

# PCM302 pressure transmitter

## Features:

- All stainless steel, all welded structure
- High strength, anti-vibration.
- Have the isolation and explosion-proof certification authorized by National Quality Supervision and Inspection Center for Ex-proof Electrical Products
- Wide measuring range, can measure absolute pressure, gauge pressure and sealed gauge pressure
- Good sealing, long-term stability
- Advanced structure to ensure product reliability
- Widely used in flammable and explosive occasions.

## Application:

- Equipment supporting
- Hydraulic and pneumatic equipment
- CNG Pipeline Network
- Compressor
- Natural gas filling station equipment

### 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:

PCM302 pressure transmitter adopts diffused silicon pressure core as the sensitive element. Built-in processing circuit converts the sensor's millivolt signal into standard voltage, current, and frequency signal output, which can be directly connected to a computer, control instrument, display instrument, etc., and can carry out remote signal transmission.

It adopts an integrated all-stainless steel structure and has been welded many times to meet the explosion design requirements, long-term be used in harsh environments. There are a wide range of flammable and explosive occasions in industries such as Petroleum, chemical industry, electricity Power, hydrology, geology and ship application.

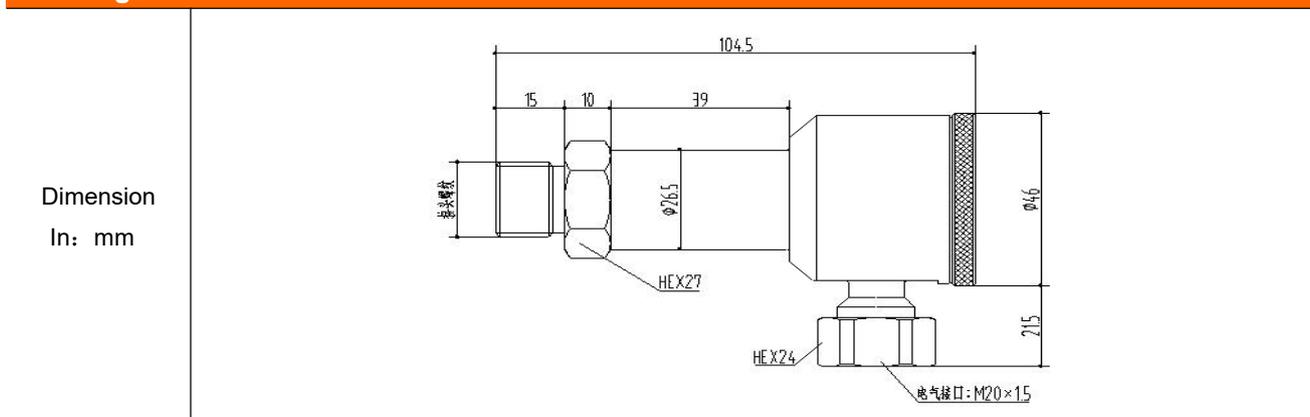
### Notes:

- 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	-100kPa...0~10kPa...60MPa
Pressure reference	Gauge pressure 、 absolute pressure 、 sealed gauge pressure
Supply&output	4~20mA(12~36VDC)
Accuracy	±0.5%FS(typ.)
Compensated temp.	-10~70℃
Temperature drift	≤±1.5%FS(@-20℃~85℃)
Response time	≤1ms ( up to 90%FS )
Service life	≥10×10 <sup>5</sup> pressure cycle
Ambient temperature	-20℃~80℃
Medium temperature	-30℃~105℃
Storage temperature	-40℃~85℃
Long-term stability	±0.2%FS/year
Insulation resistance	≥100MΩ/250VDC
Shock resistance	100g ( 11ms )
Protection level	IP65
Material	304
Installation torque	25Nm

## Drawing



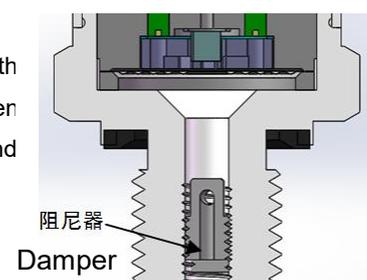
## Application of damper

### Application

Cavitation, liquid hammer and pressure peak may occur in air or hydraulic systems with varying flow rates, such as the rapid closing of valve or the start and stop of pump. Even at relatively low operating pressures, these problems may occur at the entrance and exit.

### Media condition

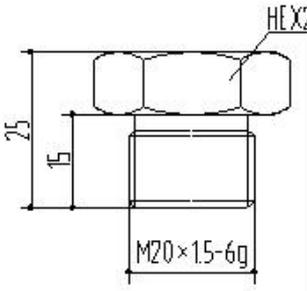
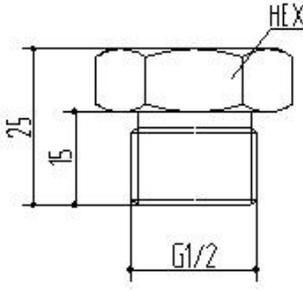
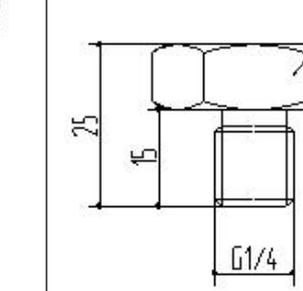
In the liquid containing particles, nozzle clogging may occur. The vertical mounting of pressure transmitter minimizes



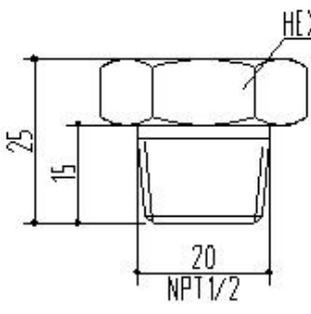
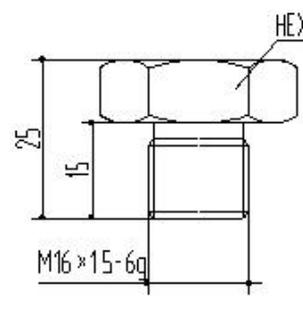
the risk of clogging because the flow of fluid happens in initial start only, the volume of the rear of the nozzle is fixed and the nozzle has a relatively large aperture (1.2 mm).

The effect of medium viscosity on response time is small. Even if the viscosity reaches 100 CST, the response time will not exceed 4 ms.

### Pressure port

Thread	C1: M20×1.5-6g	C2: G1/2	C3: G1/4
Dimension in mm			
Recommended torque	15~25Nm	15~25Nm	15~25Nm

### Pressure port

Thread	C7: NPT1/2	C22: M16×1.5
Dimension in mm		
Recommended torque	15~25Nm	15~25Nm

Note: Torque depends on various factors such as material of gasket, supporting materials, lubrication of thread and pressure.

### Pressure range selection

Pressure range code	Pressure reference	Pressure range	Overpressure	Remark
10k	G	0~10kPa	300%FS	
20k	G	0~20kPa	300%FS	
35k	G、A	0~35kPa	200%FS	
70k	G	0~70kPa	200%FS	
100k	G、A	0~100kPa	200%FS	
160k	G	0~160kPa	200%FS	
250k	G、A	0~250kPa	200%FS	
400k	G	0~400MPa	200%FS	
600k	G、A	0~600MPa	200%FS	

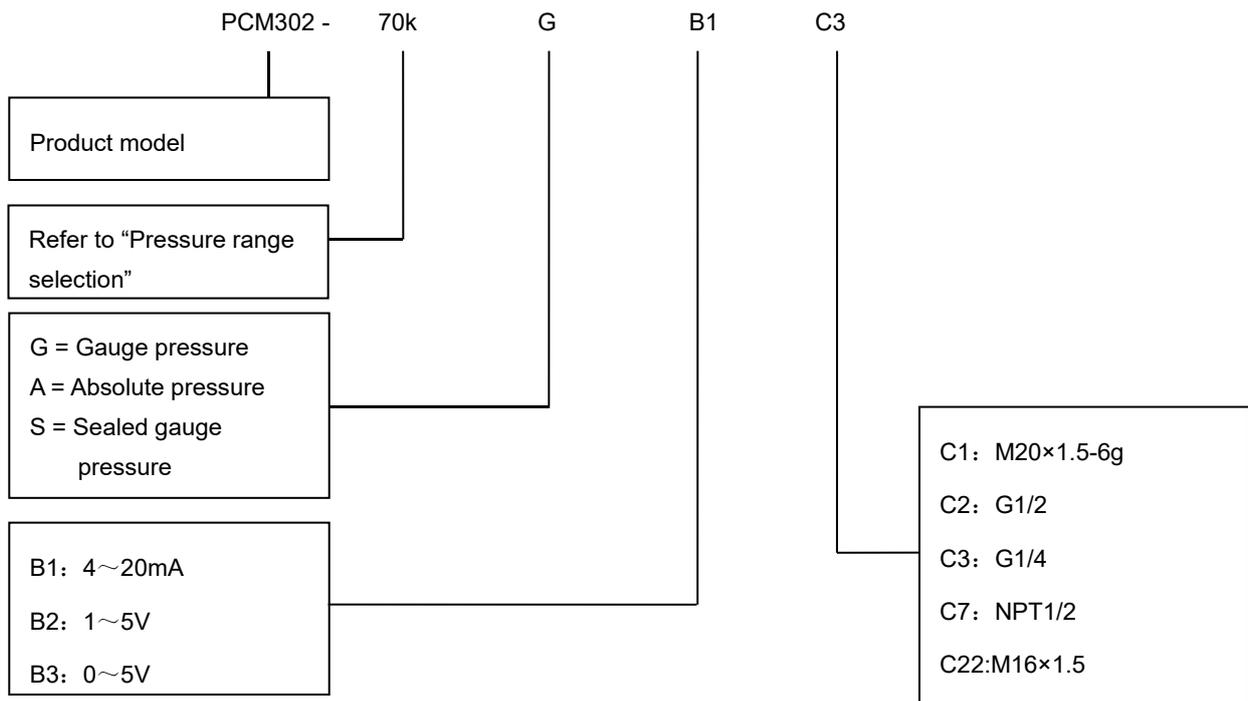
1M	G、S、A	0~1MPa	150%FS	
1.6M	S	0~1.5MPa	150%FS	
2.5M	S	0~2.5MPa	150%FS	
4M	S	0~4MPa	150%FS	
6M	S	0~6MPa	150%FS	
10M	S	0~10MPa	150%FS	
16M	S	0~16MPa	150%FS	
25M	S	0~25MPa	150%FS	
40M	S	0~40MPa	150%FS	
60M	S	0~60MPa	150%FS	
NP1	G	±100kPa	200%FS	
(-100~250)k	G	-100~250kPa	200%FS	
(-100~600)k	G	-100~600kPa	200%FS	
(-0.1~1)M	G	-0.1~1.0MPa	200%FS	
(-0.1~1.6)M	G	-0.1~1.6MPa	200%FS	

Note: G stands for gauge pressure, A, absolute pressure, S, sealed gauge pressure.

### Accessory

Name	Appearance	Description	Item number
M4 damper		Refer to "Application of damper"	100030500027

### How to order





Example: PCM302-70kGB1C3

Refer to product model PCM302, with pressure range 0~70kPa, pressure reference gauge pressure, power supply 12~36V, output signal 4~20mA, pressure port G1/4.

#### **Ordering tips:**

- 1.Ensure compatibility between measured media and contacting part of product when placing an order.
- 2.For special requirements on performance parameters and appearance of the product, we can provide customization.

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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