

PCT401 Explosion-proof Temperature Transmitter

Features

- Accurate temperature measurement
- Integrated structure
- Fast response
- Long-term stable work
- Convenient on-site connection
- Simple operation

Applications and industries

- Equipment supporting
- Temperature measurement for pumps and compressors, natural gas pipeline networks and other automatic measurement and control systems
- Temperature measurement for water or oil in the fields of petroleum, chemical industry, electric power, light textile, environmental protection, etc.

Notes:

1 During the temperature measurement, the temperature measurement component should reach thermal equilibrium with the object under test.

2 The insertion depth should be accurate.

3 Please read the Instruction Manual of the product carefully before installation and check the relevant information of the product.

4 Strictly follow the wiring method for wiring, otherwise it may cause product damage or other potential faults.



Product overview

PCT401 Explosion-proof Temperature Transmitter measures the temperature of the measured medium by using the feature that the platinum resistance value varies with temperature and shows a certain functional relationship. This product adopts the high-precision thermoelectric couple and thermal resistance as the detecting elements, uses the high stability circuit for the signal processing, realizes the continuous measurement for the temperature, outputs the industrial control standard signal, and can realize the functions such as display, remote transmission etc. simultaneously.

The temperature measurement part of the product adopts all stainless steel integration processing technology, and the connecting box adopts explosion-proof housing; the product has the features of strong shock resistance, quick thermal response etc.; the wire adopts the special shielded cable, with wide usage temperature range; this product is easy to install, and applicable to be used in all kinds of automatic control systems for temperature measurement.

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 parameter	S			
Pressure range	-50°C~250°C			
Supply & output	4~20mA (16~36VDC), 4~20mA@HART protocol (16~36VDC)			
Accuracy	±0.5%FS			
Sensitive element	Pt100 Grade A			
Insulation strength	100MΩ/250VDC			
Response time	Wa	ter 0.2m/s	Air 1m/s	
Placement diameter:	t0.5	t0.9	t0.5	t0.9
Φ12mm	10S	35S	95S	310S
Long-term stability	≤0.2%FS/year			
Placement diameter	Φ12mm			
Ambient temperature	-20°C~85°C			
Electrical connection	Aluminum housing			
Protection grade	IP65			
Maximum mounting	25Nm			
torque				
Ex-proof grade	Exd IIC T6 Gb			
Probe material	304			
Appearance structure				
Dimension In mm		tion depth		10%

Pressure connection			
Thread code	C1: M20×1.5-6g	C2: G1/2	
Dimension In mm	HE X 27- 82 M20 > 1.5- 6g		
Recommended torque	15~25Nm	15~25Nm	

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HEX27

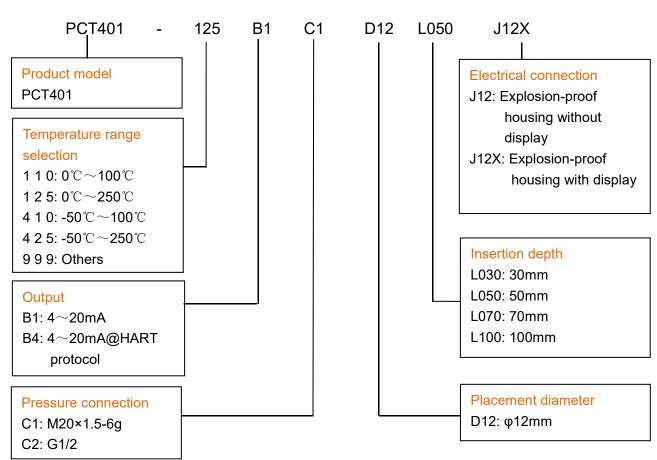
Mounting thread

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Note: The torque depends on all kinds of factors, such as gasket material, kitting material, thread lubrication and pressure.





Example: PCT401-125B1C1D12L050J12X

the product model is PCT401, 125: temperature range is $0^{\circ}C \sim 250^{\circ}C$, B1: output signal $4 \sim 20$ mA, C1: pressure connection M20×1.5-6g, D12: placement diameter: φ 12mm, L050: insertion depth 50mm, J12X: electrical connection explosion-proof housing with display.

Ordering tips

1. Please ensure the compatibility between the measured medium and the contacting part of the product when placing an order.

2. Please select the upper limit and the lower limit within -50 $^{\circ}$ C \sim 250 $^{\circ}$ C for your temperature ranges, and at the same time the difference between the upper limit and the lower limit should be \geq 50 $^{\circ}$ C.

3. In the above-mentioned selections, we usually recommend several commonly used ones: -50°C \sim 100°C, -50°C \sim 250°C, 0°C \sim 100°C, 0°C \sim 250°C, and you can customize the rest temperature ranges under the premise that Clause 2 is met. Temperature range information is required when placing an order.

4. There are four kinds of standard insertion depths: 30mm, 50mm, 70mm, 100mm, and you can customize the rest insertion depths; accurate insertion depth information is required when placing an order.

5. 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. Website: www.wtsensor.com Add: 5 Wenying Road, Binjiang Development Zone, Nanjing, 211161, China E-mail:dr@wtsensor.com