

# 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.

solving problems of fouling, block, cleaning and sanitation. It is also widely applicable to sanitary industries and occasions with fouling forming medium.

#### 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 paramete	ers		
Pressure range	-100kPa…0~10kPa…10MPa		
Pressure reference	Gauge pressure, absolute pressure, sealed gauge pressure		
Cupply 9 output	4~20mA (12~30VDC)		
Supply & output	0~5V, 1~5V, 0.5~4.5V, 0~10V (12~24VDC)		
Accuracy	±0.5%FS		
Hysteresis &	0.1%FS		
repeatability	0.176FS		
Temperature drift	1.5%FS (@-20℃~85℃)		
Response time	≤1ms (up to 90%FS)		
Service life	$\geq 10 \times 10^{6}$ pressure cycles		
Operating temp.	-20℃~85℃		
Storage temp.	-40℃~85℃		
Madium tamp	-40 $\sim$ 85 $^{\circ}$ C (without cooling fans)		
Medium temp.	-40 $\sim$ 150 $^\circ C$ (with 3 cooling fans), -40 $^\circ C$ $\sim$ 250 $^\circ C$ (with 5 cooling fans)		
Insulation resistance	≥100MΩ /250VDC		
Vibration resistance	Sine curve: 20g, 25Hz~2kHz; IEC 60068-2-6		
VIDIATION TESISTANCE	Random: 7.5grms, 5Hz $\sim$ 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	17 5 9E	Et OEL FIELD F	
Protection	IP65	IP65	

Electrical con	,◎ nection and wiring method (cont.)	
Connection mode (Current output)	Pin 1: Supply Pin 2: Current output	
Connection mode (Voltage output)	Pin 1: Supply Pin 2: GND Pin 3: Voltage output	$\begin{array}{c} \hline \\ \hline $

Cooling fan de	esign	
Cooling fan code	T3: 3 cooling fans	T5: 5 cooling fans
Dimension In mm	¢26.5 ¢26.5 C T C T C T C T C T C T C T C T C T C T C T C T C T C T C T C C T C C C C C C C C C C C C C	¢26.5
Optional thread	M20×1.5-6g, G1/2, M30×1.5	M20×1.5-6g, G1/2

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Pressure cor	nnection		
Thread code	C1: M20×1.5-6g	C2: G1/2	C7: NPT1/2, Z1/2
Dimension In mm	5:27 5:27 5:27 ED ring M20 × 1.5	27 5.27 5.27 ED ring 6.1/2	NPT1/2
Thread code	C10: R1/2, PT1/2, ZG1/2	C17: G1	C26: M30×1.5
Dimension In mm	27 27 27 261/2	CZ CZ CZ CZ CZ CZ CZ CZ CZ CZ CZ CZ CZ C	27 27 5.7 5.7 5.7 5.7 5.7 5.7 5.7 5.7 5.7 5.

Note: 1. Recommended torque:  $15 \sim 25N \cdot m$ 

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

Pressure range selection					
Code	Pressure	Pressure	Overpressure	Burst	Remark
Code	reference	range	Overpressure	pressure	Remark
10k	G	0∼10kPa	300%FS	500%FS	
20k	G	0∼20kPa	300%FS	500%FS	
35k	G	0 $\sim$ 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

Version No.: V1.1



Name	Appearance	Description	Material no.
Domestic Hirschmann plug		Domestic (default)	100040301005
Imported Hirschmann plug		Totally imported	100040301013
Product mode	PCM350 - 1.6M G		J5 J1: 2088 housing J1X: 2088 housing
See pressure selection abo	-		with display J5: DIN43650
G: Gauge pre A: Absolute p	ressure		Γ3: 3 cooling fans Γ5: 5 cooling fans
S: Sealed gau pressure	ıge		C1: M20×1.5-6g
B1: 4∼20mA B2: 1∼5V			C2: G1/2 C7: NPT1/2, Z1/2
DZ. 1/~3V			C10: R1/2, ZG1/2

B3: 0∼5V B6: 0.5∼4.5V B7: 0∼10V

Example: PCM350-1.6MGB1C1T3J5

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

C17: G1

C26: M30×1.5



## **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.

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**

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