

# PCM300T High Temperature Pressure Transmitter

## Features

- SS316L isolation diaphragm structure
- Imported high temperature resistant chip employed
- 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, 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

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

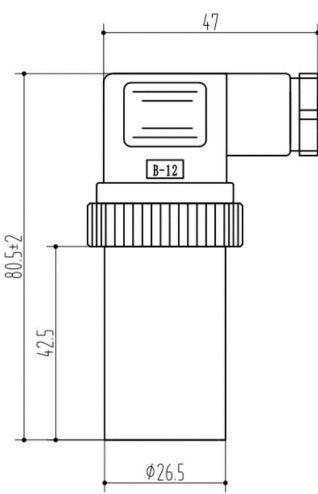
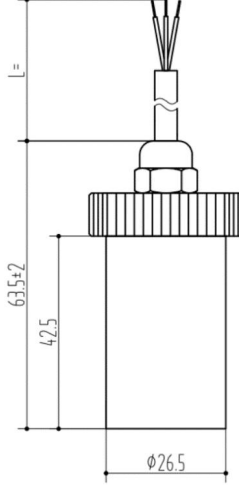
Pressure range	-100kPa...0~35kPa...60MPa
Pressure reference	Gauge pressure   Absolute pressure   Sealed gauge pressure
Accuracy	0.5%FS
Hysteresis	0.1%FS
Repeatability	0.1%FS
Temperature drift	35kPa: $\pm 2\%FS$ ( $0^{\circ}C \sim 60^{\circ}C$ )
	Other: $\pm 1.5\%FS$ ( $-20^{\circ}C \sim 85^{\circ}C$ )
Response time	$\leq 2ms$ (Up to 90%FS)
Overload pressure	Please refer to the pressure range selection form
Durability	$10^6$ 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	≥100MΩ/250VDC
Anti-vibration performance	Sine curve: 20g, 25Hz~2kHz; IEC 60068-2-6
	Random: 7.5grms, 5Hz~1kHz; IEC 60068-2-64
Shock resistance	Shock: 20g/1ms; IEC 60068-2-27
	Free fall: 1m; IEC 60068-2-32
Protection grade	IP65
Medium compatibility	All kinds of medium compatible with SS316L
Hexnut	HEX27
Ex-proof grade	Intrinsically safe explosion-proof Exia II CT6 (only for 4~20mA)
Cooling fan	3 pieces, 5 pieces, 7 pieces
Net weight	220~360g

### Performance parameters

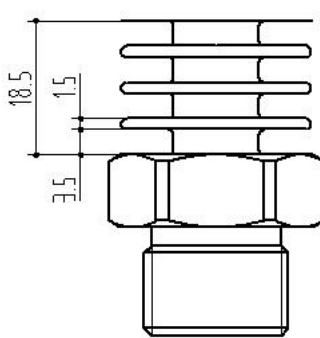
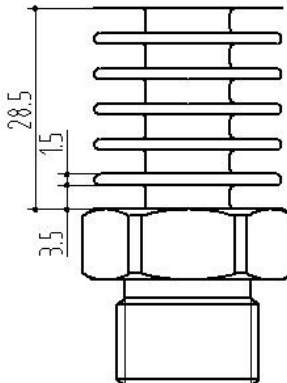
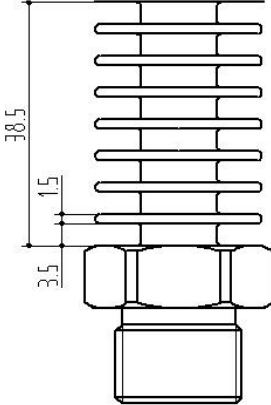
Code	B1	B3	B2	B7	B12	B6
Output	4~20mA	0~5V	1~5V	0~10V	1~10V	0.5~4.5V R/M
Supply	12~30VDC					5VDC

### Electrical connection and connection mode

Electrical connection	J5: Hirschmann DIN43650	J3H: Hirschmann with cable
Dimension In mm		
Protection grade	IP 65	
Connection mode (2 wire current)	Pin 1: V+ (red wire) Pin 2: Iout (green wire)	red wire    V+ green wire    Iout

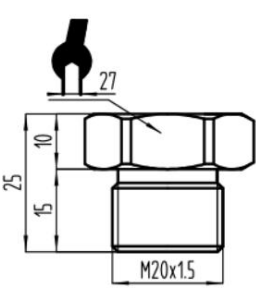
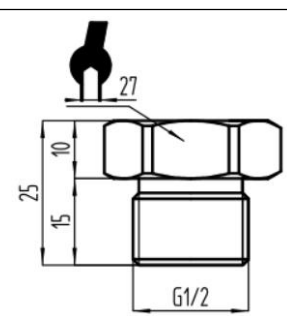
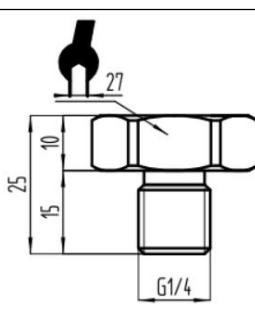
Connection mode (3 wire voltage)	Pin 1: V+ (red wire) Pin 2: Ground (green wire) Pin 3: voltage output (yellow wire)	Red wire V+ Green wire Ground Yellow wire Voltage output
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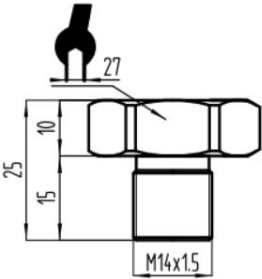
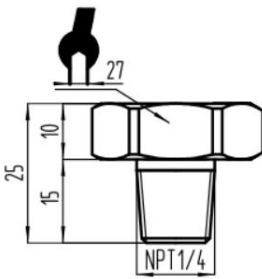
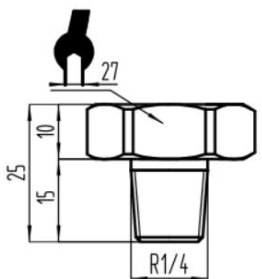
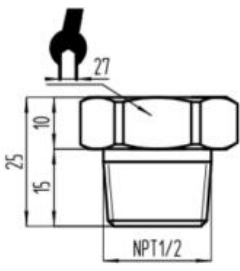
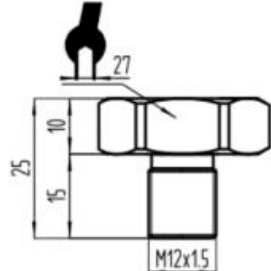
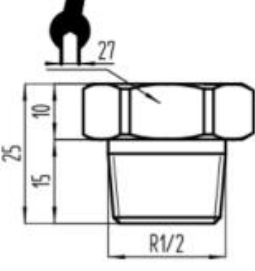
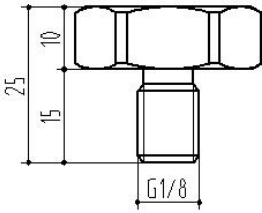
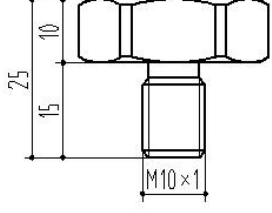
### Cooling fan

Cooling fan code	T3: 3 pieces	T5: 5 pieces	T5: 7 pieces
Dimension In mm			
Cooling fan selection	Medium temperature $\leq 150^{\circ}\text{C}$	$150^{\circ}\text{C} < \text{Medium temperature} \leq 250^{\circ}\text{C}$	$250^{\circ}\text{C} < \text{Medium temperature} \leq 350^{\circ}\text{C}$

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
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

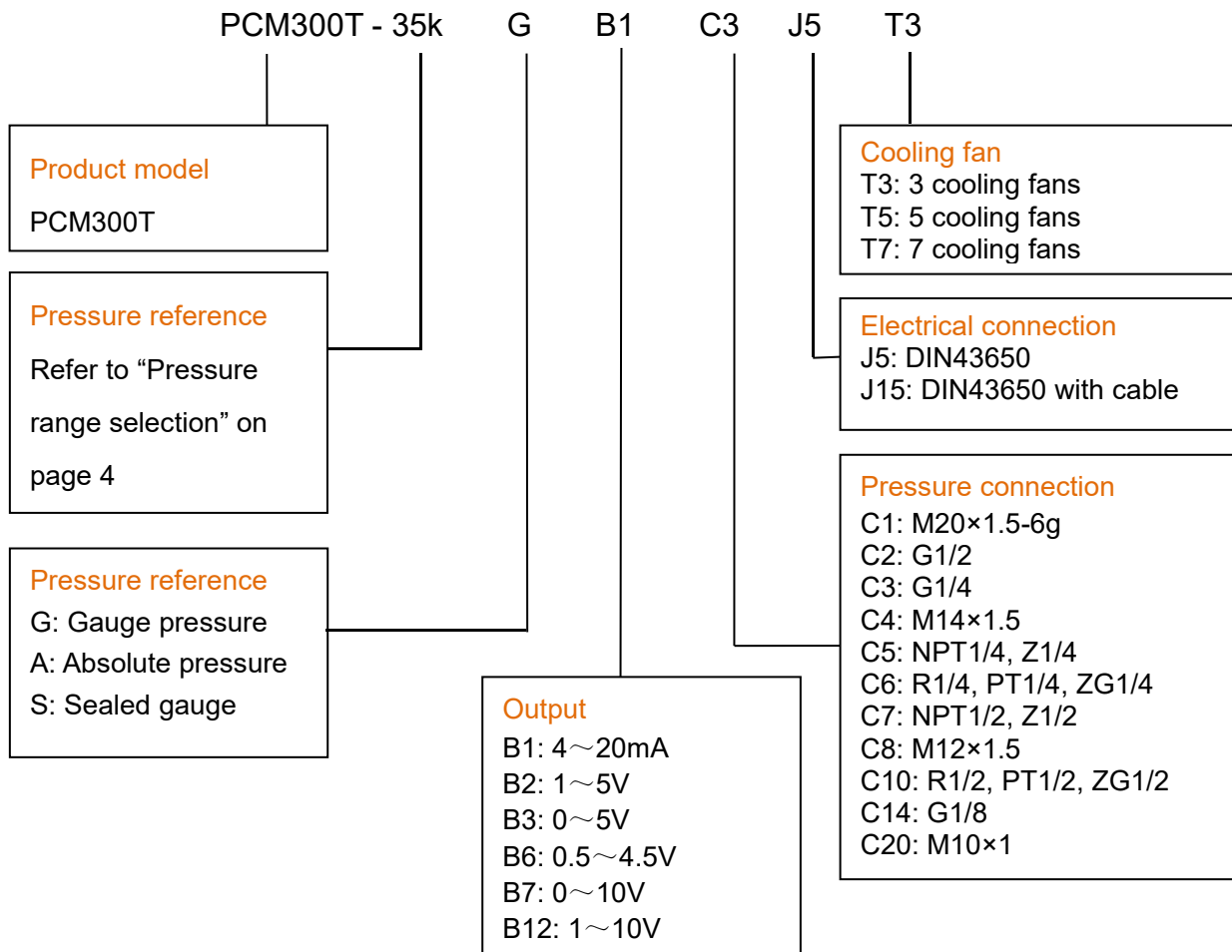
Pressure range code	Pressure reference	Pressure range	Overload pressure	Burst pressure	Remark
35k	G、A	0~35kPa	150%FS	500%FS	
70k	G	0~70kPa	150%FS	500%FS	
100k	G、A	0~100kPa	150%FS	300%FS	
250k	G、A	0~250kPa	150%FS	300%FS	
400k	G、A	0~400kPa	150%FS	300%FS	
600k	G、A	0~600kPa	150%FS	300%FS	
1M	G、A、S	0~1MPa	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	

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

### Accessory

Name	Appearance	Description	Material No.
LCD12 with display gauge		<ol style="list-style-type: none"> <li>LCD display</li> <li>Green backlight</li> </ol>	100040100008
BS-6 digital display gauge		<ol style="list-style-type: none"> <li>Digital tube display</li> <li>Red backlight</li> </ol>	100040101000
Hirschmann plug made in China		Made in China	100040301005
Imported Hirschmann plug		Imported	100040301013



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. Please ensure the compatibility between the measured medium and the contacting part of the product when placing an order.
2. The measuring range between 1kPa ~ 35kPa could be customized (Pressure range≤6kPa, choose the pressure sensor without oil filling, the measuring medium must be pure gas)

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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