9mi	L10 L12 L15 L18 L20 L25		
10mi	L10 L12 L15 L18 L20 L25		
12mi	L15 L18 L20 L25		
15mi	L15 L18 L20 L25		
18mi	L20 L25		
20mi	L25		

How to order



Example: PCM265-1miB1J1L1

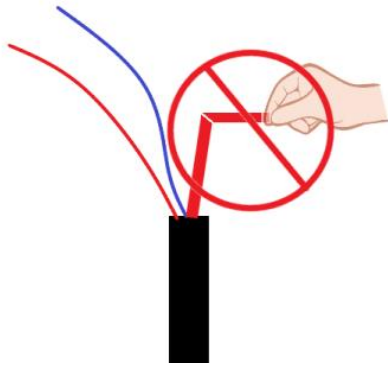
Product model: PCM265, pressure range: 1m H₂O, output signal: 4~20mA, 2088 housing, L: cable length 1m.

Optional accessories

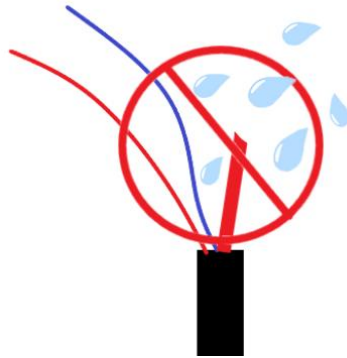
The length of the cable beyond the standard cable length.

Notes

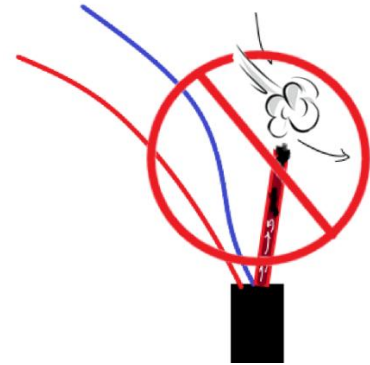
The air duct of the liquid level transmitter needs to remain open to the atmosphere. During operation, ensure that the duct is not blocked or bent. Additionally, proper waterproof and dustproof measures should be applied to the air duct; otherwise, it may impair transmitter performance and cause damage to the device.



Do Not Bend



Do Not Expose to Rain or Water



No Dust Blockage

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.

Contact us

Nanjing Wotian Technology Co.,Ltd.

Website: www.wtsensor.com

Add: 5 Wenying Road, Binjiang Development Zone, Nanjing, 211161, China

E-Mail: dr@wtsensor.com