

# 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:

- 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...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.	$-20^{\circ}C \sim 85^{\circ}C$

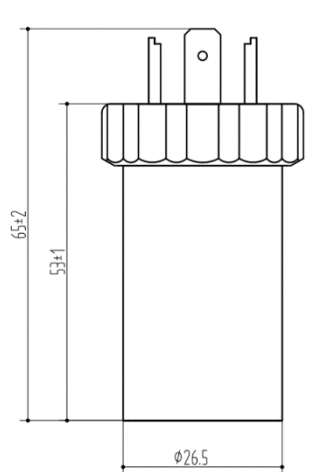
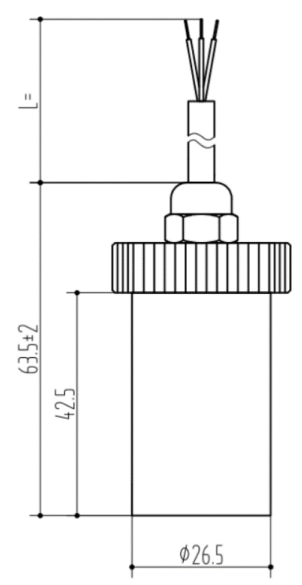
### Performance parameters (cont.)

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~2kHz; IEC 60068-2-6 Random: 7.5grms, 5Hz~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	300~350g

### Output and power supply

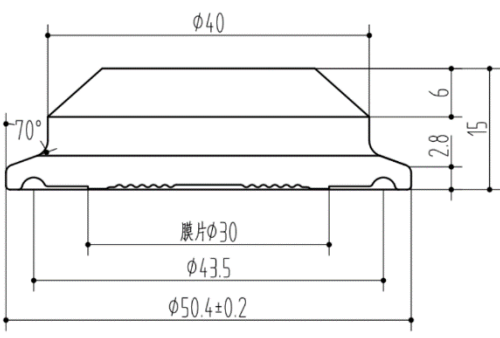
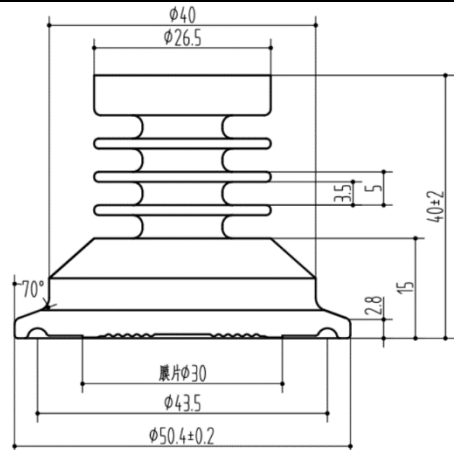
Code	B1	B7	Customizable
Output	4~20mA	0~10V	
Power supply	12~30VDC	12~30VDC	

### 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	 <p>Technical drawing of the T0 sensor head. It shows a trapezoidal top with a diameter of <math>\phi 40</math> and a height of 15 mm. The top surface is inclined at <math>70^\circ</math>. The base has a diameter of <math>\phi 50.4 \pm 0.2</math> mm. A membrane (膜片) with a diameter of <math>\phi 30</math> mm is located at the bottom, with a diameter of <math>\phi 43.5</math> mm. The distance from the top edge to the membrane is 2.8 mm, and the distance from the membrane to the bottom edge is 6 mm.</p>	 <p>Technical drawing of the T3 sensor head with three cooling fans. The top diameter is <math>\phi 40</math> mm, and the fan diameter is <math>\phi 26.5</math> mm. The height of the fan stack is <math>4.0 \pm 2</math> mm. The top surface is inclined at <math>70^\circ</math>. The base has a diameter of <math>\phi 50.4 \pm 0.2</math> mm. A membrane (膜片) with a diameter of <math>\phi 30</math> mm is located at the bottom, with a diameter of <math>\phi 43.5</math> mm. The distance from the top edge to the membrane is 2.8 mm, and the distance from the membrane to the bottom edge is 15 mm. The distance from the top of the fan stack to the membrane is 3.5 mm, and the distance from the membrane to the bottom edge is 5 mm.</p>
Selection of cooling fans	Medium temperature $\leq 100^\circ\text{C}$	$100^\circ\text{C} < \text{Medium temperature} \leq 150^\circ\text{C}$

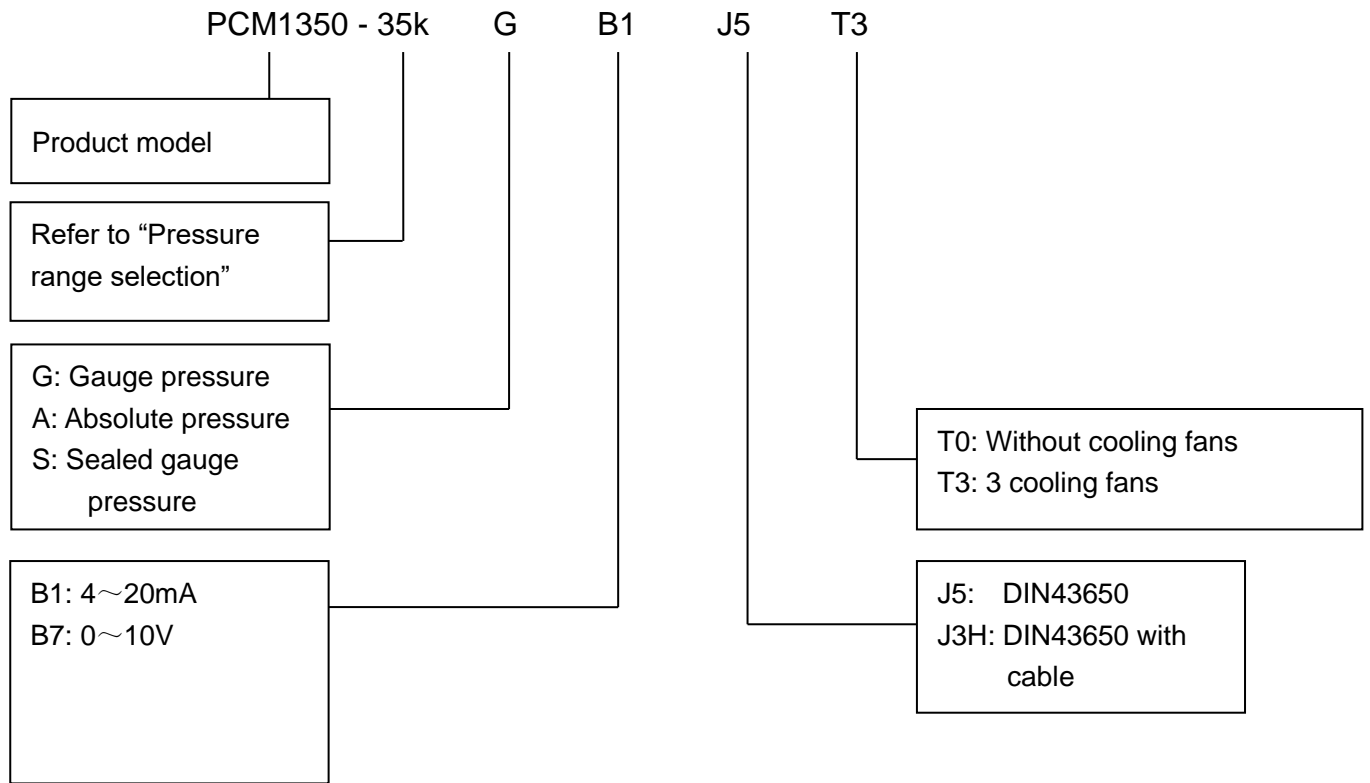
### Pressure range selection

Pressure	Pressure	Pressure range	Overpressure	Burst	NOTES
----------	----------	----------------	--------------	-------	-------

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		<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>Nixie tube display</li> <li>Red backlight</li> </ol>	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.

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.

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

Sales Manager: Wuzhou Lian

MP: 0086-13998828452

Email: [lianwuzhou@wtsensorus.com](mailto:lianwuzhou@wtsensorus.com)