

PCM302 Pressure Transmitter

Features

- All stainless steel, fully welded structure
- High strength, anti-vibration
- 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.



Product Overview

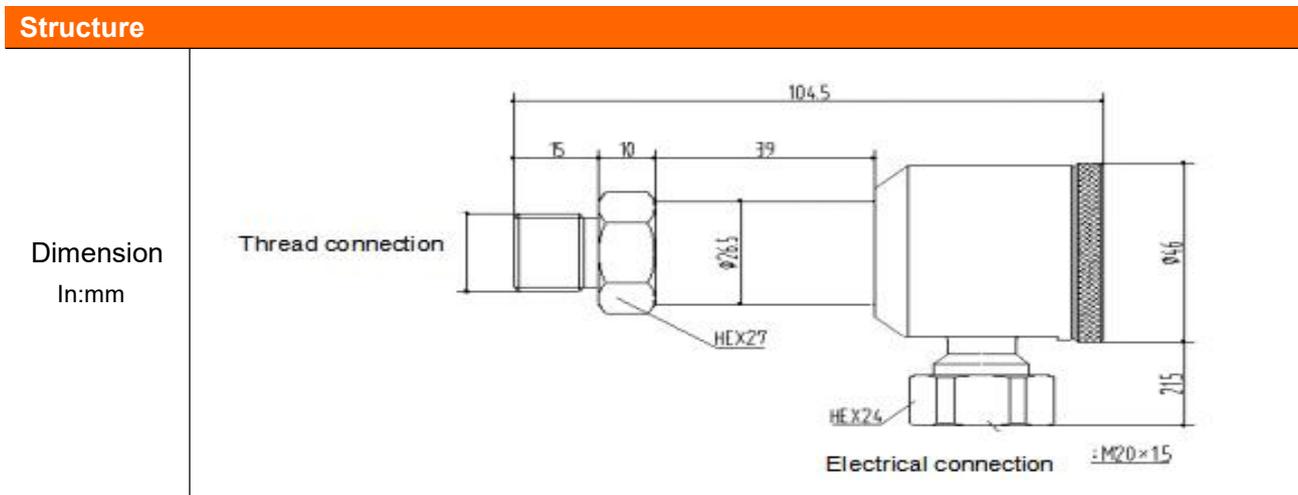
The PCM302 pressure transmitter uses a diffusion silicon pressure sensor as its sensitive element. The built-in processing circuit converts the sensor's millivolt signal into a standard voltage, current, or frequency signal, which can be directly connected to a computer, control instrument, display instrument, etc., and can also support remote signal transmission.

It adopts an integrated all-stainless-steel structure and has been welded repeatedly to meet explosion requirements and be used in harsh environments for a long time. PCM302 is widely used in industries with flammable and explosive occasions, such as petroleum, chemical, electricity power, hydrology, geology, and shipping.

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...0~35kPa...60MPa
Pressure reference	Gauge pressure, Absolute pressure, Sealed gauge pressure
Supply & output signal	4~20mA (12~36VDC)
Accuracy	±0.5%FS (typ.)
Compensated temp.	-10~70°C
Temperature drift	≤±1.5%FS (@-10°C~70°C)
Response time	≤1ms (up to 90%FS)
Durability	10 ⁶ pressure cycles
Ambient temperature	-20°C~80°C
Medium temperature	-30°C~105°C
Storage temperature	-40°C~85°C
Long-term stability	±0.2%FS/year
Insulation resistance	≥100MΩ/250VDC
Shock	10g (11ms)
Protection level	IP65
Material	304
Max. installation torque	25Nm

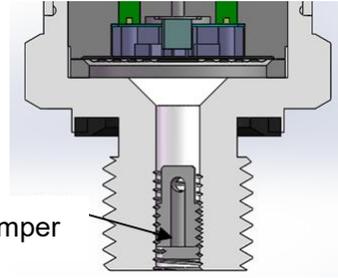


Application of damper

Application

Cavitation, liquid hammer, and pressure peak may occur in air or hydraulic systems with varying flow rates, such as the rapid closing of a valve or the starting and stopping of a pump.

Even at relatively low operating pressures, these problems may occur at the inlet and outlet.

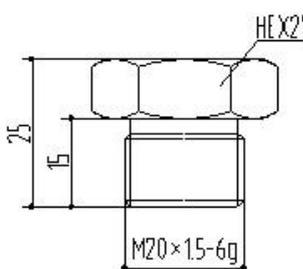
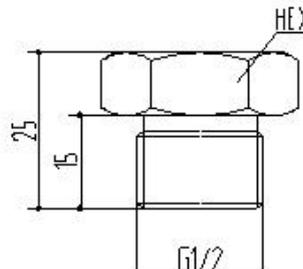
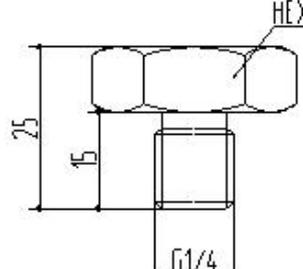
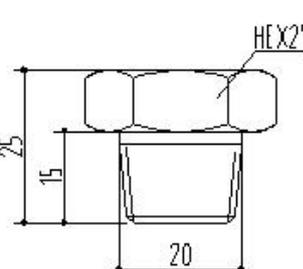
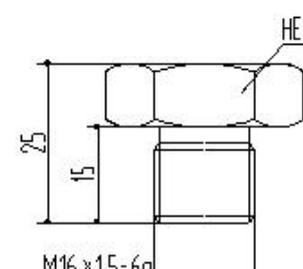


Installation method

Nozzle clogging may occur in liquids containing particles. Vertical mounting of the pressure transmitter can minimize this risk. This is because fluid flow happens only during initial startup, 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 the response time is small. Even if the viscosity reaches 100 cSt, the response time will not exceed 4 ms.

Pressure connection

Thread code	C1: M20×1.5-6g	C2: G1/2	C3: G1/4
Dimension in mm			
Recommended torque	15~25Nm	15~25Nm	15~25Nm
Thread code	C7: NPT1/2	C22: M16×1.5	
Dimension in mm			-
Recommended torque	15~25Nm	15~25Nm	

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

Pressure range selection

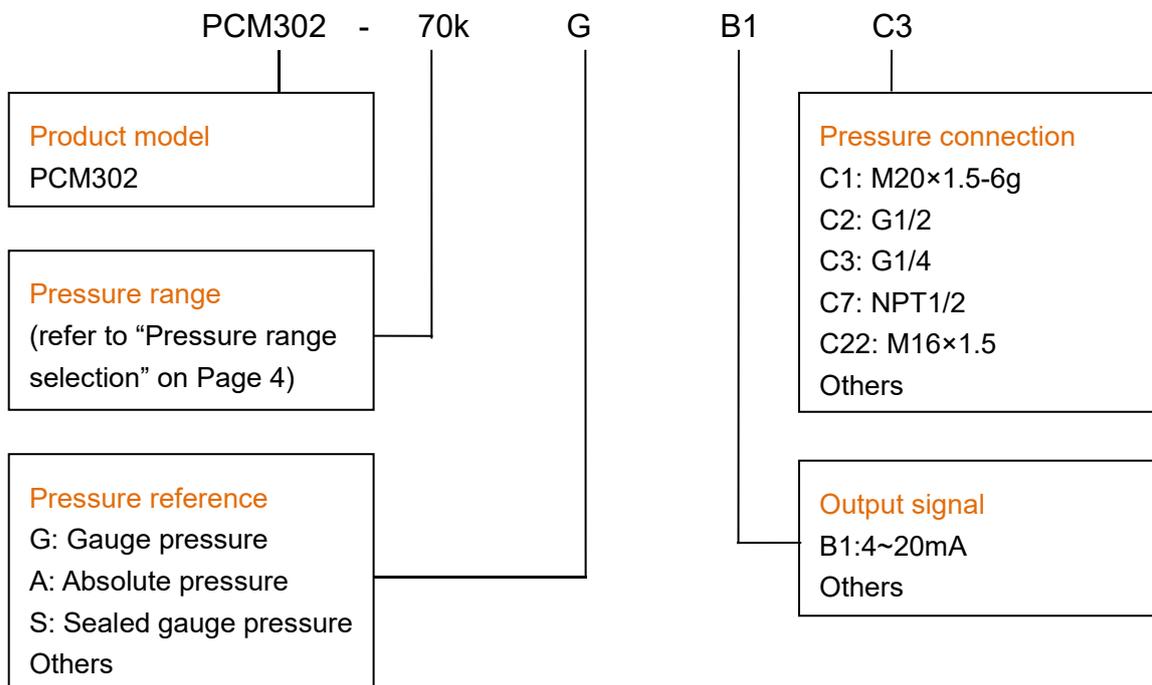
Pressure range code	Pressure reference	Pressure range	Overload pressure	Note
35k	G	0~35kPa	200%FS	
70k	G	0~70kPa	200%FS	
100k	G, A	0~100kPa	200%FS	
160k	G	0~160kPa	200%FS	
250k	G, A	0~250kPa	200%FS	
400k	G	0~400MPa	200%FS	
600k	G, A	0~600MPa	200%FS	
1M	G, S, A	0~1MPa	150%FS	
1.6M	S	0~1.6MPa	150%FS	
2.5M	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, 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

The product model is PCM302, 70k: pressure range 0~70kPa, G: Gauge pressure, B1: power supply 12~36V, output signal 4~20mA, C3: pressure connection G1/4.

Ordering tips

- 1 Ensure the measured medium is compatible with the contacting part of the product.
- 2 For special requirements on the product's appearance and performance parameters, customization is available.

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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