PCM350 Flush Diaphragm Pressure Transmitter

Features

- SS316L flush diaphragm structure adopting for pressure connection
- Sanitary design with easy cleaning properties
- Wide measuring range; absolute pressure, gauge pressure, and sealed gauge pressure
- Excellent sealing performance for long-term stable operation
- High vibration and shock resistance
- Multiple output signal options, customizable per customer requirements

Applications

- Suitable for pharmaceutical, food, dairy, beer, beverage industries with viscous/clogging media, hygienic requirements and easy cleaning needs
- Environmental protection, chemical coatings, polyurethane equipment, paint testing systems 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.

Product overview

The PCM350 Flush Pressure Transmitter adopts a flush diaphragm to directly receive the pressure signal. It takes a diffusion silicon pressure sensor as the sensitive element and standard silicone oil or olive oil as the pressure transfer medium.

The SS316L flush diaphragm is with special welding processing. PCM350 has a compact structure and is corrosion-resistant, which prevents scaling, unsanitary, and sticky pressure blocking. PCM350 is especially suitable for pressure measurement of viscous fluids in the medical and food industries, which have hygienic requirements.

Notes:

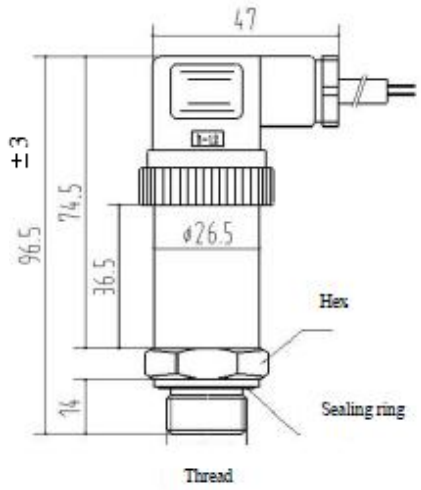
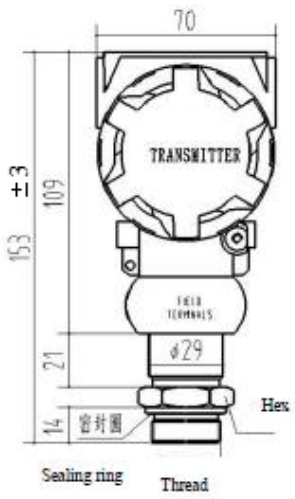
1 Do not misuse documentation.

2 The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.

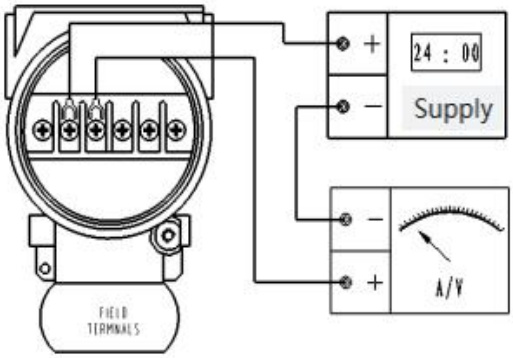
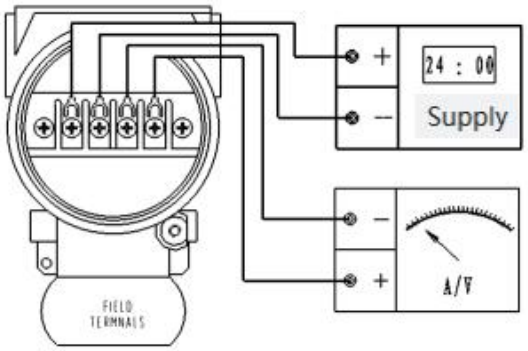
3 Complete installation, operation, and maintenance information is provided in the instructions of the product.

4 Misuse of the product may cause danger or personal injury.

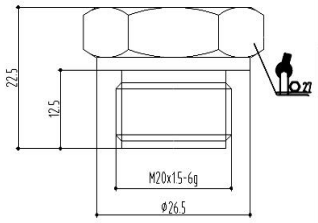
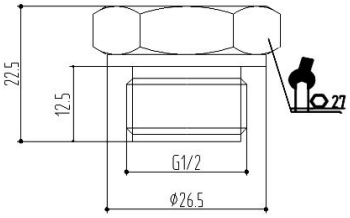
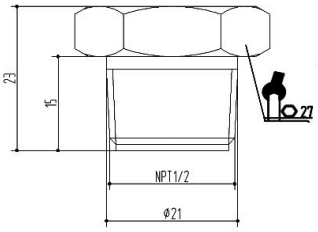
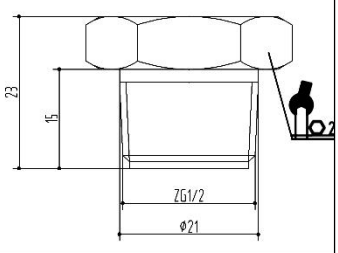
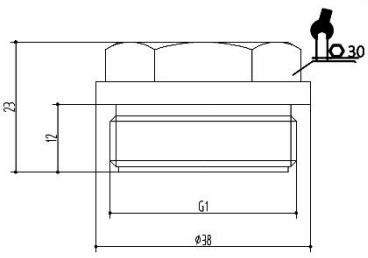
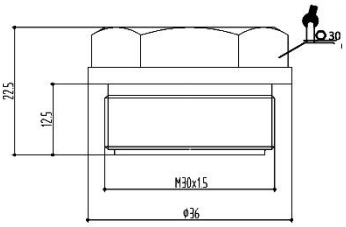
Performance parameters	
Pressure range	-100kPa…0~35kPa…10MPa
Pressure reference	Gauge pressure, absolute pressure, sealed gauge pressure
Supply & output signal	4~20mA (12~30VDC) 0~5V, 1~5V, 0.5~4.5V, 0~10V (12~24VDC) without display
Accuracy	±0.5%F.S. (@25±5ºC)
Hysteresis & repeatability	0.1%F.S.
Temp. drift	1.5%F.S. (@-20ºC ~ 85ºC)
Response time	Analog circuit: ≤2ms (up to 90%F.S.) Digital circuit: ≤100ms (up to 90%F.S.)
Service life	≥10^6 pressure cycles
Ambient temp.	-20ºC ~ 85ºC
Operating temp.	-10ºC ~ 70ºC
Storage temp.	-40ºC ~ 120ºC
Insulation resistance	≥100MΩ/250VDC
Vibration resistance	20g (20~5000HZ)
Shock resistance	10g/11ms
Protection	IP65
Medium compatibility	All the media which are compatible with SS316L.
Ex-proof grade	Intrinsic safety explosion-proof Ex ia Ⅱ C T6 Ga

Electrical connection and connection diagrams		
Electrical Connector code	**J5: DIN43650**	**J1: 2088 housing**
Dimension In mm		
Protection	IP65	IP65

Electrical connection and connection diagrams (cont.)

Connection mode (Current output)	Red wire: Supply+ Green wire: Current output	
Connection mode (Voltage output)	Red wire: Supply+ Green wire: GND Yellow wire: Voltage output	

Pressure connection

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

Pressure range selection

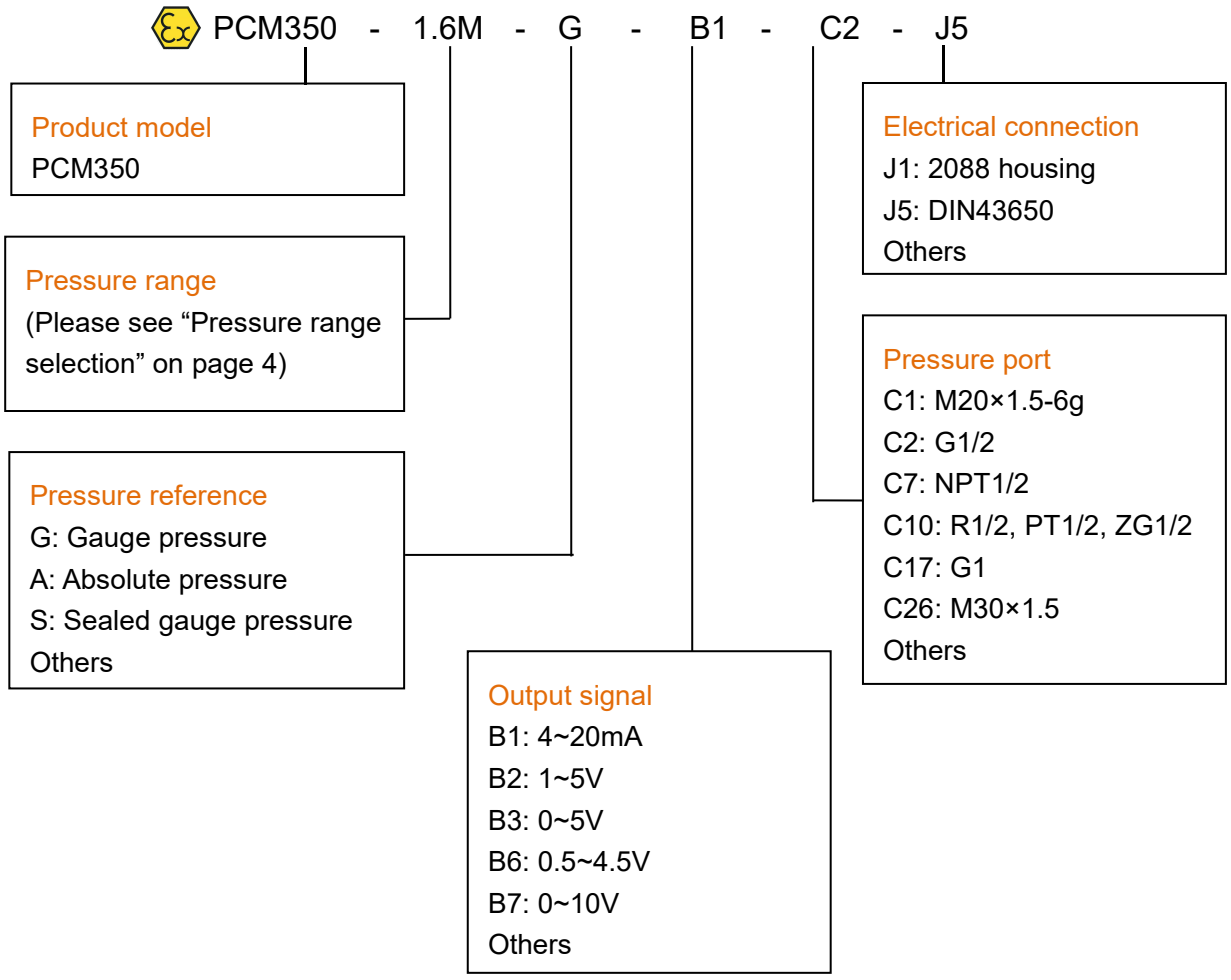
Code	Pressure reference	Pressure range	Overload pressure	Burst pressure	Note
35k	G	0~35kPa	300%F.S.	500%F.S.	
70k	G	0~70kPa	300%F.S.	500%F.S.	
100k	G	0~100kPa	200%F.S.	300%F.S.	
160k	G	0~160kPa	200%F.S.	300%F.S.	
250k	G	0~250kPa	200%F.S.	300%F.S.	
400k	G	0~400kPa	200%F.S.	300%F.S.	
600k	G	0~600kPa	200%F.S.	300%F.S.	
1M	G, S	0~1MPa	200%F.S.	300%F.S.	
1.6M	G, S	0~1.6MPa	200%F.S.	300%F.S.	
2.5M	G, S	0~2.5MPa	200%F.S.	300%F.S.	
4M	G, S	0~4MPa	150%F.S.	300%F.S.	
6M	S	0~6MPa	150%F.S.	300%F.S.	
10M	S	0~10MPa	150%F.S.	300%F.S.	

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

Accessories (Our standard pressure sensor does not include them)

Name	Appearance	Description
Hirschmann plug made in China		Made in China (default)
Imported Hirschmann plug		Imported

Ordering information



Please check the following questions according to your applications in order to provide more suitable products.

1 Accuracy: typical 0.5% F.S., customization for your accuracy 0.25%F.S. or higher?
2 Medium? Medium temperature range?
3 Please tell us your additional special application requirements, then we can customize sensors accordingly.

Example of ordering information: PCM350 - 1.6M - G - B1 - C2 - J5

Product mode: PCM350, 1.6M: pressure range 0~1.6MPa, G: gauge pressure, B1: output signal 4~20mA, C2: pressure port G1/2, J5: electrical connection DIN43650.

Ordering tips

1 The measured medium is compatible with the wetted part of the pressure sensor, please tell us your special wetted material requirement.
2 For special requirements on the appearance and performance parameters, customization is available.

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.

Contact us

Nanjing Wotian Technology Co.,Ltd.

Website: www.wtsensor.com

Add: 5 Wenying Road, Binjiang Development Zone, Nanjing, 211161, China

E-Mail: dr@wtsensor.com