PCT200(Intrinsic Safety) Temperature Transmitter

Features

- With the movable connector and easy to install
- High strength, high pressure resistance
- Integrated structure
- Long-term stable work
- Fast response
- Reliable structure

Applications

- Equipment support
- Automatic temperature measurement and control systems such as pumps, compressors, natural gas pipelines, etc.
- Temperature measurement of water or oil in petroleum, chemical, electric power, textile, and environmental protection, etc.

Notes:

1 When measuring temperature, the temperature measuring element should reach thermal equilibrium with the measured object.

2 Make sure the insertion length is 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; otherwise, it may cause product damage or other potential faults.

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



Product overview

The PCT200 (Intrinsic safety) explosive-proof temperature transmitter measures medium temperature using the principle that the resistance of platinum resistors varies with temperature according to a specific functional relationship. It adopts imported high-performance, high-reliability platinum resistance, undergoes precise temperature and non-linearity compensation, and employs high-performance modular signal processing technology to measure and calibrate medium temperature, outputting standard industrial control signals.

The housing of this product is integrally machined from all stainless steel, with a compact size and fast thermal response. Fitted with dedicated shielded cables, the product supports a wide operating temperature range. PCT200 is easy to install and features excellent vibration and shock resistance.

Notes:

1 Do not misuse the documentation.

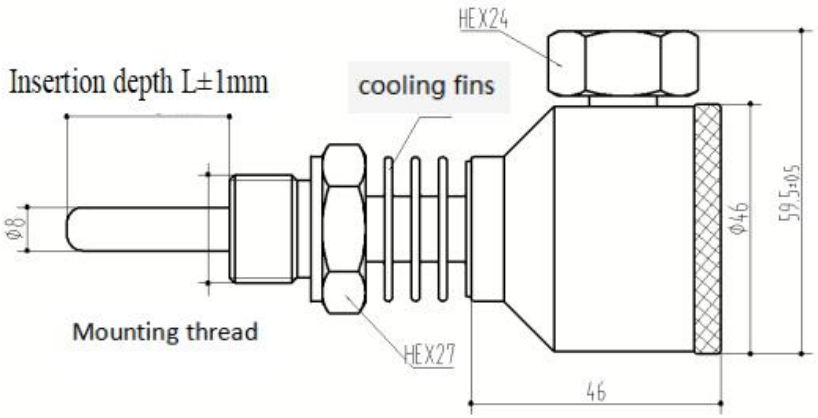
2 The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.

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

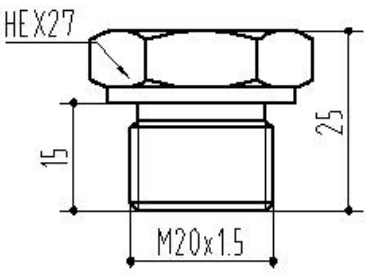
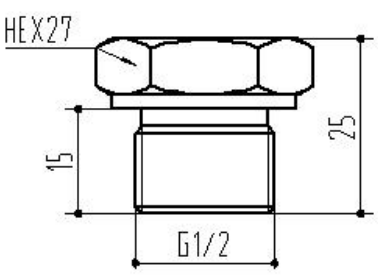
4 Misuse of the product may cause danger or personal injury.

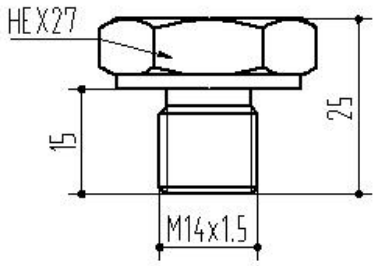
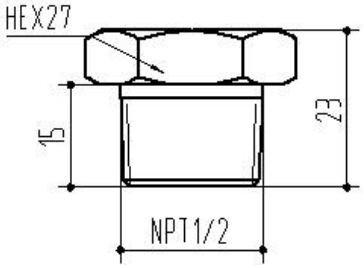
Performance parameters	
Temperature range	-50℃~650℃
Supply & output signal	4~20mA(16-36VDC)
Accuracy	±0.5%FS
Sensing element	Pt100 Grade A
Insulation strength	100MΩ/250VDC
Response time	≤30s
Long-term stability	≤0.2%FS/year
Insertion diameter	Φ8mm
Storage temp.	-40℃~85℃
Electrical connection	Terminal
Protection	IP65
Material	304
Max. mounting torque	25Nm

Structure & Dimension

Dimension In mm	

Pressure connection

Thread code	C1: M20×1.5-6g	C2: G1/2
Dimension In mm		
Recommended torque	15~25Nm	15~25Nm

Thread code	C4: M14×1.5	C7: NPT1/2
Dimension In mm		
Recommended torque	15~25Nm	15~25Nm

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

Temperature range selection

Temperature range code	Temperature range	Note
（-50~100）	-50℃~100℃	
（-50~150）	-50℃~150℃	
（-50~200）	-50℃~200℃	
（-50~650）	-50℃~650℃	
（0~100）	0℃~100℃	
（0~150）	0℃~150℃	
（0~200）	0℃~200℃	
（0~650）	0℃~650℃	

Ordering information

PCT200 (Intrinsic Safety) - (-50~650） - B1 - C1 - L050

Product model
PCT200(Intrinsic Safety)

Temperature range
-50~650℃
Others

Output signal
B1: 4~20mA
Others

Insert depth
L030: 30mm
L050: 50mm
L070: 70mm
L100: 100mm
Others

Pressure connection
C1: M20×1.5-6g
C2: G1/2
C4: M14×1.5
C7: NPT1/2
Others

Example of ordering information: PCT200(Intrinsic Safety)-(-50~650)-B1-C1-L050

Product model: PCT200(Intrinsic Safety), (-50~650): temperature range -50℃~650℃, B1: output signal 4~20mA, C1: pressure connection M20×1.5-6g, L050: insert depth 50mm.

Ordering tips

1 Ensure the measured medium is compatible with the contacting part of the product.
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.

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