

# PCM3502 Hydrogen Pressure Transmitter

#### **Features**

- Full stainless steel structure
- Reliable performance
- Small size and light weight
- Protection level IP65
- Integrated structural design, no leakage risk
- Mature technology, suitable for mass production
- Vibration and shock resistance

## **Application and Industry**

- Pneumatic control
- Hydrogen measurement
- Hydrogen-powered vehicles
- High pressure pneumatic control system

### **Notice:**

- 1. Do not touch the diaphragm with hard objects, as this may damage the isolation diaphragm.
- 2. Before installation, please read the product manual carefully and check the relevant information of the product.
- 3. Connect the wires strictly according to the wiring method, otherwise it may cause product damage and other potential failures.
- Improper use may result in danger and personal injury.



## **Product Description**

This series of sensors is a glass micro-melting pressure transmitter developed by our company specifically for measuring hydrogen. It is made of 316L material, resistant to hydrogen penetration, good stability, and has multiple output interfaces. It has a unique integrated structure, no leakage risks, and good vibration and impact resistance. It is widely used in hydrogen energy vehicles and hydrogen measurement industries.

#### **Notice:**

- 1. Do not misuse the file.
- 2. The information in this selection is for reference only and cannot be used as a guide for product installation.
- 3. Complete installation, operation and maintenance information is provided in the product manual.
- 4. Improper use may result in danger and personal injury.

Performance Parameters		
Pressure range	0 ~ 2.5MPa 70MPa	
Insulation	≥100MΩ / 250VDC	
resistance		
Accuracy	± 0.5 %FS ( @ 25 ± 5 °C )	
Full		
temperature	± 1.5 %FS (@ -20 ~ 85 °C )	
range accuracy		
Response time	≤90 ms	



Overload pressure	2×Pressure range		
Burst pressure	4×Pressure range		
Service life	≥ 1 0 <sup>6</sup> pressure cycles		
Operating	-40 °C ∼ 125 °C		
temperature	-40 °C ~ 123 °C		
Storage	-40 °C ∼ 125 °C		
temperature			
Shock Vibration	20 g (2 0 Hz to 2 400 Hz)		
Performance parameters (continued)			
	CISPR25:2008 CE Conducted Emission ISO 7637-2:2011 CTE Pulsed Emission		
	CISPR25:2008-6.4 RE Radiated Emission ISO 7637-2:2011 MFI Low Frequency Magnetic		
EMC	Field Immunity		
	CISPR25:2008-6.4 BCI high current injection ISO 7637-3:2007 ICC signal line pulse		
	ISO 7637-2:2011 CI power line pulse ISO 7637-3:2007 CCC signal line pulse		
Protection level	IP65 (Round Packard can meet IP67)		
Medium	Various medium compatible with 316L stainless steel and hydrogen		

Output and power supply				
Code	B1	В6		
Output	4∼20mA	0.5~4.5VR/M		
powered by	12~30VDC	5VDC		

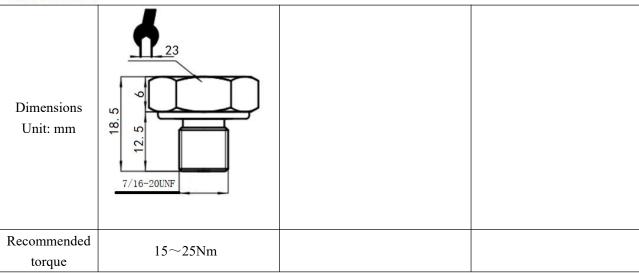
Electrical connection and wiring method		
Connector Code	J6: Mini 4 pin	J7: Round Packard
Dimensions Unit: mm	1 41+1 3 3 + 0.5 2 1.5	3 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1
Connection	Pin 1: Supply +	Pin 1: Supply+
Mode	Pin 2: Current output	Pin 2: Current output
Current	Ground: suspended	Pin 3: Floating
(2 wires)	Pin 3: Floating	1 iii 3.1 loating
Connection	Pin 1: Supply +	Pin 1: Supply+
Mode	Pin 2: Common Ground	Pin 2:Common-Ground
Current	Pin 3: Voltage output	Pin 3: Voltage output
(3wires)	Ground: suspended	Pin 2: Common Ground



Electrical conn	ection and wiring method
Connector Code	J4: M12×1
	4 1 2 FC
Dimensions Unit: mm	1324 V3 43 43 43 43 43 43 43 43 43 43 43 43 43
Wiring (2-wire current)	Pin 1: Supply+ Pin 2: Current output Pin 3: Floating Pin 4 : Floating
Wiring (3-wire voltage)	Pin 1: Supply + Pin 2: Voltage output Pin 3: Common Ground Pin 4 : Floating

<b>Pressure Port</b>			
Thread code	C 1: M20×1.5-6g	C3: G1/4	C5: NPT1/4
Dimensions Unit: mm	23 M20x1.5	<u>23</u>	23 9 NPT1/4
Recommended torque	15~25Nm	15∼25Nm	15∼25Nm
Thread code	C11:7/16-20UNF		





NOTE: Torque depends on various factors such as gasket material, mating material, thread lubrication and pressure level.

ressure Range so	election			
Range code	Measuring range	Overload pressure	Burst pressure	Remark
2.5M	0∼ 2.5MPa	200 % FS	500 % FS	
25M	0∼ 25MPa	200 % FS	500 % FS	
45M	0∼ 45MPa	200 % FS	4 00% FS	
70M	0∼ 70MPa	200 % FS	4 00% FS	
ow to order				
Product model  Pressure range Refer to "Pressure range selection"		B1	J4: M12×1 J6: Mini 4 p J7: Round F	
B1: 4~20mA B3: 0~5V B6: 0.5~4.5V B7: 0~10V			C1: M20×1. C3: G1/4 C5: NPT1/4 C11: 7/16-2	<u> </u>

Example: PCM 3502 - 2.5M B1 C3 J7

The model is PCM 3502 , the measuring range is  $0 \sim 25 MPa$  , the output signal is  $4 \sim 20$  mA , the Pressure Port is G1/4, Round Packard .



# **Contact us**

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