

# PCM269 Ultra-Small-Diameter Level Transmitter

## Features

- Diffusion silicon piezoresistive pressure sensor
- Immersion probe measurement, easy to install
- For level measurement
- Multi-protective structure design, high protective ability
- Fully welded structure, good sealing performance
- Full temperature range digital compensation, good stability
- 15.8mm diameter, easy to install and use

## Applications

- Static pressure level, liquid irrigation, sewage, industrial water, pool, well, river, sea, and lake.....

### 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

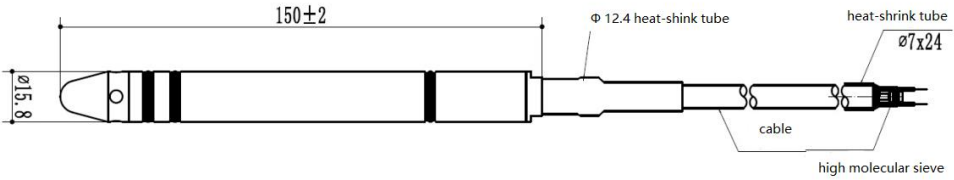
The PCM269 Ultra-Small-Diameter Level Transmitter adopts the high-performance diffusion silicon piezoresistive pressure sensor as the measuring element, and accurately measures static pressure of the liquid proportional to the level depth; the result is converted to the standard signal (current or voltage signal) through the signal conditioning circuit, establishing the linear corresponding relation between the output signal and liquid depth to realize the measurement for the liquid depth. PCM269 has the advantages of high precision and small volume. By submerging it directly into liquid, the height from the end of the transmitter to the liquid surface can be measured easily. The product is applicable to the level measurement and control in the petroleum, chemical, power plant, urban water supply, and hydrological exploration fields.

This product, with stable and reliable performance, has passed long-term aging and stability screening and can be used in harsh outdoor environments. Meanwhile, on-site liquid level display and zero and span migration are available.

### 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	2m~100m H <sub>2</sub> O
Power supply & output signal	4~20mA (18~36V)
Operating temperature	-20°C~85°C
Medium temperature	-10°C~70°C
Storage temperature	-40°C~125°C
Compensated temperature	0m~10m H <sub>2</sub> O: 0°C~60°C
	10m~100m H <sub>2</sub> O: -10°C~70°C
Zero temp. coefficient	±1.5%FS (within compensated temp.)
Span temp. coefficient	±1.5%FS (within compensated temp.)
Overload pressure	200%FS~300%FS
Vibration resistance	20g (20~5000HZ)
Shock	100g/11ms
Overall accuracy	0.5%FS
Insulation resistance	100MΩ/250VDC
Response time	≤1ms (up to 90%FS)
Long-term stability	±0.2%FS/Year
Protective level	IP68
Material	316L
	Cable material: Polyurethane or Polyethylene
Medium compatibility	All media compatible with stainless steel 316L

Structure and pressure connection	
	<b>J3: cable outlet</b>
Dimension In mm	
Pressure connection	Red wire: supply+ Green wire: current output+

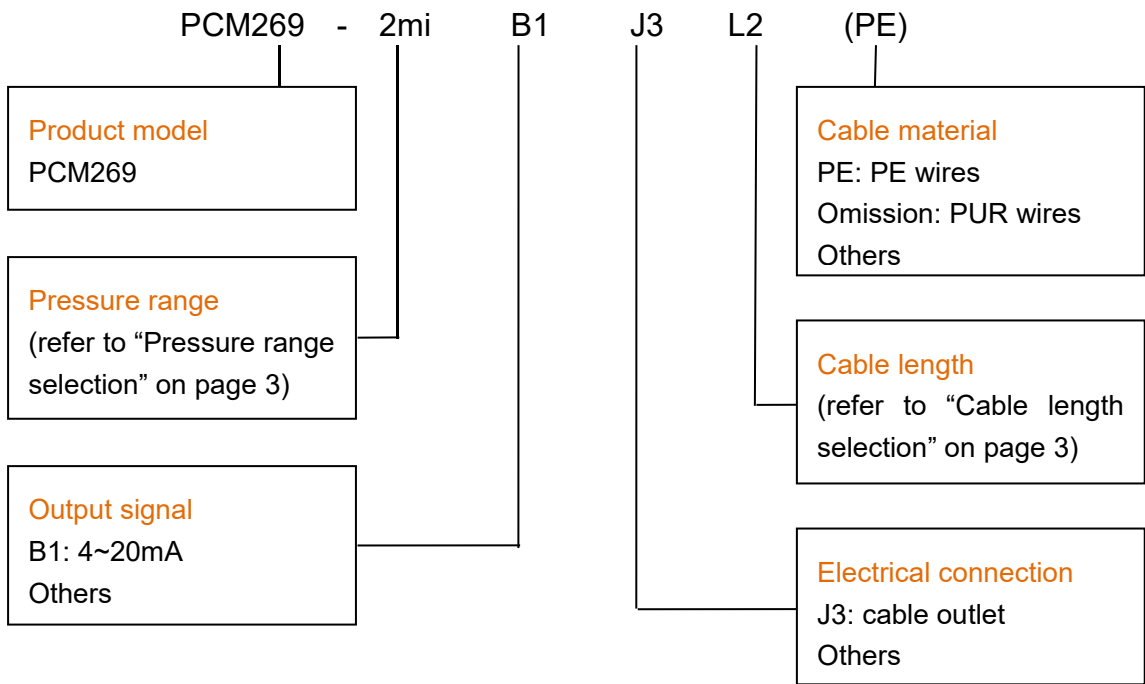
### Pressure range selection

Pressure range code	Pressure reference	Pressure range	Overload pressure	Burst pressure	Note
2mi	G	2 meters H <sub>2</sub> O	300%FS	600%FS	
3mi	G	3 meters H <sub>2</sub> O	300%FS	600%FS	
5mi	G	5 meters H <sub>2</sub> O	300%FS	600%FS	
7mi	G	7 meters H <sub>2</sub> O	300%FS	600%FS	
8mi	G	8 meters H <sub>2</sub> O	300%FS	600%FS	
9mi	G	9 meters H <sub>2</sub> O	300%FS	600%FS	
10mi	G	10 meters H <sub>2</sub> O	300%FS	600%FS	
12mi	G	12 meters H <sub>2</sub> O	300%FS	600%FS	
15mi	G	15 meters H <sub>2</sub> O	300%FS	600%FS	
18mi	G	18 meters H <sub>2</sub> O	300%FS	600%FS	
20mi	G	20 meters H <sub>2</sub> O	300%FS	600%FS	
25mi	G	25 meters H <sub>2</sub> O	300%FS	600%FS	
40mi	G	40 meters H <sub>2</sub> O	300%FS	600%FS	
60mi	G	60 meters H <sub>2</sub> O	300%FS	600%FS	
80mi	G	80 meters H <sub>2</sub> O	300%FS	600%FS	
100mi	G	100 meters H <sub>2</sub> O	200%FS	500%FS	

### Cable length selection

Range Code	Standard cable length	Code	Definition
2mi	L2 L3 L5 L7 L8 L9 L10 L12 L15 L18 L20 L25 L40 L60 L80 L100	L2	Cable length 2m
3mi	L3 L5 L7 L8 L9 L10 L12 L15 L18 L20 L25 L40 L60 L80 L100	L3	Cable length 3m
5mi	L5 L7 L8 L9 L10 L12 L15 L18 L20 L25 L40 L60 L80 L100	L5	Cable length 5m
7mi	L7 L8 L9 L10 L12 L15 L18 L20 L25 L40 L60 L80 L100	L7	Cable length 7m
8mi	L8 L9 L10 L12 L15 L18 L20 L25 L40 L60 L80 L100	L8	Cable length 8m
9mi	L9 L10 L12 L15 L18 L20 L25 L40 L60 L80 L100	L9	Cable length 9m
10mi	L10 L12 L15 L18 L20 L25 L40 L60 L80 L100	L10	Cable length 10m
12mi	L12 L15 L18 L20 L25 L40 L60 L80 L100	L12	Cable length 12m
15mi	L15 L18 L20 L25 L40 L60 L80 L100	L15	Cable length 15m
18mi	L18 L20 L25 L40 L60 L80 L100	L18	Cable length 18m
20mi	L20 L25 L40 L60 L80 L100	L20	Cable length 20m
25mi	L25 L40 L60 L80 L100	L25	Cable length 25m
40mi	L40 L60 L80 L100	L40	Cable length 40m
60mi	L60 L80 L100	L60	Cable length 60m
80mi	L80 L100	L80	Cable length 80m
100mi	L100	L100	Cable length 100m

**How to order**



**Example:** PCM269-2miB1J3L2PE

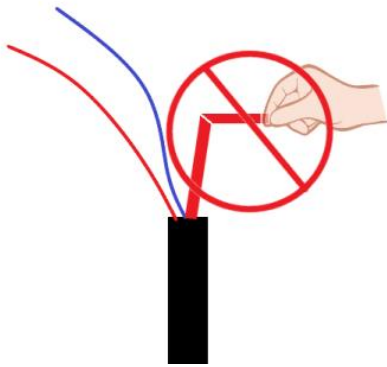
The model is PCM269. Pressure range 2 meters H<sub>2</sub>O, output signal 4~20mA, electrical connection: cable outlet, 2 meters PE cable.

**Optional accessories**

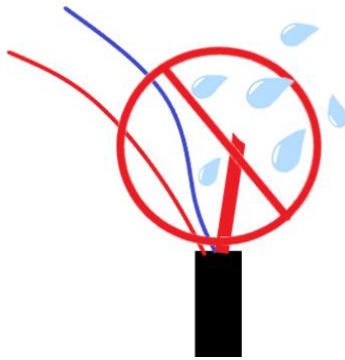
The part of the cable exceeding the standard cable length.

## Notes

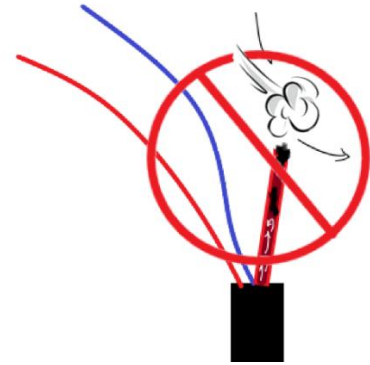
The air duct of the liquid level transmitter needs to remain open to the atmosphere. During operation, ensure that the duct is not blocked or bent. Additionally, proper waterproof and dustproof measures should be applied to the air duct; otherwise, it may impair transmitter performance and cause damage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

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

E-Mail: [dr@wtsensor.com](mailto:dr@wtsensor.com)