

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℃

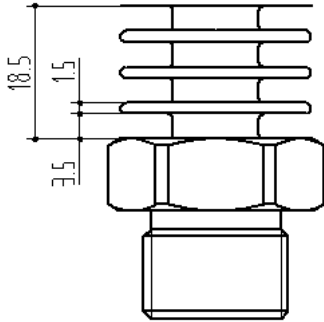
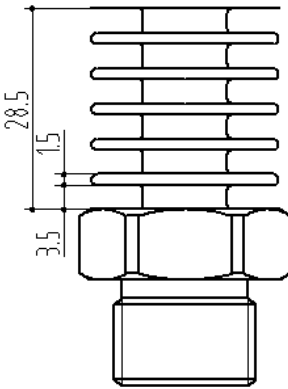
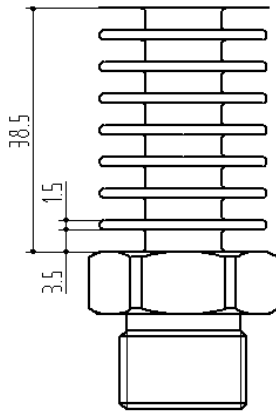


Performance parameters (cont.)

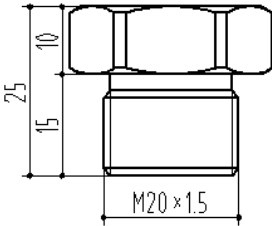
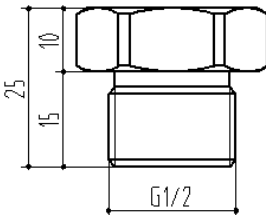
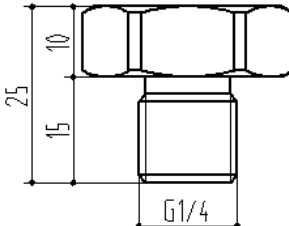
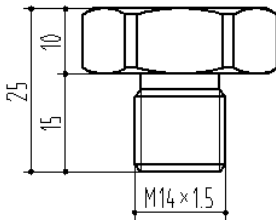
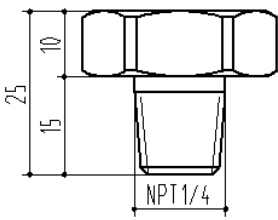
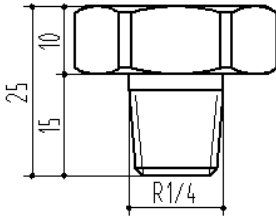
EMC-interference	IEC 61000-6-3
EMC-anti-interference	IEC 61000-6-2
Insulation resistance	$\geq 100\text{M}\Omega/250\text{VDC}$ ($200\text{M}\Omega/500\text{VDC}$)
Anti-vibration performance	Sine curve: 20g, 25Hz~2kHz; IEC 60068-2-6 Random: 7.5grms, 5Hz~1kHz; IEC 60068-2-64
Shock resistance	Shock: 200g/1ms; 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

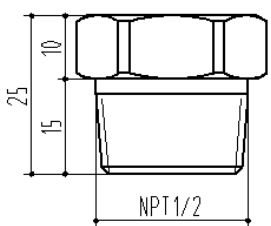
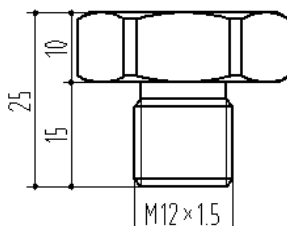
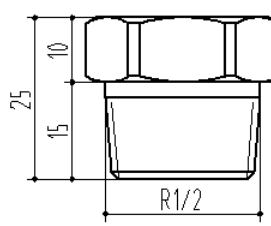
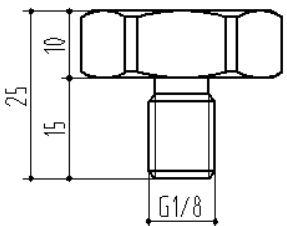
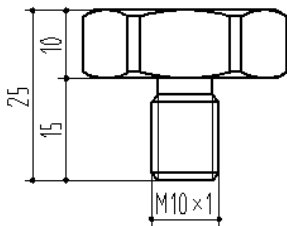
Connector code	J5: DIN43650	J15: DIN43650 with cable
Dimension In mm		
Protection grade	IP65	IP65
Connection mode (2 wire current)	Pin 1: Power supply+ Pin 2: Current output	Red wire: Power supply+ Green wire: Current output
Connection mode (3 wire voltage)	Pin 1: Power supply+ Pin 2: Common-ground Pin 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 $\leq 150^{\circ}\text{C}$	$150^{\circ}\text{C} < \text{Medium}$ 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

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	

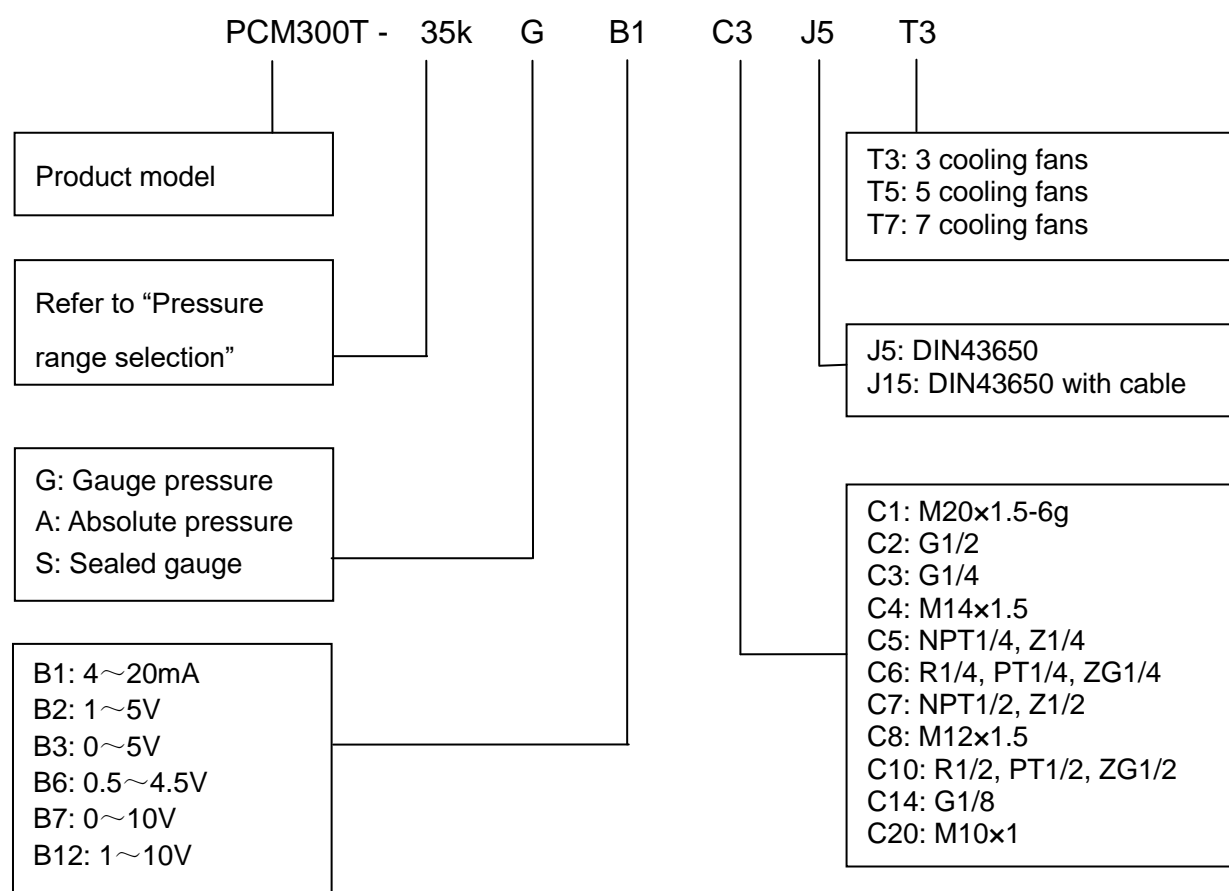
Pressure range selection (cont.)

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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PCM303 Universal Pressure Transmitter

Features

- SS316L diaphragm structure
- High accuracy, all stainless steel structure
- Small size and light weight
- Strong anti-interference, good long-term stability
- Diversified formal structures, easy installation and use
- Wide pressure range, can measure the absolute pressure, gauge pressure and sealed gauge pressure
- Anti-vibration, shock resistance
- Zero, full span adjustable

Applications and industries

- Process control
- Aerospace
- Automobile and medical equipment
- Pipeline system

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

PCM303 economic pressure transmitter adopts diffused silicon pressure sensor as pressure sensing element. Through internal ASIC, the millivolt signal of sensor is transmitted into standard current signal. PCM303 can be directly connected with computer interface card, control instruments, intelligent meters or PLC etc. conveniently. Long-distance transmission can use current output. PCM303 features with small size, light weight, all stainless steel sealing structure and ability to work in corrosive environments. The product is easy to install and has extremely high vibration and shock resistance. PCM303 is widely used in process control, aviation, aerospace, automobile, medical equipment, HVAC and other fields.

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: $\pm 2\%FS(0^{\circ}C \sim 60^{\circ}C)$ Other ranges: $\pm 1.5\%FS(-20^{\circ}C \sim 85^{\circ}C)$

Performance parameters (cont.)	
Response time	≤1ms (Up to 90%FS)
Overpressure	Refer to Table for Pressure Range Selection
Service life	≥10×10 ⁶ pressure cycles
Ambient temperature	-20℃～85℃
Medium temp.	-30℃～105℃
Storage temp.	-40℃～125℃
EMC	Immunity: IEC 61000-6-2, Radiation: IEC 61000-6-3
Insulation resistance	≥100MΩ/500VDC(200MΩ/250VDC)
Vibration resistance	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
Hexagon	HEX27
Ex-proof grade	Intrinsically safe explosion-proof Exia II CT6 (only for 4～20mA)
Net weight	150～180g

Output and power supply

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

Electrical connection & wiring mode

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

Application of damper

Applications

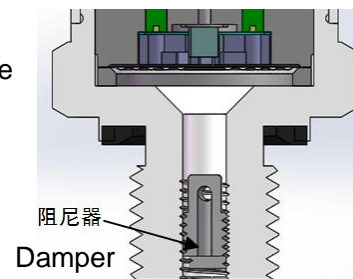
Cavitation, liquid hammer and pressure peak may occur in air or fluid systems with varying flow rates, such as the rapid closing of the valve or the start and stop of the pump.

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).

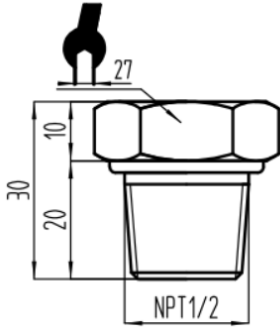
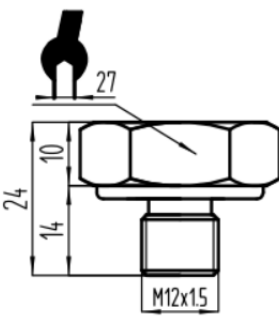
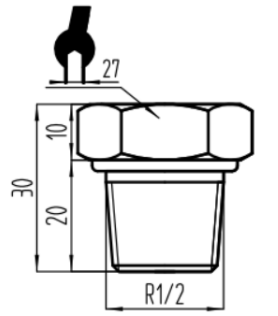
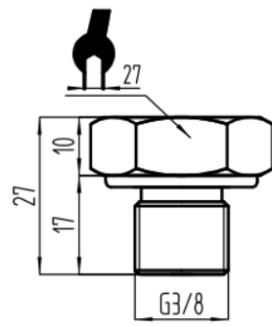
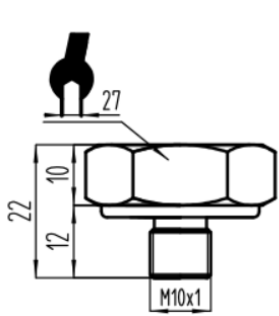
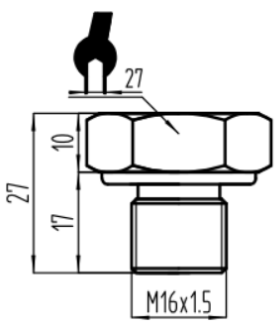
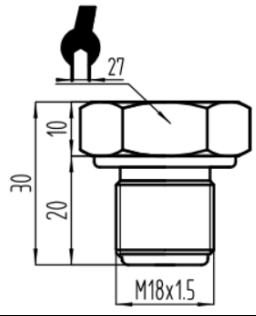
The effect of medium viscosity on response time is small. Even if the viscosity reaches 100 CST, the response time will not exceed 4ms.



Pressure connection

Thread code	C1: M20x1.5-6g	C2: G1/2	C3: G1/4
Dimension In mm			
Recommended torque	15~25Nm	15~25Nm	15~25Nm
Thread code	C4: M14x1.5	C5: NPT1/4, Z1/4	C6: R1/4, PT1/4, ZG1/4
Dimension In mm			
Recommended torque	15~25Nm	15~25Nm	15~25Nm

Pressure connection (cont.)

Thread code	C7: NPT1/2, Z1/2	C8: M12x1.5	C10: R1/2, PT1/2, ZG1/2
Dimension In mm			
Recommended torque	15~25Nm	15~25Nm	15~25Nm
Thread code	C15: G3/8	C20: M10x1	C22: M16x1.5
Dimension In mm			
Recommended torque	15~25Nm	15~25Nm	15~25Nm
Thread code	C23: M18x1.5		
Dimension In mm			
Recommended torque	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	NOTES
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	0~100MPa	120%FS	150%FS	
(-100~0)k	Omission	-100~0kPa	150%FS	300%FS	
(0~-100)k	Omission	0~-100kPa	150%FS	300%FS	
NP100k	Omission	-100~100kPa	150%FS	300%FS	

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

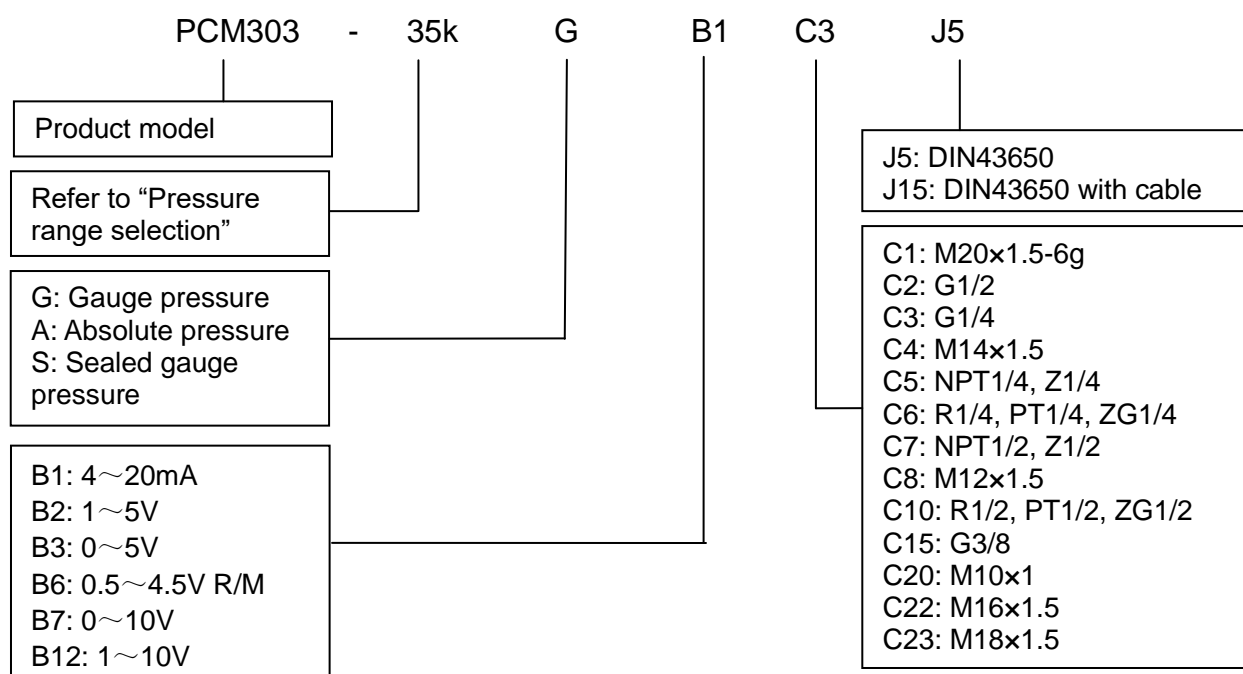
Note 2: Select the non-oil filling pressure sensor, and the measurement medium must be clean gas.

Accessory			
Name	Appearance	Description	Material No.
M4 damper		Refer to "Application of damper"	100030100027
LCD12 display gauge		1. LCD display 2. Green backlight	100040100008

Accessory (cont.)

BS-6 digital display gauge		1. Nixie tube display 2. Red backlight	100040101000
Hirschmann plug made in China		Made in China	100040301005
Imported Hirschmann plug		Imported	100040301013

How to order



Example: PCM303-35kGB1C3J5

Refer to product model PCM303, pressure range 0~35kPa, pressure reference gauge pressure, output signal 4~20mA, pressure connection G1/4, electrical connector DIN43650.



Ordering tips

1. Please ensure the compatibility between the measured medium and the contacting part of the product when placing an order.
2. For the pressure range between 1~35kPa, the product can be customized.
3. For the pressure range between 25~100MPa, with the superstrong pressure impact for the application on site, the product can be customized.

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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PCM330 High Range Pressure Transmitter



Features

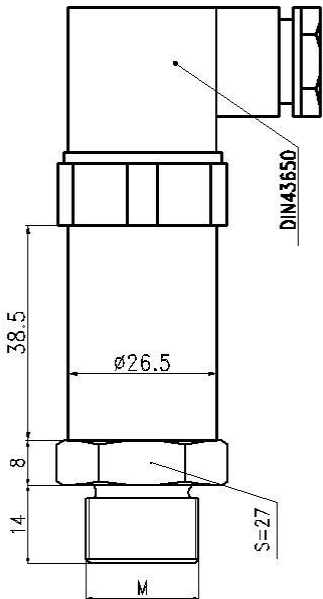
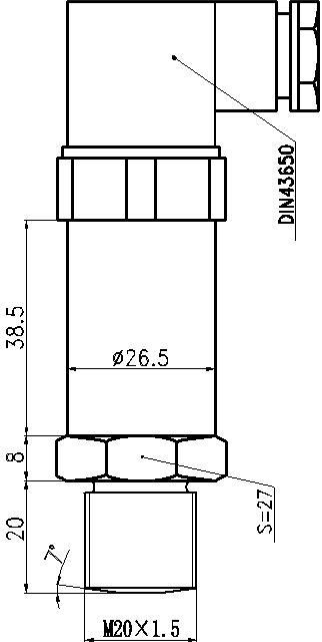
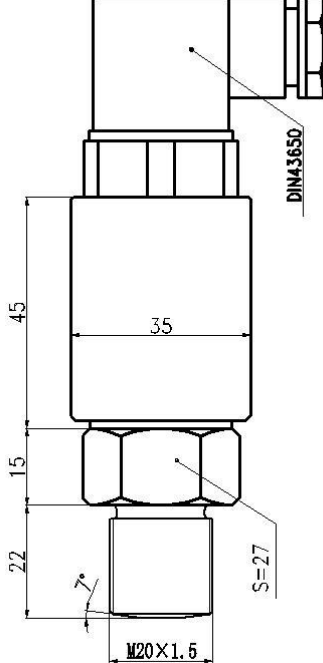
- Measuring diaphragm and pressure interface one-piece structure
- Thread interface USES 7 degrees of taper sealing surface
- Resistance to vibration, the instantaneous pressure impact resistance
- Can measure pressure up to 600MPa
- With German import plugs, IP65 standard seal

PCM330 high range pressure transmitter chooses high precision foil strain gauge as sensing element, has a unique integrated elastic structure, good stability and reliability. Signal processing circuit is located in the stainless steel casing, which has the circuit through strict aging process processing, at the same time also has a good linear compensation function. This product is mainly used for high pressure, super high pressure and impact pressure greatly.



Pressure range	
Pressure range	0~40...600MPa
Pressure reference	Gauge pressure
Overpressure	125%FS
Burst pressure	150%FS
Output signal	
Output	4 to 20mA 0 to 10V 1 to 5V 0 to 5V 4 to 20mA +HART
Specification	
Accuracy (linearity, repeatability and hysteresis)	±0.5%FS ±0.25%FS ±0.1%FS
Excitation	9~30VDC
Compensated temp.	0~70°C -20~85°C
Operating temp.	-40~85°C -40~120°C
Insulation resistance	≥500M Ω
Zero temp. coefficient	±0.2%FS/10°C
Span temp. coefficient	±0.2%FS/10°C
Load resistance for current loop	≥[(Vs-6.5V)/0.02A] Ω
Mechanical interface	M20×1.5; G1/4"; special thread can be customized
Electrical interface	DIN DIN with digital display Aviation Plug Spring Direct Polyurethane sheath 2088 etc. optional
Life time	≥5million times cycles
Long-term stability	≤±0.15%FS/Year

Electrical connection (DIN 43650)

40MPa≤R<100MPa	100MPa≤R≤350MPa	400MPa≤R≤600MPa
		
Threaded port is equipped with a buffer	7 degrees taper sealing	7 degrees taper sealing

Electrical connection

Cable outlet		Aviation Plug DIN43650		Gray Aviation Plug		
Current (2 wire)	Voltage (3 wire)	Current (2 wire)	Voltage (3 wire)	Current (2 wire)	Voltage (3 wire)	Voltage (3 wire)
Red: Power+ Black: Signal+	Red: Power+ Black: Ground Green: Signal+	Red (1): Power+ Black (2): Signal+	Red (1): Power+ Black (2): Ground Green (3): Signal+	Black (1): Signal+ Red (4): Power+	Black (1): Signal+ Green (3): Ground Red (4): Power+	Black (1): Signal+ White(2): -12V Green (3): Ground Red (4): +12V



How to order

PCM330	XX	XX	XX	XX	XX	XX
Pressure range Please write directly						Electrical connection C1: Cable outlet (please write the cable length) C2: DIN 43650 C3: Gray Aviation Plug
Pressure reference G: gauge pressure						
Excitation E1: 12V DC E2: 24V DC						Pressure connection A1: M20*1.5 A2: G1/2 A3: others (please specify)
Output signal S1: 4 to 20mA S2: 1 to 5V S3: 0 to 5V						

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PCM350 (WTR02) Flush Pressure Transmitter

Features

- 316L flush diaphragm structure adopted for pressure connection
- Sanitary, anti-fouling
- Wide pressure range, can measure absolute pressure, gauge pressure and sealed reference pressure
- Good seal, long-term stable work
- With cooling fans, excellent performance for high temperature medium application
- Optional output signal, can be customized

Applications

- Occasion with easy block, high sanitary requirement and convenient cleaning such as medicine and health care, food, liquor-making, dairy and drinks
- Environmental protection chemical coating, polyurethane equipment, paint detection system etc.

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.



Overview

PCM350 Sanitary Flush Pressure Transmitter adopts flush diaphragm to directly receive pressure signal, takes diffused silicon pressure sensor as sensitive element and uses standard silicone or olive oil as pressure transfer medium. With compact structure, corrosion resistance, vibration resistance and wide range temperature compensation, stainless steel 316L and specially welded flush isolation diaphragm are used for measurement end.

It prevents fouling due to its exposed diaphragm, which is especially applicable to measure viscous fluid pressure with sanitary requirements of health care and food industry, solving problems of fouling, block, cleaning and sanitation. It is also widely applicable to sanitary industries and occasions with fouling forming medium.

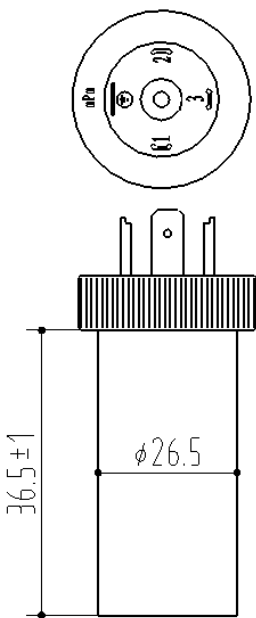
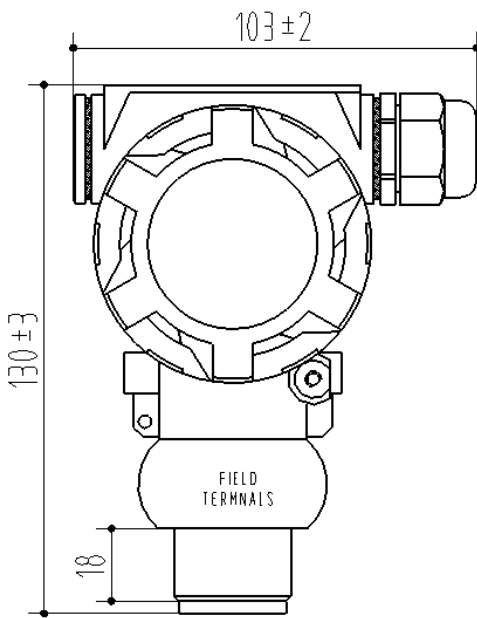
Notes:

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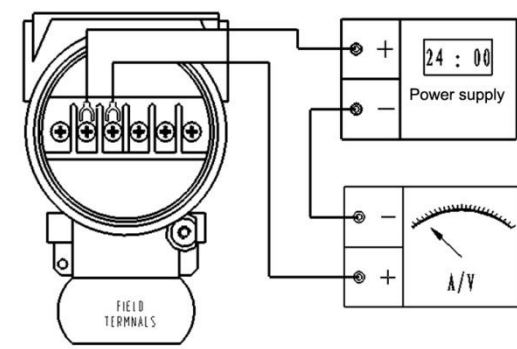
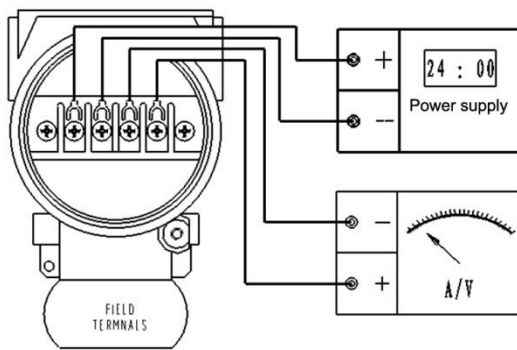
Performance parameters

Pressure range	-100kPa...0~10kPa...10MPa
Pressure reference	Gauge pressure, absolute pressure, sealed gauge pressure
Supply & output	4~20mA (12~30VDC) 0~5V, 1~5V, 0.5~4.5V, 0~10V (12~24VDC)
Accuracy	±0.5%FS
Hysteresis & repeatability	0.1%FS
Temperature drift	1.5%FS (@-20℃~85℃)
Response time	≤1ms (up to 90%FS)
Service life	≥10×10 ⁶ pressure cycles
Operating temp.	-20℃~85℃
Storage temp.	-40℃~85℃
Medium temp.	-40~85℃ (without cooling fans) -40~150℃ (with 3 cooling fans), -40℃~250℃ (with 5 cooling fans)
Insulation resistance	≥100MΩ /250VDC
Vibration resistance	Sine curve: 20g, 25Hz~2kHz; IEC 60068-2-6 Random: 7.5grms, 5Hz~1kHz; IEC 60068-2-64
Protection	IP65
Medium compatibility	All the media compatible with stainless steel 316L
Ex-proof	Exia II CT6

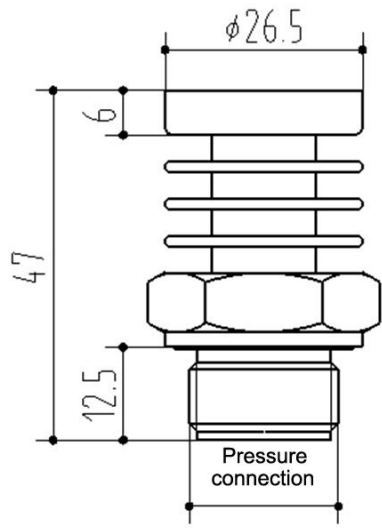
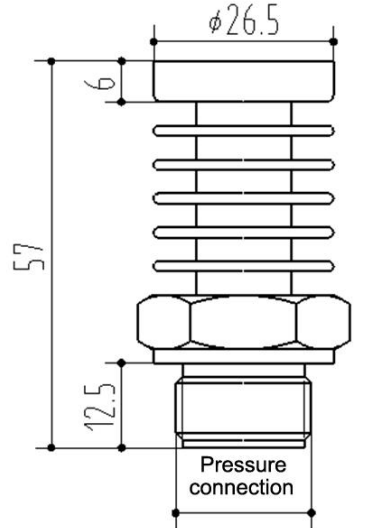
Electrical connection and wiring method

Connector code	J5: DIN43650	J1: 2088 housing
Dimension In mm		
Protection	IP65	IP65

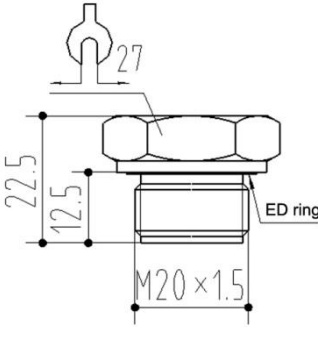
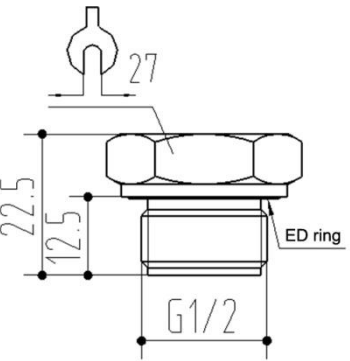
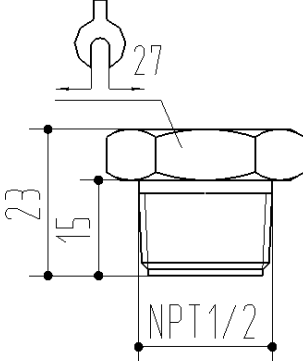
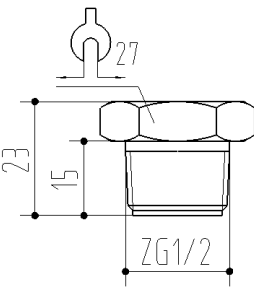
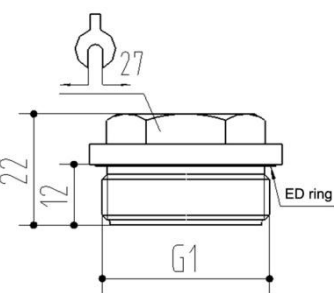
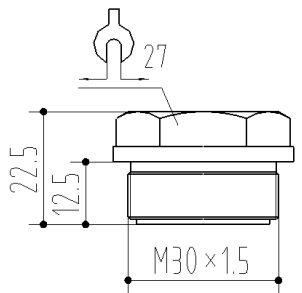
Electrical connection and wiring method (cont.)

<p>Connection mode (Current output)</p>	<p>Pin 1: Supply Pin 2: Current output</p>	
<p>Connection mode (Voltage output)</p>	<p>Pin 1: Supply Pin 2: GND Pin 3: Voltage output</p>	

Cooling fan design

Cooling fan code	T3: 3 cooling fans	T5: 5 cooling fans
<p>Dimension In mm</p>		
<p>Optional thread</p>	<p>M20×1.5-6g, G1/2, M30×1.5</p>	<p>M20×1.5-6g, G1/2</p>

Pressure connection

Thread code	C1: M20×1.5-6g	C2: G1/2	C7: NPT1/2, Z1/2
Dimension In mm			
Thread code	C10: R1/2, PT1/2, ZG1/2	C17: G1	C26: M30×1.5
Dimension In mm			

Note: 1. Recommended torque: 15~25N • m



2. Recommended torque depends on a number of factors such as gasket material, supporting material, thread lubrication and pressure.

Pressure range selection

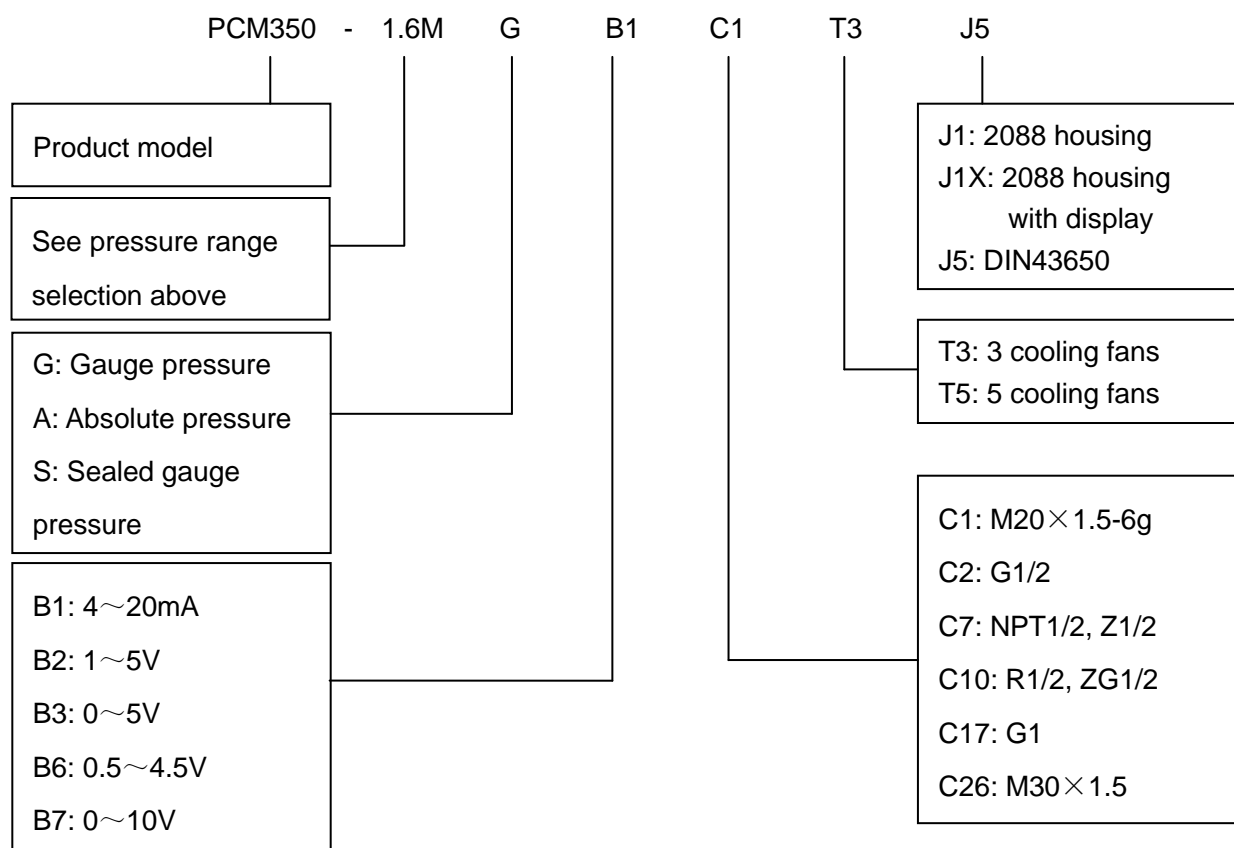
Code	Pressure reference	Pressure range	Overpressure	Burst pressure	Remark
10k	G	0~10kPa	300%FS	500%FS	
20k	G	0~20kPa	300%FS	500%FS	
35k	G	0~35kPa	300%FS	500%FS	
70k	G	0~70kPa	300%FS	500%FS	
100k	G, A	0~100kPa	200%FS	300%FS	
160k	G	0~160kPa	200%FS	300%FS	
250k	G	0~250kPa	200%FS	300%FS	
400k	G	0~400kPa	200%FS	300%FS	
600k	G	0~600kPa	200%FS	300%FS	
1M	G, S	0~1MPa	200%FS	300%FS	
1.6M	G, S	0~1.6MPa	200%FS	300%FS	
2.5M	G, S	0~2.5MPa	200%FS	300%FS	
6M	S	0~6MPa	150%FS	300%FS	
10M	S	0~10MPa	150%FS	300%FS	

Note: G-Gauge pressure, A-Absolute pressure, S-Sealed gauge pressure

Accessories

Name	Appearance	Description	Material no.
Domestic Hirschmann plug		Domestic (default)	100040301005
Imported Hirschmann plug		Totally imported	100040301013

How to order



Example: PCM350-1.6MGB1C1T3J5

Refer to product model PCM350, with pressure range 0~1.6MPa, gauge pressure, output 4~20mA, pressure connection M20×1.5, 3 cooling fans, electrical connection DIN43650.



Ordering tips

1. Please note the compatibility of wetted part with the measured medium during the selection.
2. If there are special requirements for product appearance and performance parameters, we can provide customization.

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PCM390 Universal Pressure Transmitter

Features

- Compact structure
- Digital circuit compensation
- Strong anti-interference, good long-term stability
- Small diameter, small size, easy to install and use
- Can measure absolute pressure, gauge pressure and sealed gauge pressure
- A variety of electrical connections
- Liquid contacting diaphragm 316L
- Suitable for mass production

Applications

- Air compressor
- Hydraulic and pneumatic equipment
- Servo valves and drive
- Air conditioning systems
- Piping systems



PCM390 pressure transmitter is specially designed for small and medium equipment applications such as booster pumps and air compressors. It is also applicable to a wide range of industrial applications, with a variety of structures, output forms and pressure connections to meet the requirements of most applications. PCM390 is designed with compact structure which especially applies to the installation in small space.

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.

Notes:

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- 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	0~35kPa...25MPa
Pressure reference	Gauge pressure, Absolute pressure, Sealed gauge pressure
Accuracy	±0.5%FS(typ.); ±1%FS(max.)
Hysteresis & repeatability	≤±0.1%FS
Temp. drift	≤±1.5%FS(-20° C~85° C)



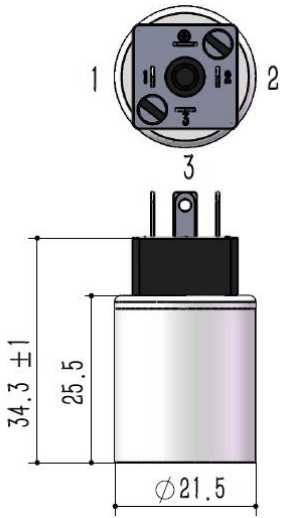
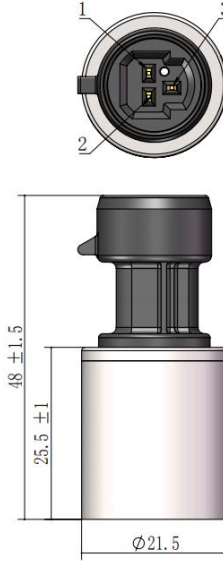
Response time	<10ms
Service life	$\geq 10 \times 10^6$ pressure cycles
Ambient temp.	-20° C~80° C
Medium temp.	-30° C~105° C
Storage temp.	-40° C~120° C
EMC-interference	IEC 61000-6-3
EMC-immunity	IEC 61000-6-2
Insulation resistance	$\geq 100\text{M}\Omega/500\text{VDC}(200\text{M}\Omega/250\text{VDC})$
Vibration resistance	Sine curve: 20g, 25Hz~2kHz; IEC 60068-2-6
	Random: 7.5grms, 5Hz~1kHz; IEC 60068-2-64
Shock resistance	Shock: 100g/11ms; IEC 60068-2-27
	Free fall: 1m; IEC 60068-2-32
Protection	IP65
Material	Diaphragm and sensor inside (AISI316L)
	Housing and pressure port: (AISI304)
	Electrical connection: PA66
Net weight	50g~90g
Size of hexagon	HEX22

Supply & output

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

Electrical connection & wiring method

Connector code	J3: Cable outlet	J4: M12
Dimension In mm		

Connection mode Current (2 wires)	Red: Supply+ Green: Current output	Pin 1: Supply+ Pin 2: Current output Pin 3: Pending
Connection mode Voltage (3 wires)	Red: Supply+ Green: Ground Yellow: Voltage output	Pin 1: Supply+ Pin 2: Voltage output Pin 3: Ground
Connector code	J6: Mini 4 pin	J7: Round Packard
Dimension In mm		
Connection mode Current (2 wires)	Pin 1: Supply+ Pin 2: Current output Pin 3: Pending Grounding: Pending	Pin 1: Supply+ Pin 2: Current output Pin 3: Pending
Connection mode Voltage (3 wires)	Pin 1: Supply+ Pin 2: Ground Pin 3: Voltage output Grounding: Pending	Pin 1: Supply+ Pin 2: Ground Pin 3: Voltage output

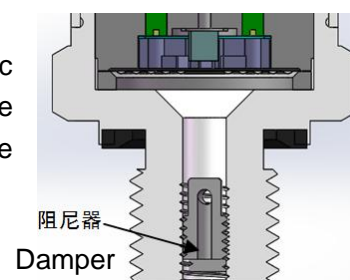
Application of damper

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.

Installation

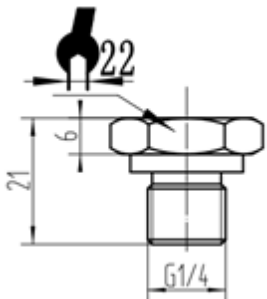
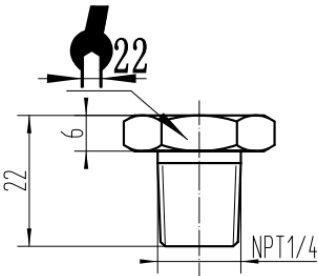
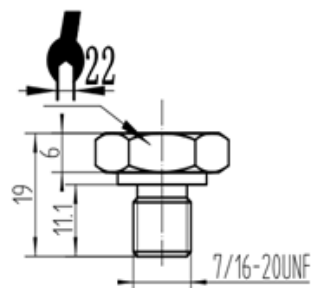
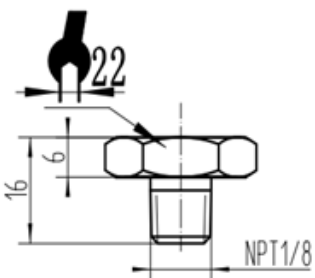
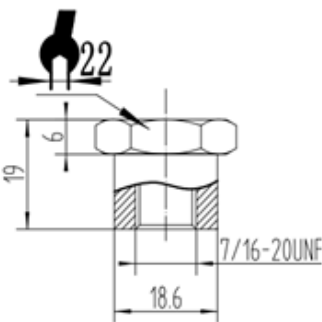
If the fluids containing particles, then nozzle clogging maybe occur, and the vertical installation of the transmitter minimizes the risk of clogging.



Accessory

Name	Appearance	Description	Item number
M4 damper		1 Refer to "Application of damper" 2 Pressure ports with thread code C12, C34 and C36 are not applicable	100030100027

Pressure port

Thread code	C3: G1/4	C5: NPT1/4-18	C11: 7/16-20UNF
Dimension In mm			
Recommended torque	15~25 N•m	15~25 N•m	15~25 N•m
Thread code	C18: NPT1/8	C11F: 7/16-20UNF Female	
Dimension In mm			
Recommended torque	15~25 N•m	15~25 N•m	

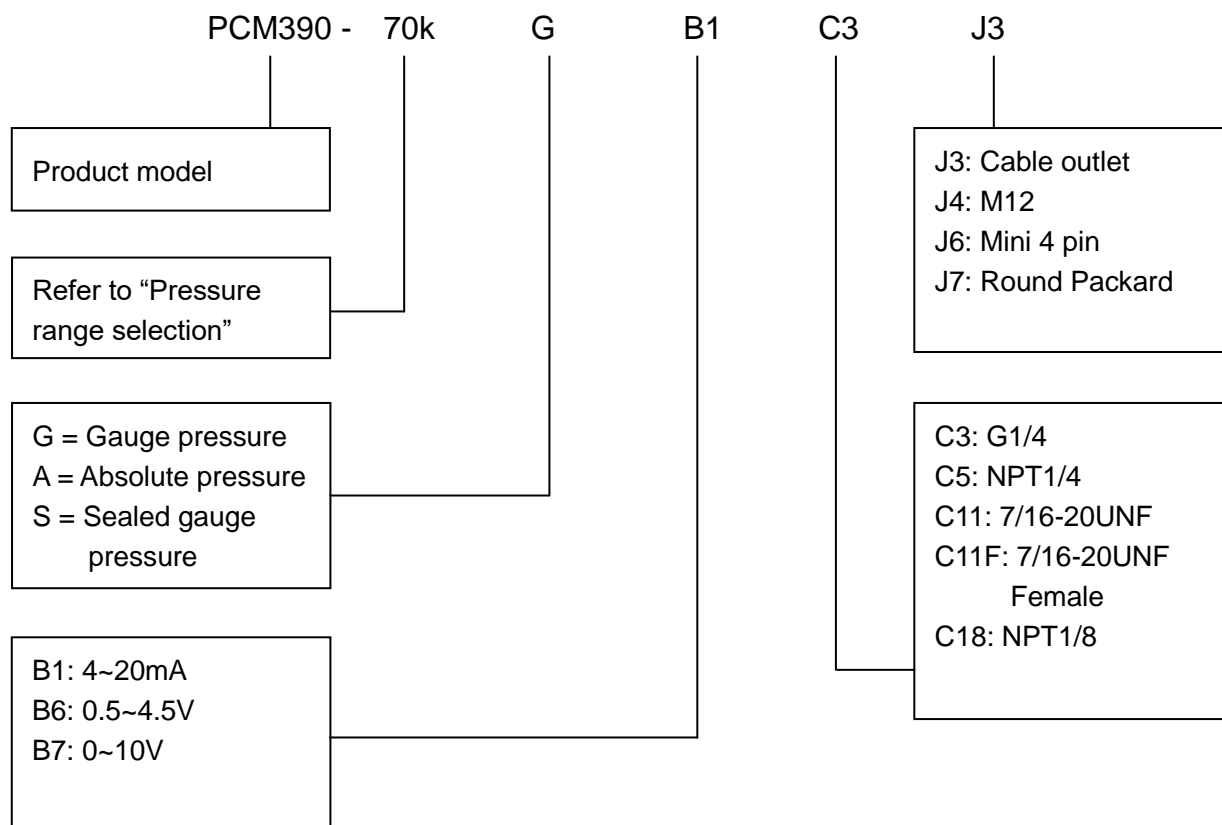
Note: Recommended torque depends on various factors such as material of gasket, supporting materials, lubrication of thread and pressure.

Pressure range selection

Pressure range code	Pressure reference	Pressure range	Overpressure	Burst pressure	Remark
35k	G	0~35kPa	300%FS	600%FS	①
70k	G	0~70kPa	300%FS	600%FS	①
100kC	G、A	0~100kPa	200%FS	500%FS	
160kC	G	0~160kPa	200%FS	500%FS	
250kC	G、A	0~250kPa	200%FS	500%FS	
400kC	G	0~400kPa	200%FS	500%FS	
600kC	G	0~600kPa	200%FS	500%FS	
1MC	G	0~1MPa	200%FS	500%FS	
1.6MC	G、S	0~1.6MPa	200%FS	500%FS	
2.5MC	S	0~2.5MPa	200%FS	500%FS	
4MC	S	0~4MPa	200%FS	400%FS	
6MC	S	0~6MPa	200%FS	300%FS	
10M	S	0~10MPa	200%FS	300%FS	①
16M	S	0~16MPa	150%FS	200%FS	①
25M	S	0~25MPa	150%FS	200%FS	①

Note: (1) G stands for gauge pressure, A, absolute pressure, S, sealed gauge pressure. (2) "①" is non-glass header, please note.

How to order





Example: PCM390-70kGB1C3J3

Refer to product model PCM390, pressure range 0~70kPa, pressure reference gauge pressure, output signal 4~20mA, pressure port G1/4, electrical connection cable outlet.

Ordering tips:

Ensure compatibility between measured media and contacting part of product when placing an order.

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Contact us

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PCM1350 Flush Pressure Transmitter

(For food industry and aseptic processing applications)

Features

- With SS316L isolation diaphragm structure
- With high accuracy and all stainless steel structure
- With strong anti-interference and good stability
- Adjustable zero and span output
- With diversified form and structure, and easy for installation
- Multiple aseptic process connections available for process temperature up to 150°C

Applications and industries

- Oil and gas, compressed air, steam, liquid, paste and powder media
- Vacuum pressure detection such as vacuum transfer pump monitoring

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



PCM1350 flush pressure transmitter is applicable to food, beverage, pharmaceutical and biological engineering. Full metal flush-mounting isolation diaphragm is directly welded with process connection to ensure the precision connection between process connection and measuring diaphragm. Therefore, no additional sealing gaskets are required, and it ensures there are no measurement dead zones.

The stainless steel 316L diaphragm separates the measuring medium from the pressure sensor, and the process pressure from the diaphragm to the piezoresistive sensor is transferred statically through the filling fluid which has the hygienic license.

Notes:

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- 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...2.5MPa
Pressure reference	Gauge pressure, Absolute pressure, Sealed gauge pressure
Accuracy	0.5%FS
Hysteresis	0.1%FS
Repeatability	0.1%FS
Temperature drift	35kPa: $\pm 3\%$ FS (0°C~60°C)



	Other ranges: $\pm 1.5\%FS$ ($-10^{\circ}C \sim 70^{\circ}C$)
Response time	$\leq 1ms$ (Up to 90%FS)
Overpressure	Refer to the range selection table
Service life	$\geq 1 \times 10^6$ pressure cycles
Ambient temp.	$-20^{\circ}C \sim 85^{\circ}C$

Performance parameters (cont.)

Medium temp.	$-30^{\circ}C \sim 125^{\circ}C$
Storage temp.	$-40^{\circ}C \sim 125^{\circ}C$
EMC	Immunity: IEC 61000-6-2, Radiation: IEC 61000-6-3
Insulation resistance	$\geq 100M\Omega/250VDC$
Vibration performance	Sine curve: 20g, 25Hz \sim 2kHz; IEC 60068-2-6 Random: 7.5grms, 5Hz \sim 1kHz; IEC 60068-2-64
Protection grade	IP67 (No connectors are included.)
Surge	IEC 61000-4-5 3 level
Voltage resistance	Current output: 500V/AC 1min Voltage output: 250V/AC 1min
Static electricity	IEC 61000-4-2 4 level
Medium compatibility	All medium compatible with 316L
Ex-proof	Intrinsically safe explosion-proof Exia II CT6 (Only for 4 to 20mA output)
Net weight	300 \sim 350g

Output and power supply

Code	B1	B7	Customizable
Output	4 \sim 20mA	0 \sim 10V	
Power supply	12 \sim 30VDC	12 \sim 30VDC	

Electrical connection & wiring mode

Connector code	J5: DIN43650	J3H: DIN43650 with cable
Dimension In mm		

Protection grade	IP65	IP65
Connection mode (2-wire current output)	Pin 1: Supply+ (red wire) Pin 2: Current output (green wire)	Red wire: Supply+ Green wire: Current output
Connection mode (3-wire voltage output)	Pin 1: Supply+ (red wire) Pin 2: Common ground (green wire) Pin 3: Voltage output (yellow wire)	Red wire: Supply+ Green wire: Common ground Yellow wire: Voltage output

Cooling fans

Code	T0: No cooling fans	T3: 3 pieces cooling fans
Dimension In mm		
Selection of cooling fans	Medium temperature $\leq 100^{\circ}\text{C}$	$100^{\circ}\text{C} < \text{Medium temperature} \leq 150^{\circ}\text{C}$

Pressure range selection

Pressure	Pressure	Pressure range	Overpressure	Burst	NOTES
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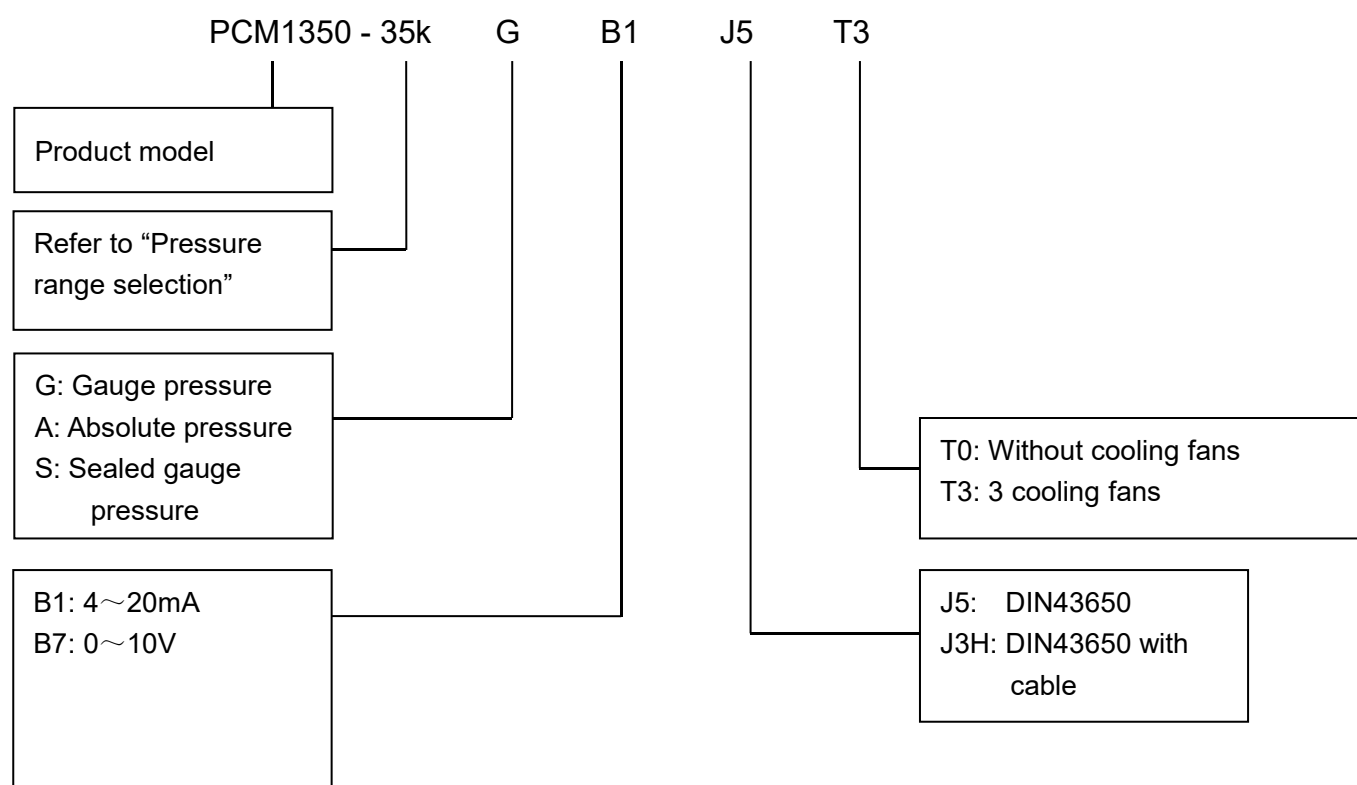


range code	reference			pressure	
35k	G	0~35kPa	300%FS	600%FS	
70k	G	0~70kPa	300%FS	600%FS	
100k	G、A	0~100kPa	200%FS	500%FS	
250k	G	0~250kPa	200%FS	500%FS	
600k	G	0~600kPa	200%FS	500%FS	
1M	G	0~1MPa	200%FS	500%FS	
1.6M	G、S	0~1.6MPa	200%FS	500%FS	
2.5M	G、S	0~2.5MPa	200%FS	500%FS	

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

Accessories

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



Example: PCM1350-35kGB1J5T3

Refer to product model PCM1350, pressure range 0~35kPa, pressure reference gauge pressure, output signal 4~20mA, electrical connection DIN43650, 3 cooling fans, pressure connection 2 inch clamp.

Ordering tips

- (1) Please ensure the compatibility between the measured medium and the contacting part of the product when placing an order.
- (2) If there are special requirements for the product appearance or performance parameter, our company can provide customization.

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