

PCM300T High Temperature Pressure Transmitter

Features

- SS316L isolation diaphragm structure
- Imported high-temperature-resistant chip
- Applicable to a wide range of medium temperatures
- Strong anti-interference, good long-term stability
- Directly contacting the measured high temperature medium, and improving the pressure response frequency
- Providing ample pressure ranges for low pressure, moderate pressure, and high pressure
- Anti-vibration, shock resistance, and corrosion resistance

Applications and industries

- Process control
- Aerospace
- Chemical product and chemical industry
- Servo valve and transmission

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 PCM300T High Temperature Pressure Transmitter adopts the high-temperature resistant pressure sensor as the signal measuring element, and through the heat dissipation structure of the transmitter, the measured medium pressure is transmitted to the sensor; the high-precision signal processing circuit is located in the stainless steel housing, and transforms the sensor's output signal into the standard output signal.

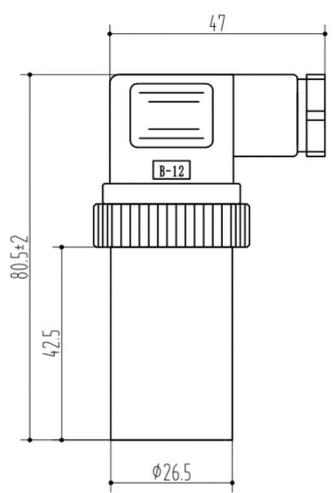
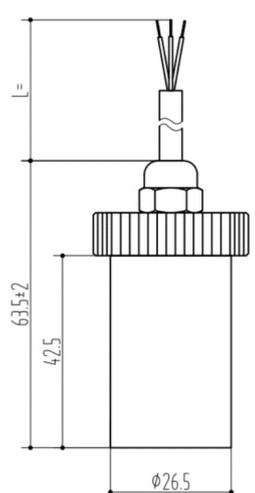
Notes:

- 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.

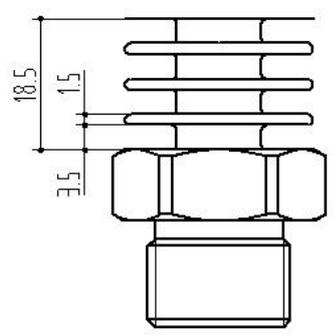
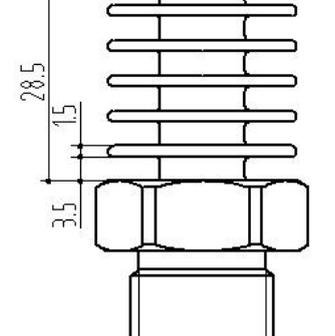
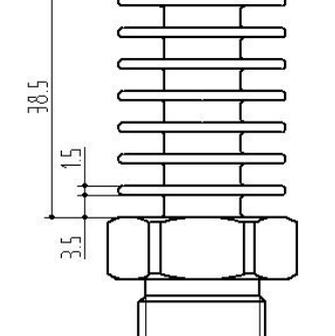
Performance parameters	
Pressure range	-100kPa...0~35kPa...100MPa
Pressure reference	Gauge pressure Absolute pressure Sealed gauge pressure
Accuracy	0.5%FS
Hysteresis	0.1%FS
Repeatability	0.1%FS
Temperature drift	35kPa: $\pm 2\%$ FS (0°C~60°C)
	Other: $\pm 1.5\%$ FS (-20°C~85°C)
Response time	$\leq 1\text{ms}$ (Up to 90%FS)
Overload pressure	Please refer to the "pressure range selection" on page 5
Durability	$\geq 10 \times 10^6$ pressure cycles
Ambient temperature	-20°C~85°C
Medium temp.	-30°C~105°C
Storage temp.	-40°C~125°C
EMC	Immunity: IEC 61000-6-2 Radiation: IEC 61000-6-3
Insulation resistance	$\geq 100\text{M}\Omega/250\text{VDC}$ (200M $\Omega/500\text{VDC}$)
Anti-vibration performance	Sine curve: 20g, 25Hz~2kHz; IEC 60068-2-6
	Random: 7.5grms, 5Hz~1kHz; IEC 60068-2-64
Shock resistance	Shock: 200g/1ms; IEC 60068-2-27
	Free fall: 1m; IEC 60068-2-32
Protection grade	IP65
Medium compatibility	All kinds of media compatible with SS316L
Hexnut	HEX27
Ex-proof grade	Intrinsic safety explosion-proof Exia II CT6 (only for 4~20mA)
Cooling fan	3 pieces, 5 pieces, 7 pieces
Net weight	220~360g

Performance parameters						
Code	B1	B3	B2	B7	B12	B6
Output	4~20mA	0~5V	1~5V	0~10V	1~10V	0.5~4.5V R/M
Supply	12~30VDC					5VDC

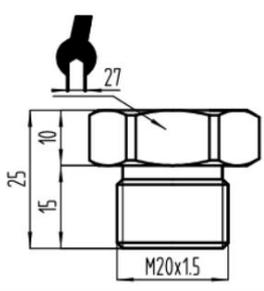
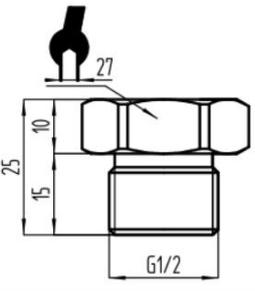
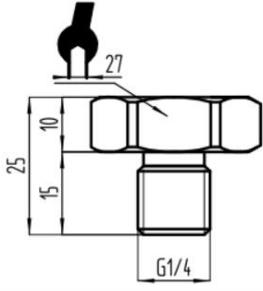
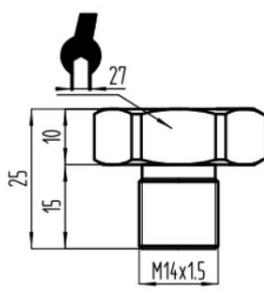
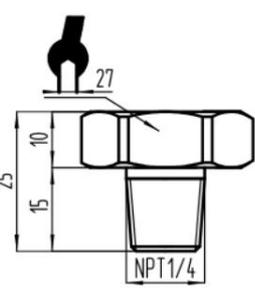
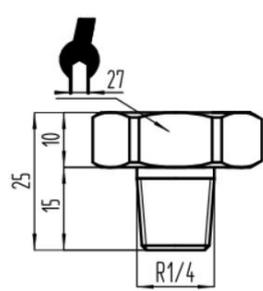
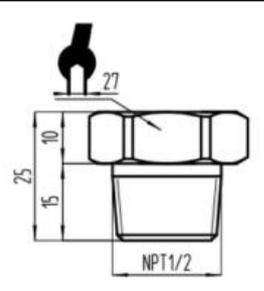
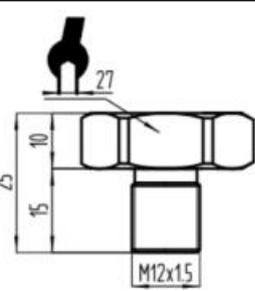
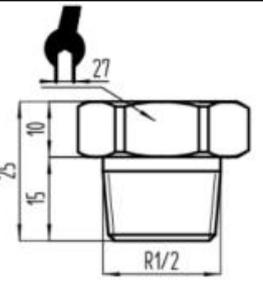
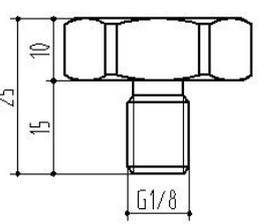
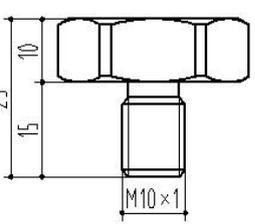
Electrical connection and connection mode

Code	J5: DIN43650	J3H: Hirschmann with cable
Dimension In mm		
Protection grade	IP65	
Connection mode (2-wire current)	Pin 1: Supply+ (red wire) Pin 2: Iout (green wire)	red wire Supply+ green wire Iout
Connection mode (3-wire voltage)	Pin 1: Supply+ (red wire) Pin 2: Ground (green wire) Pin 3: voltage output (yellow wire)	red wire Supply+ green wire Ground Yellow wire Voltage output

Cooling fan

Cooling fan code	T3: 3 pieces	T5: 5 pieces	T5: 7 pieces
Dimension In mm			
Cooling fan selection	Medium temperature ≤ 150 °C	150 °C < Medium temperature ≤ 250 °C	250 °C < Medium temperature ≤ 350 °C

Note: For the cooling fan selection, please consider the on-site ventilation environment.

Thread code	C1: M20×1.5	C2: G1/2	C3: G1/4
Dimension In mm			
Recommended torque	15~25Nm	15~25Nm	15~25Nm
Thread code	C4: M14×1.5	C5: NPT1/4	C6: R1/4
Dimension In mm			
Recommended torque	15~25Nm	15~25Nm	15~25Nm
Thread code	C7: NPT1/2	C8: M12×1.5	C10: R1/2
Dimension In mm			
Recommended torque	15~25Nm	15~25Nm	15~25Nm
Thread code	C14: G1/8	C20: M10×1	
Dimension In mm			---
Recommended torque	15~25Nm	15~25Nm	

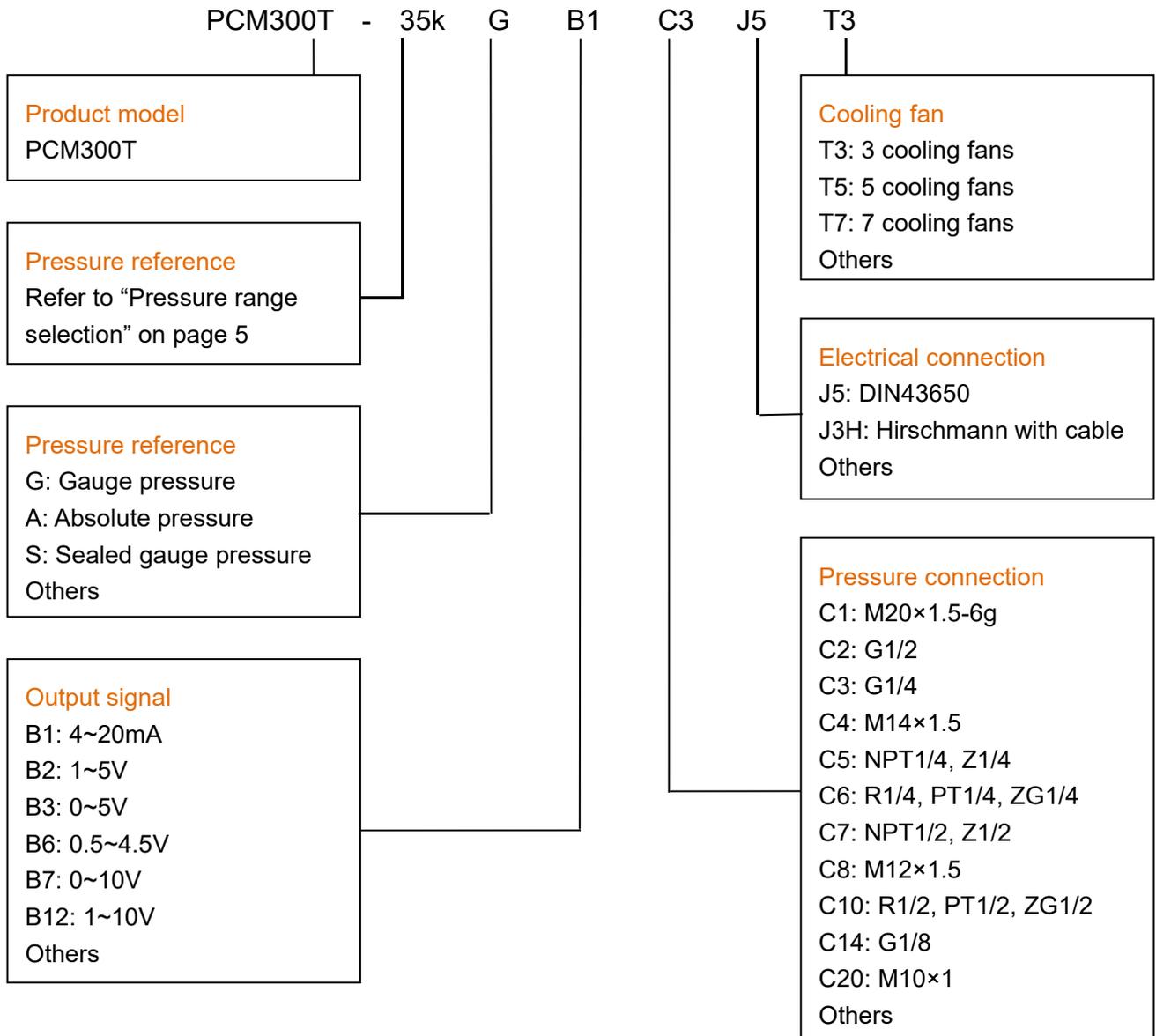
Note: The torque depends on all kinds of factors, such as the gasket material, kitting material, thread lubrication and pressure.

Pressure range selection					
Pressure range code	Pressure reference	Pressure range	Overload pressure	Burst pressure	Note
35k	G, A	0~35kPa	150%FS	500%FS	
70k	G	0~70kPa	150%FS	500%FS	
100k	G, A	0~100kPa	150%FS	300%FS	
250k	G, A	0~250kPa	150%FS	300%FS	
400k	G, A	0~400kPa	150%FS	300%FS	
600k	G, A	0~600kPa	150%FS	300%FS	
1M	G, A, S	0~1MPa	150%FS	300%FS	
1.6M	G, S	0~1.6MPa	150%FS	300%FS	
2.5M	G, S	0~2.5MPa	150%FS	300%FS	
4M	S	0~4MPa	150%FS	300%FS	
6M	S	0~6MPa	150%FS	300%FS	
10M	S	0~10MPa	150%FS	300%FS	
16M	S	0~16MPa	150%FS	300%FS	
25M	S	0~25MPa	150%FS	300%FS	
40M	S	0~40MPa	150%FS	300%FS	
60M	S	0~60MPa	150%FS	200%FS	
100M	S	0~100kPa	120%FS	150%FS	
(-100~0)k	N/A	-100~0kPa	150%FS	300%FS	
(0~-100)k	N/A	0~-100kPa	150%FS	300%FS	
NP100k	N/A	-100~100kPa	150%FS	300%FS	

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

Accessory			
Name	Appearance	Description	Material No.
LCD12 with display gauge		1. LCD display 2. Green backlight	100040100008
BS-6 digital display gauge		1. Digital tube display 2. Red backlight	100040101000
Hirschmann plug made in China		Made in China	100040301005
Imported Hirschmann plug		Imported	100040301013

How to order



Example: PCM300T-35kGB1C3J5T3

The product model is PCM300T, 35k: pressure range 0~35kPa, G: pressure reference gauge pressure, B1: output signal 4~20mA, C3: pressure connection G1/4, J5: electrical connector DIN43650, T3: 3 pieces cooling fans.



Ordering tips

- 1 Ensure the measured medium is compatible with the contacting part of the product when placing an order.
- 2 Customization is available for pressure ranges between 1~35kPa. (For ranges ≤ 6 kPa, an oil-free sensor should be selected, and the measured medium must be pure gas.)
- 3 Customization is available for ranges between 25~100MPa, where the application site involves extreme pressure impacts.

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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