

PCM308 Pressure Transmitter

Features

- 316L stainless steel isolation diaphragm structure
- High accuracy, all stainless steel structure
- Small size, light weight
- Good long-term stability
- Multiple forms and structures, easy to install and use
- Wide pressure range, available for absolute pressure, gauge pressure, and sealed gauge pressure
- Anti-vibration, shock resistance

Applications

- Hydraulic process control
- Aviation and aerospace
- Auto industry and medical equipment
- Hydraulic piping 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

The PCM308 pressure transmitter uses a diffusion silicon pressure sensor as its sensitive element. The built-in integrated circuit converts the sensor's millivolt signal into a standard current signal, which can be directly connected with the computer interface card, control instrument, intelligent instrument, or PLC. If it is used for remote transmission, the current output is available. PCM308 has a small size, light weight, and an all-stainless-steel sealing structure, and can be used in corrosive environments. The product is easy to install and has high anti-vibration and shock resistance performance, which can be widely used in process control, aviation & aerospace, auto industry, medical equipment, HVAC, and many other fields.

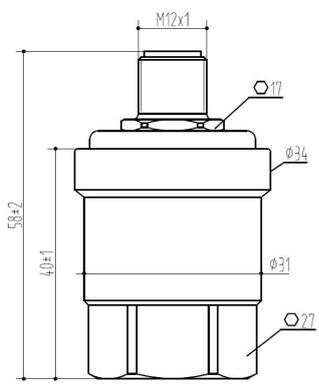
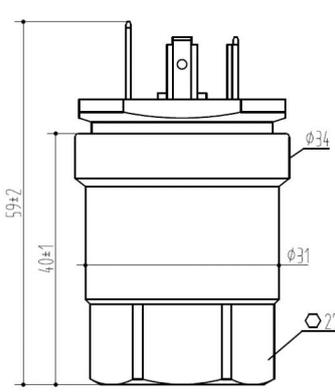
Notes:

- 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.

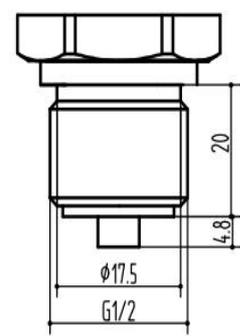
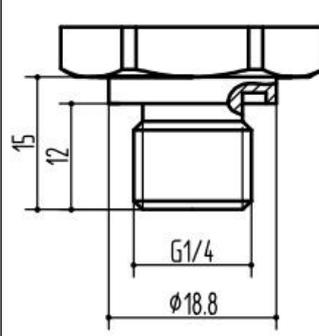
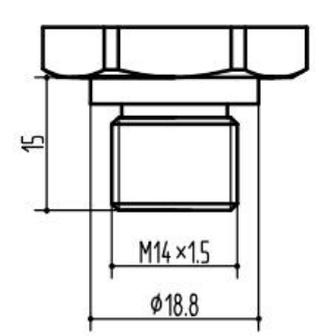
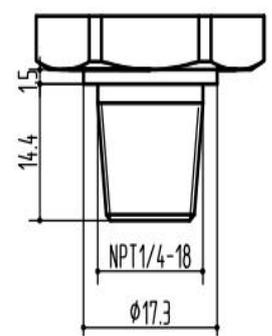
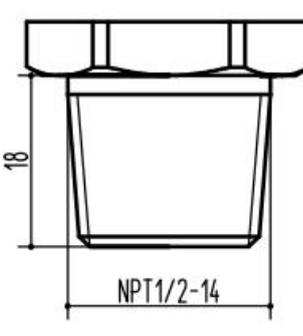
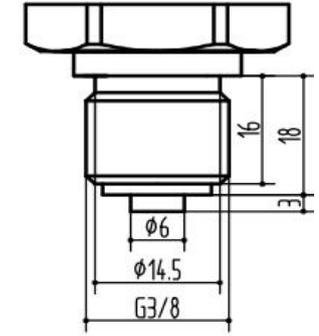
Performance parameters	
Pressure range	-100kPa~0...60MPa
Pressure reference	Gauge pressure, Absolute pressure, Sealed gauge pressure
Accuracy	0.5%FS
Hysteresis	0.1%FS
Repeatability	0.1%FS
Temp. drift	±1.5%FS (-20℃~85℃)
Response time	≤90ms(up to 90%FS)
Overpressure	(Refer to "Pressure range selection" on page 4.)
Durability	≥10 ⁶ pressure cycles
Ambient temp.	-40℃~85℃
Medium temp.	115- (0.35×Ambient temp.)℃
Storage temp.	-40℃~125℃
EMC	Immunity: IEC 61000-6-2, Radiation: IEC 61000-6-3
Insulation resistance	≥100MΩ/250VDC
Vibration resistance	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	IP65
Surge	IEC 61000-4-5 level 1
Voltage resistance	500V/AC 1min, 1000V/AC 1min(optional)
Static electricity	IEC 61000-4-2 level 2
Medium compatibility	All media compatible with stainless steel 316L
Hex nut	HEX27
Ex-proof level	Intrinsic safety ex-proof Exia II CT6 (only for 4~20mA)
Net weight	130g±20g

Output and power supply		
Code	B1	Available for customization
Output signal	4~20mA	-
Power supply	12~36VDC	-

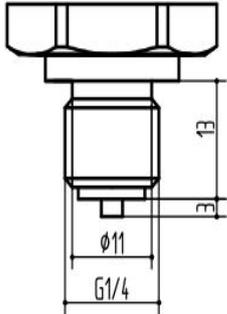
Electrical connection & wiring mode

Connector code	J4: M12×1	J5: DIN43650
Dimension In mm		
Protection	IP65	IP65
Wiring method (2-wire current)	Pin 1: Power supply+ (Red wire) Pin 2: Current output (Green wire)	Pin 1: Power supply+ (Red wire) Pin 2: Current output (Green wire)

Pressure port

Thread Code	C2: G1/2	C3: G1/4 (ED)	C4: M14×1.5
Dimension In mm			
Recommended torque	15~25Nm	15~25Nm	15~25Nm
Thread Code	C5: NPT1/4, Z1/4	C7: NPT1/2, Z1/2	C15: G3/8
Dimension In mm			
Recommended torque	15~25Nm	15~25Nm	15~25Nm

Pressure port (cont.)

Thread Code	C34: G1/4 (EN837)		
Dimension In mm		-	-
Recommended torque	15~25Nm	-	-

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

Pressure range selection

Pressure range code	Pressure reference	Pressure range	Overpressure	Burst pressure	Note
100k	G, A	0~100kPa	200%FS	500%FS	
160k	G, A	0~160kPa	200%FS	500%FS	
250k	G, A	0~250kPa	200%FS	500%FS	
400k	G, A	0~400kPa	200%FS	500%FS	
600k	G, A	0~600kPa	200%FS	500%FS	
1M	G, A	0~1MPa	200%FS	500%FS	
1.6M	G, A	0~1.6MPa	200%FS	500%FS	
2.5M	S	0~2.5MPa	200%FS	500%FS	
4M	S	0~4MPa	200%FS	300%FS	
6M	S	0~6MPa	200%FS	300%FS	
10M	S	0~10MPa	200%FS	300%FS	
16M	S	0~16MPa	200%FS	300%FS	
25M	S	0~25MPa	150%FS	200%FS	
40M	S	0~40MPa	150%FS	200%FS	
60M	S	0~60MPa	150%FS	200%FS	
(-100~0)k	G	-100~0kPa	300kPa	600kPa	

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

Accessory

Name	Appearance	Description	Item number
Imported Hirschmann plug		Imported	100040301013
Hirschmann plug made in China		Made in China	100040301005
LCD12 display gauge		1. LCD display 2. Green backlight	100040100008
BS-6 digital display gauge		1. Nixie tube display 2. Red backlight	100040101000
M12 connector (Thread M12×1)		MB12FAAFF04ST	100040304001
Damper		Refer to "Application of damper"	100030500027

Note: Standard configuration includes a domestic (China) Hirschmann plug without cable. If required, please install the cable by yourself, and an outer diameter of $\phi 5 \sim \phi 7$ is recommended.

Application of damper

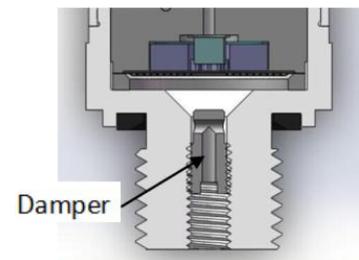
Application

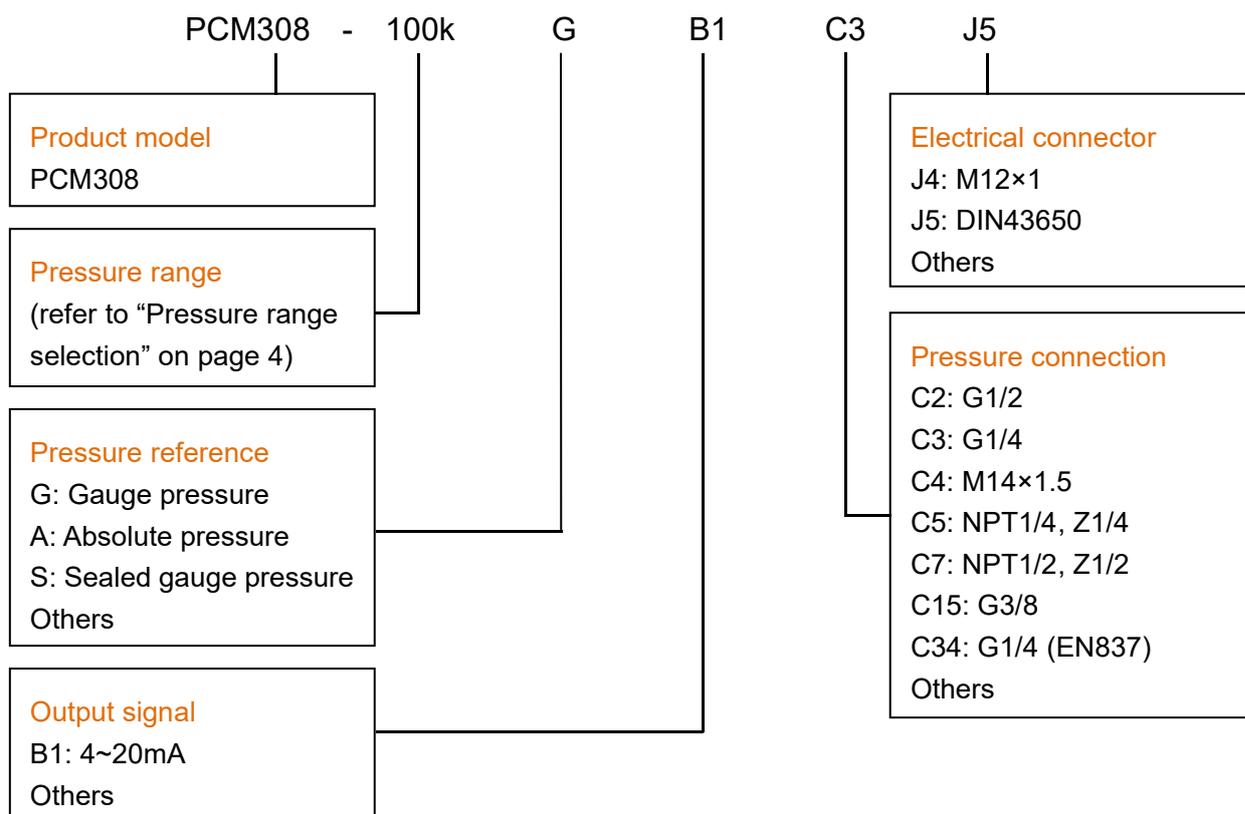
Cavitation, liquid hammer, and pressure peaks may occur in air or hydraulic systems with varying flow rates, such as the rapid closing of a valve or the starting and stopping of a pump.

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

Media condition

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 (1.2mm).





Example: PCM308-100kGB1C3J5

Product model: PCM308, pressure range 0~100kPa, gauge pressure, output signal: 4~20mA, pressure connection: G1/4, electrical connector: DIN43650.

Ordering tips

- 1 Ensure the measured medium is compatible with the contacting part of the product when placing an order.
- 2 Can customize for ranges between -100kPa~60MPa.
- 3 A printed label is applied by default.

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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