

PCM300T High Temperature Pressure Transmitter

Features

- SS316L diaphragm structure
- Using the imported high temperature resistant chip
- Applicable to wide medium temperature range
- Strong anti-interference, good long-term stability
- Directly contacting with the measured high temperature medium, and improving the pressure response frequency
- Providing ample pressure ranges for low pressure, medium 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

PCM300T High Temperature Pressure Transmitter adopts the high temperature resistant pressure sensor as the signal measuring element, and through the heat dissipation structure for 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 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.

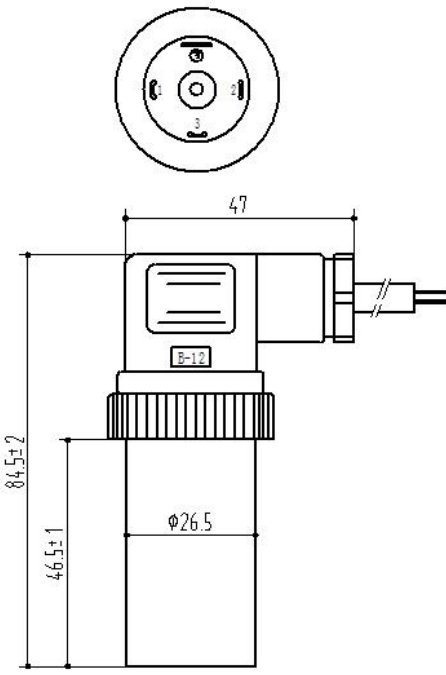
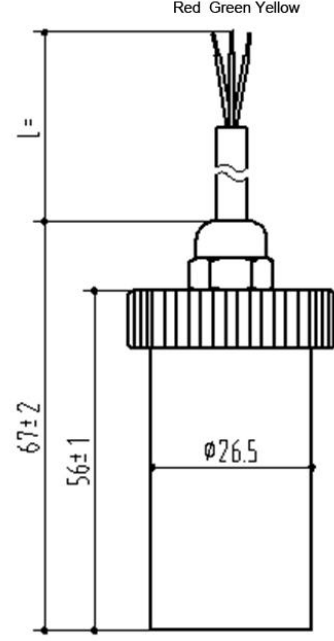
Performance parameters

Pressure range	-100kPa...0~10kPa...60MPa
Pressure reference	Gauge pressure, Absolute pressure, Sealed gauge pressure
Supply & output	4~20mA, 0~5V, 1~5V, 0~10V, 1~10V (12~30VDC) 0.5~4.5V R/M(5VDC)
Accuracy	2%FS (pressure range -5~5kPa) 0.5%FS (the rest)
Hysteresis and repeatability	0.1%FS
Temperature drift	±1.5%FS(-20℃~85℃)
Response time	≤1ms (Up to 90%FS)
Overpressure	150%FS
Service life	≥10×10 ⁶ pressure cycles
Ambient temperature	-20℃~85℃
Medium temp.	-30℃~350℃
Storage temp.	-40℃~125℃

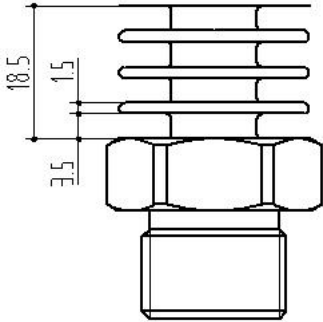
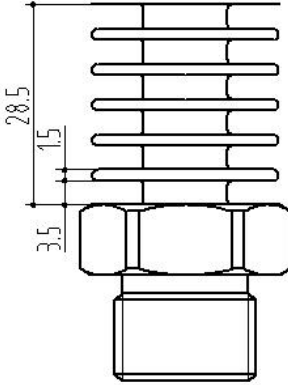
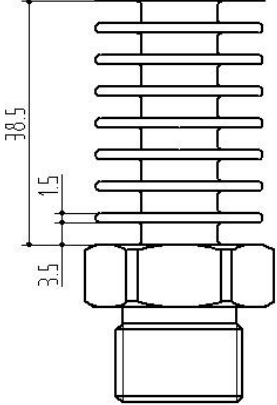
Performance parameters (cont.)

EMC-interference	IEC 61000-6-3
EMC-anti-interference	IEC 61000-6-2
Insulation resistance	$\geq 100\text{M}\Omega/250\text{VDC}$ ($200\text{M}\Omega/500\text{VDC}$)
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 falling body: 1m; IEC 60068-2-32
Protection grade	IP65
Medium compatibility	All kinds of media compatible with SS316L
Net weight	220~360g
Ex-proof grade	Intrinsically safe explosion-proof Exia II CT6 (only for 4~20mA)
Cooling fan	3 pieces, 5 pieces, 7 pieces
Hexahedral size	HEX27

Electrical connection & wiring mode

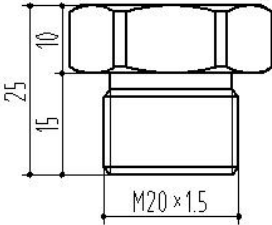
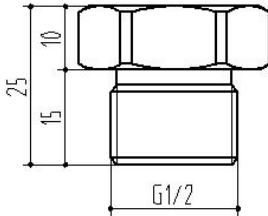
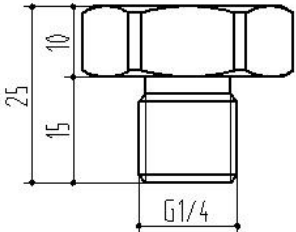
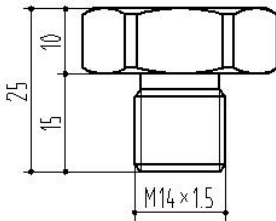
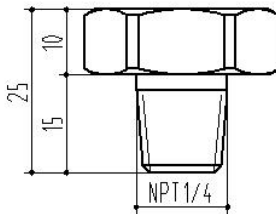
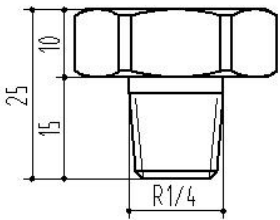
Connector code	J5: DIN43650	J15: DIN43650 with cable
Dimension In mm		
Protection grade	IP65	IP65
Connection mode (2 wire current)	Pin 1: Power supply+ Pin 2: Current output	Red wire: Power supply+ Green wire: Current output
Connection mode (3 wire voltage)	Pin 1: Power supply+ Pin 2: Common-ground Pin 3: Voltage output	Red wire: Power supply+ Green wire: Common-ground Yellow wire: Voltage output

Cooling fan

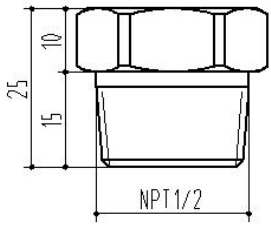
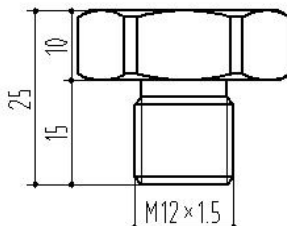
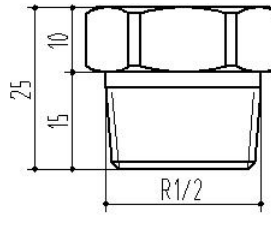
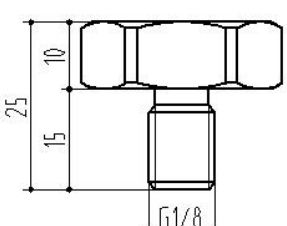
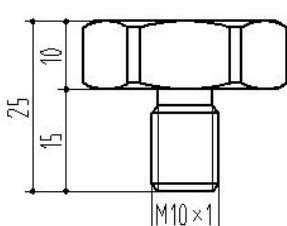
Cooling fan code	T3: 3 pieces	T5: 5 pieces	T5: 7 pieces
Dimension In mm			
Cooling fan selection	Medium temperature ≤ 150°C	150°C < Medium temperature ≤ 250°C	250°C < Medium temperature ≤ 350°C

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

Pressure connection

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

Pressure connection (cont.)

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 gasket material, kitting material, thread lubrication and pressure.

Pressure range selection

Pressure range code	Pressure reference	Pressure range	Overpressure	Burst pressure	Remark
1k	G	0~1kPa	200%FS	600%FS	Note 2
2k	G	0~2kPa	200%FS	600%FS	Note 2
5k	G	0~5kPa	200%FS	500%FS	Note 2
7k	G	0~7kPa	200%FS	500%FS	
10k	G	0~10kPa	200%FS	500%FS	
20k	G	0~20kPa	200%FS	500%FS	
35k	G	0~35kPa	200%FS	500%FS	
70k	G	0~70kPa	200%FS	500%FS	
100k	G	0~100kPa	150%FS	300%FS	
160k	G	0~160kPa	150%FS	300%FS	
250k	G	0~250kPa	150%FS	300%FS	
400k	G	0~400kPa	150%FS	300%FS	
600k	G	0~600kPa	150%FS	300%FS	
1M	G	0~1MPa	150%FS	300%FS	

Pressure range selection (cont.)

Pressure range code	Pressure reference	Pressure range	Overpressure	Burst pressure	Remark
1.6M	G	0~1.6MPa	150%FS	300%FS	
2.5M	G	0~2.5MPa	150%FS	300%FS	
35k	A	0~35kPa	150%FS	500%FS	
100k	A	0~100kPa	150%FS	300%FS	
160k	A	0~160kPa	150%FS	300%FS	
250k	A	0~250kPa	150%FS	300%FS	
400k	A	0~400kPa	150%FS	300%FS	
600k	A	0~600kPa	150%FS	300%FS	
1M	A	0~1MPa	150%FS	300%FS	
1.6M	A	0~1.6MPa	150%FS	300%FS	
2.5M	A	0~2.5MPa	150%FS	300%FS	
4M	A	0~4MPa	150%FS	300%FS	
1M	S	0~1MPa	150%FS	300%FS	
1.6M	S	0~1.6MPa	150%FS	300%FS	
2.5M	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	
N1k	Omission	-100~0kPa	150%FS	300%FS	
N2k	Omission	0~-100kPa	150%FS	300%FS	
N3k	Omission	-100~100kPa	150%FS	300%FS	
N5M	Omission	-100~250kPa	150%FS	300%FS	
N7M	Omission	-0.1~0.6MPa	150%FS	300%FS	
N8M	Omission	-0.1~1MPa	150%FS	300%FS	
N9M	Omission	-0.1~1.6MPa	150%FS	300%FS	
N10M	Omission	-0.1~2.5MPa	150%FS	300%FS	

Note 1: G stands for gauge pressure, A, absolute pressure, S, sealed gauge pressure.

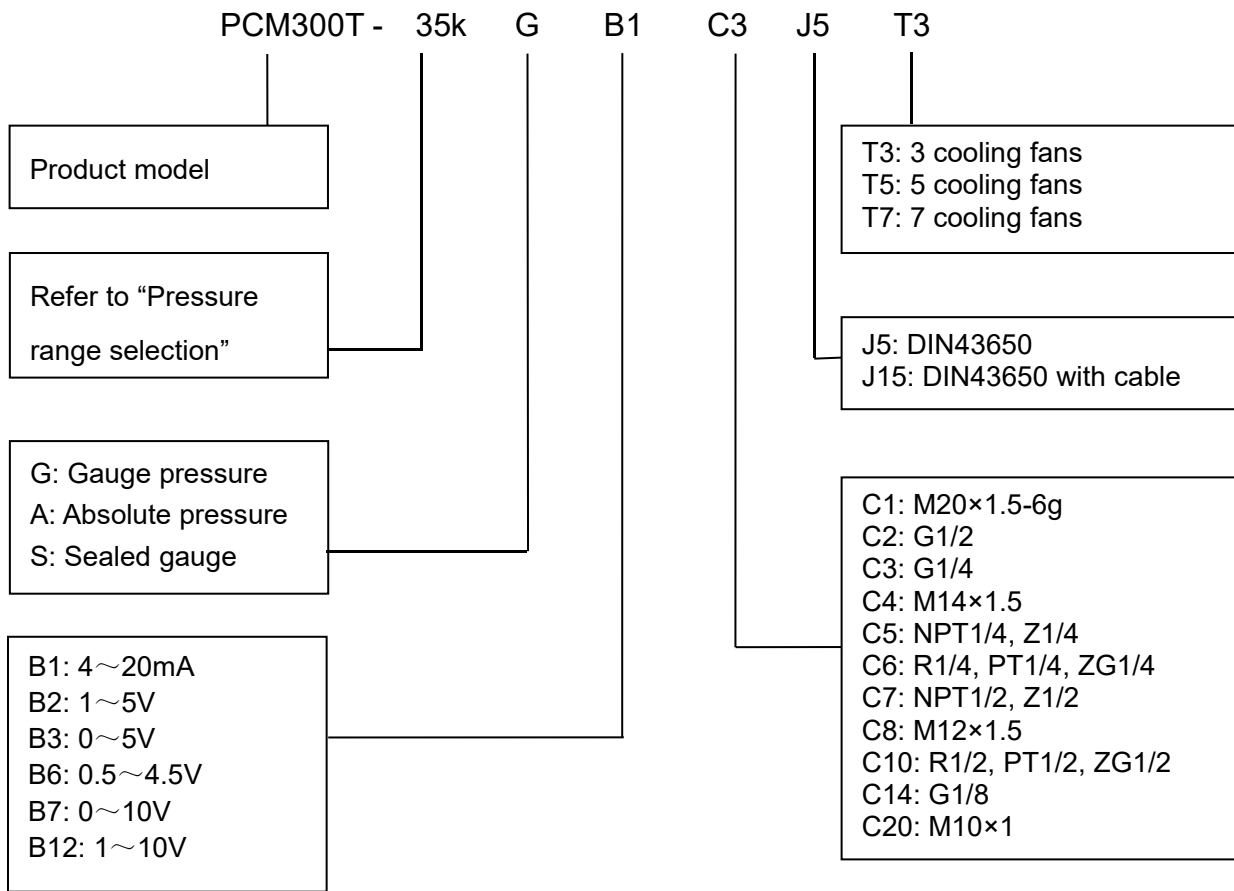
Note 2: Select the non-oil filling pressure sensor, and the measurement medium must be clean gas.

Accessory

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

Accessory (cont.)

Name	Appearance	Description	Material No.
Imported Hirschmann plug		Imported	100040301013
Hirschmann gauge outfit		HPT-14-LCD	100040101001



Example: PCM300T-35kGB1C3J5T3

Refer to product model PCM300T, pressure range 0~35kPa, pressure reference gauge pressure, output signal 4~20mA, pressure connection G1/4, electrical connector DIN43650, three cooling fans.

Ordering tips

Please ensure the compatibility between the measured medium and the contacting part of the product when placing an order.

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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