

PCM263 Level Transmitter

Features

- Diffusion silicon piezoresistive pressure sensor
- Immersion probe measurement, easy to install
- For level measurement
- High precision and all stainless steel structure
- Small size and light weight
- Strong anti-interference; good long-term stability
- Anti-vibration, shock resistance

Applications

- Water level measurement in rivers and lakes
- Level measurement of containers and storage systems

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

PCM263 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 current 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. PCM263 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.

Notes:

1 Do not misuse the documentation.

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

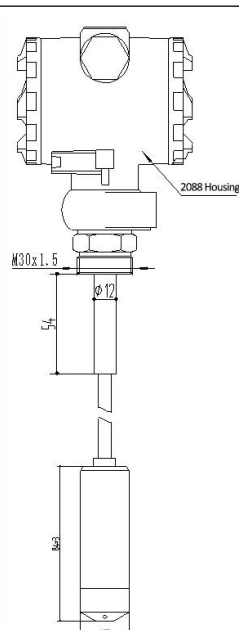
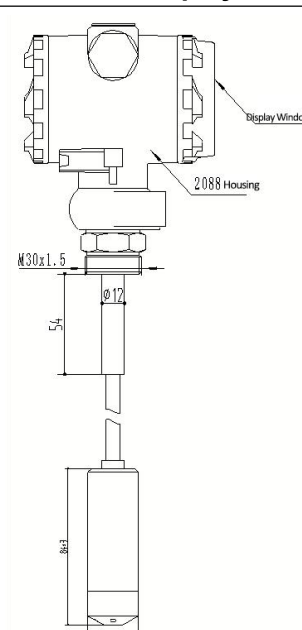
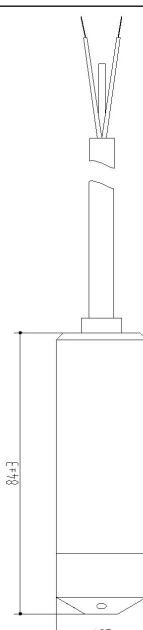
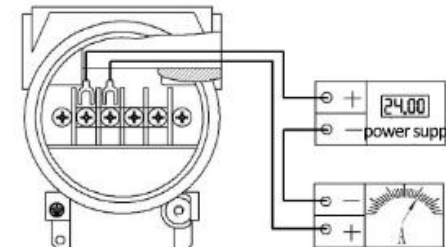
3 Complete installation, operation, and maintenance information is provided in the instructions of the product.

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

Performance parameters

Pressure range	0~1mH ₂ O...10mH ₂ O
Pressure reference	Gauge pressure
Accuracy	±0.5%FS (@25°C)
Supply	9~30V
Output signal	4~20mA
Temperature drift	35kPa: ±3%FS (@0~60°C)
	Others: ±1.5%FS (@-10~70°C)
Response time	≤100ms (Up to 90%FS)
Overload pressure	(Refer to “pressure range selection” on page 3)
Durability	≥10 ⁶ (cycles)
Operating temp.	-20°C~70°C
Medium temp.	-10°C~70°C
Storage temp.	-40°C~70°C
Insulation resistance	≥100MΩ/250VDC
Protection	IP68
Medium compatibility	All kinds of media compatible with stainless steel 304 (Protective cap: PC+ABS)

Structure and wiring method

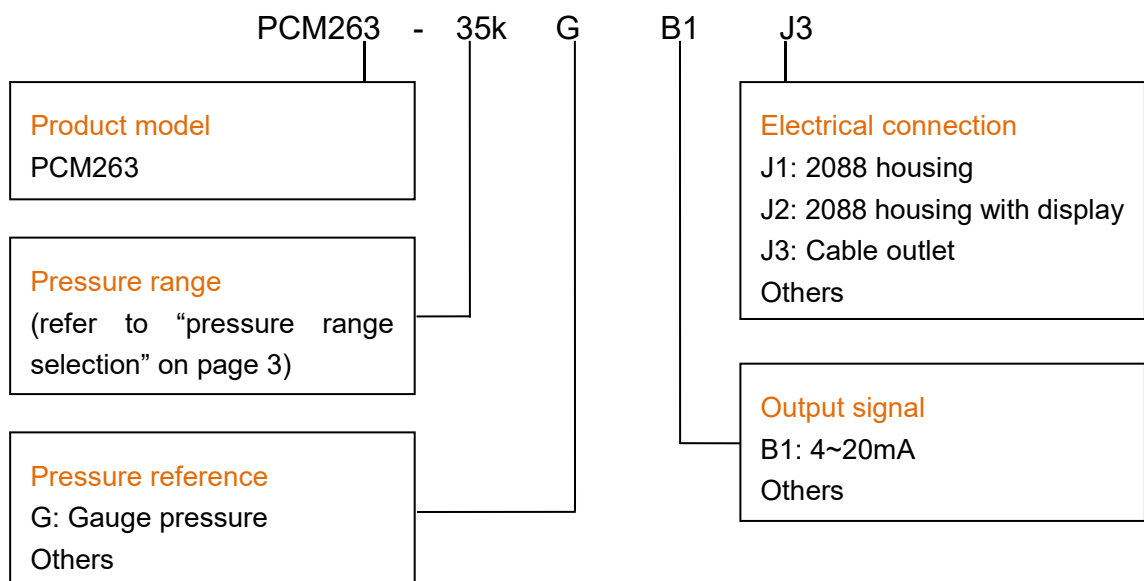
Code	J1: 2088 housing	J2: 2088 housing with display	J3: Cable outlet
Dimension In mm	 <p>Technical drawing of the J1 housing showing dimensions: M30x1.5, φ12, 54, 86±3, and φ27. The drawing includes a top view and a side view.</p>	 <p>Technical drawing of the J2 housing with a display window. Dimensions are the same as J1, plus a 'Display Window' label. The drawing includes a top view and a side view.</p>	 <p>Technical drawing of the J3 cable outlet showing a height of 86±3 and a diameter of φ27. The drawing includes a side view.</p>
Wiring method	 <p>Wiring diagram showing the connection of the sensor to a power supply (24.00V) and a load (A). The diagram shows the sensor terminals connected to the power supply and load.</p>		<p>Red: Vcc Blue/yellow: Iout</p>

Pressure range selection

Sensor pressure range	Pressure range	Range code	Overload pressure	Burst pressure	Note
35kPa	1mH ₂ O<X≤4mH ₂ O	35kG	300%FS	600%FS	
100kPa	4mH ₂ O<X≤10mH ₂ O	100kG	200%FS	500%FS	

Note: G, gauge pressure; X, pressure range needed

How to order



Example: PCM263-35kGB1J3

Refer to product model PCM263, pressure range 0~4mH₂O, gauge pressure, output signal 4~20mA, electrical connection: cable outlet.

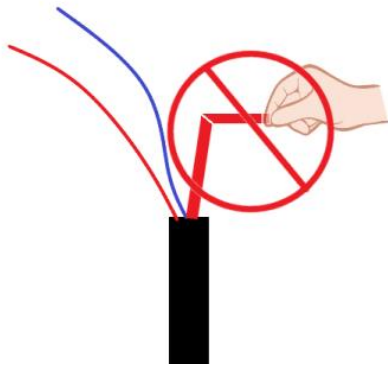
Ordering tips

- 1 Ensure the measured medium is compatible with the contacting part of the product when placing an order. The default material for the product is 304 (the protective cap material for 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 ± 0.2 mm. 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 default cable length of the product is 2 meters. If a longer cable is needed, there will be an extra charge.
- 5 **If the product needs to be used in fields with frequent lightning, please choose the lightning protection level transmitter.**

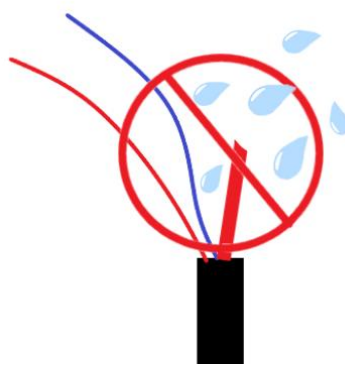
- 6 The air vent should be open to the atmosphere, and there should be no water. Please make sure the outlet end is waterproof and moistureproof when using the product.
- 7 Customization is available for pressure ranges >20m.
8. If you need a level transmitter made of 316L material, please choose the PCM1260 level transmitter.

Notes

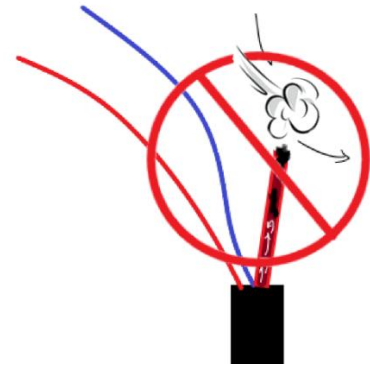
The air duct of the liquid level transmitter needs to remain open to the atmosphere. During operation, ensure that the duct is not blocked or bent. Additionally, proper waterproofing and dustproofing measures should be applied to the air duct; otherwise, it may impair transmitter performance and cause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

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