PCM303W Transmitter (Pressure + Temperature)

Features

- Built-in PT100 /PT1000 platinum resistor
- 316L stainless steel isolation diaphragm structure
- High precision, all stainless steel structure
- Wide measuring range, capable of measuring absolute pressure, gauge pressure and sealed pressure
- Vibration and shock resistance

Application and industry

- Process Control
- Aviation and aerospace
- Automobiles, medical equipment
- Pipeline system

Notice:

1. Do not touch the diaphragm with hard objects, as this may damage the isolation diaphragm.
2. Before installation, please read the product manual carefully and check the relevant information of the product.
3. Connect the wires strictly according to the wiring method, otherwise it may cause product damage and other potential failures.
4 Improper use may result in danger and personal injury.

product description

PCM303W pressure transmitter (pressure + temperature), the pressure sensitive core adopts diffused silicon core . The temperature adopts PT100/PT1000 platinum resistance. The product is small in size, light in weight, and has a full stainless steel sealed structure, which can work in corrosive environments. The product is easy and simple to install, has extremely high vibration and impact resistance, and is widely used in process control, aviation, aerospace, automobile, medical equipment, HVAC and other fields.

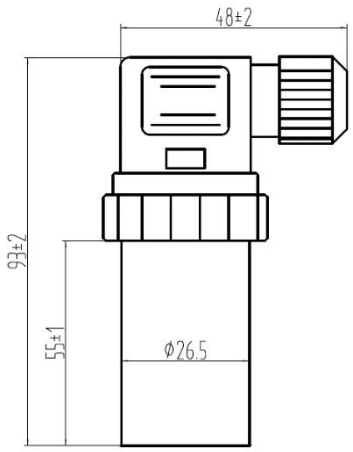
Notice:

1. Do not misuse the file.
2. The information in this selection is for reference only and cannot be used as a guide for product installation.
3. Complete installation, operation and maintenance information is provided in the product manual.
4. Improper use may result in danger and personal injury.

Performance parameters	
Measuring range	Pressure range: 0～35 kPa… 40MPa Temperature range: -40 to 120°C
Pressure Type	Gauge pressure, absolute pressure, sealed pressure
Accuracy	Pressure accuracy: ± 0.5% FS (type) Temperature accuracy: ±2 %FS(type)
Hysteresis and Repeatability	0.1 %FS
Pressure temperature drift	≤35 kPa: ± 3%FS (0℃～60 ℃) Other ranges: ± 1.5 %FS (-10 ℃～70 ℃)
Power-on response time	≤ 90 ms (rising to 90%FS)
Service life	≥ 1 × 10 ^{6} pressure cycles
Ambient temperature	-20℃～85℃
Medium temperature	-30℃～120 ℃
Performance parameters	
Storage temperature	-40℃～125℃
EMC	Immunity: IEC 61000-6-2, Radiated emissions: IEC 61000-6-3
Insulation resistance	≥ 100MΩ/250VDC
Vibration performance	Sinusoidal curve: 20g, 25Hz ~ 2kHz; IEC 60068-2-6 Random: 7.5grms, 5Hz ~ 1kHz; IEC 60068-2-64
Shock proof	Shock: 10g/11ms; IEC60068-2- 27 Free fall: 1m; IEC60068-2-32
Protection level	IP65
wave Surge	IEC 61000-4-5 Level 3 2KV
quiet electricity	IEC 61000-4-2 Level 4
Media compatibility	Various media compatible with 304 stainless steel
six square	HEX27

Output and power supply				
letter Number	Pressure signal	Temperature signal		
Code	B1	W1	W2	W3
Output	4～20mA	4～20mA	PT100	PT1000
powered by	12～30VDC	12～30VDC	/	/

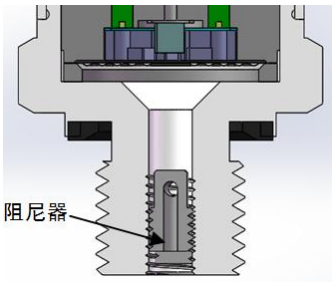
Electrical connection and wiring method

Connector Code	J5: Hirschmann	
Dimensions Unit: mm		
Wiring	Pressure connection	Temperature wiring
	Pin 1: Power + Pin 2: Current output	Pin 3 : Power + Pin 4 : Current output

Selection of dampers

Application

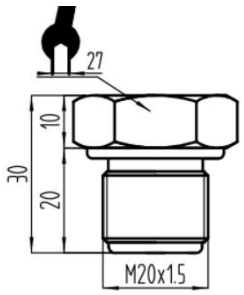
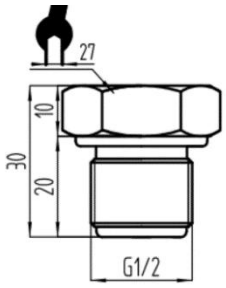
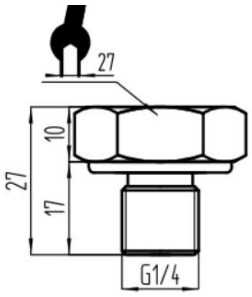
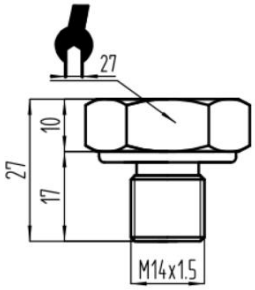
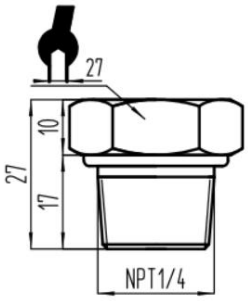
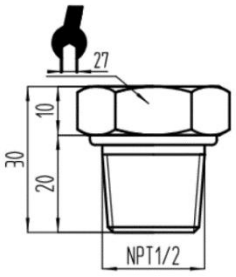
Cavitation, liquid hammer and pressure spikes can occur in air or liquid systems with changes in flow rate, such as rapid closing of valves or starting and stopping of pumps.



Even at fairly low operating pressures, these problems can occur at the inlet and outlet.

Medium conditions

In liquids containing particles, nozzle clogging may occur. Vertically mounting the transmitter minimizes the risk of clogging, as the flow of the fluid is limited to the initial start-up period, the volume behind the nozzle is fixed, and the nozzle orifice is relatively large (1.2mm).

Threaded interface			
Thread code	C 1: M20×1.5-6g	C2: G1/2	C3: G1/4
Dimensions Unit: mm			
Recommended torque	15～25Nm	15～25Nm	15～25Nm
Thread code	C4: M14×1.5	C5: NPT1/4, Z1/4	C7: NPT1/2
Dimensions Unit: mm			
Recommended torque	15～25Nm	15～25Nm	15～25Nm

NOTE: Torque depends on various factors such as gasket material, mating material, thread lubrication and pressure level.

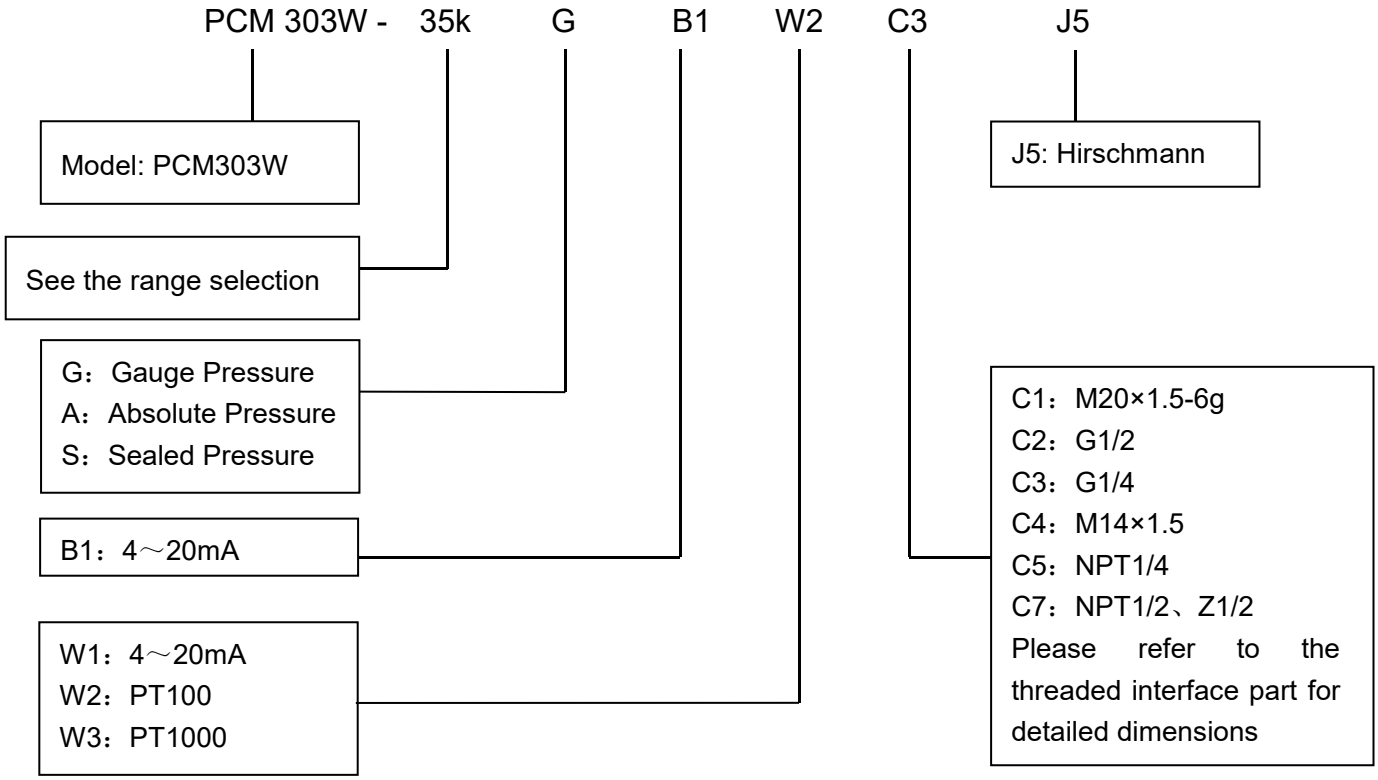
Range selection

Range code	Pressure Type	Measuring range	Overload pressure	Burst pressure	Remark
35k	G	0～35 kPa	300% FS	6 00% FS	
70k	G	0～70 kPa	200% FS	500%FS	
100k	G.A	0～100 kPa	200% FS	500%FS	
250k	G.A	0～250 kPa	200% FS	500%FS	
600k	G.A	0～600kPa	200% FS	500%FS	
1M	G.A	0～1MPa	200% FS	500%FS	
1.6M	G, A , S	0～1.6MPa	200% FS	500%FS	
2.5M	G, A , S	0～2.5MPa	200% FS	500%FS	
4M	S	0～4 MPa	200% FS	400%FS	
6M	S	0～6 MPa	200% FS	400%FS	
10M	S	0～10 MPa	200% FS	400%FS	

16M	S	0～16 MPa	200% FS	400%FS	
25M	S	0～25 MPa	150% FS	400%FS	
40M	S	0～40 MPa	150% FS	300%FS	

Note: G is gauge pressure, A is absolute pressure, S is sealed pressure.

Selection



Example: PCM303 W -35kGB1 W2 C3J5 -PT100

The model is PCM 303 W , the measuring range is 0 ~ 35k Pa , the pressure mode is gauge pressure, the pressure output signal is 4 ~ 20 mA , the threaded interface is G1/4, with temperature PT100 resistance value output, and the electrical connector is Hirschmann .

Accessories

name	shape	describe	Item number
M4 damper		See Damper Selection	100030500027
Domestic Hirschmann plug		Domestic	100040301005

Ordering Tips

1. When selecting the product, please pay attention to the compatibility between the measured medium and the contact part of the product.

Contact us

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