

# PCT002 Thermocouple Temperature Transmitter



## **Features**

- Temperature measurement range
- Easy installation
- High temperature measurement accuracy
- Long-term stability
- Long life cycle

## **Applications**

- Electric power, aerospace industry
- Temperature measurement in textile, food and other fields
- Atomic energy, petroleum, chemical

Note:

#### Notes:

- 1 Please read the Instruction Manual of the product carefully before installation and check the relevant information of the product.
- 2.Follow the instructions to install, otherwise it will cause product damage and other potential failures
- 3 Misuse of the product may cause danger or personal injury.

### **Product overview**

PCT002 thermocouple, matched with display instrument, can perform temperature measurement in the temperature range of -200 ~ 1600 °C. It consists of two homogeneous conductors (electrodes) with different chemical compositions. When there is a temperature difference between the two ends of the gear, an electromotive force is generated between the two ends, and a current will flow through the circuit. This phenomenon is called a non-temperature difference electric phenomenon. On the potentiometer, the value of the thermoelectromotive force will be displayed. Widely used in aerospace, atomic energy, petroleum, chemical, metallurgy, machinery and other departments and scientific and technological fields.

#### 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.



Techincal Indicators								
name	l le	evel	II le	evel	III level			
Thermocouple	Measure	Tolerance	Measurem	Tolerance	Measure	Toleran		
	ment	°C	ent	°C	ment	се		
	ranges°C		ranges°C		ranges°C	°C		
Platinum armor	0~1600	1.0or±	0~1600	±1.5	/	/		
10-Pa		{1+0.03		or±0.25%t				
Platinum armor	0~1600	(t-1100)}						
13-pa								
Platinum armor	1	/	600~1700		600~170	±4.0or		
30-armor					0	±0.5%t		
platinum 6								
NiCr-NiSi	-40~1100	±1.5or	-40~1300	±2.5	-200~400	±2.5		
		±4.0%t		or±0.75%t		or		
NiCrSi-NiSiMg	-40~1100		-40~1300		-200~400	±1.5%t		
Nichrome-Const	-40~800		-40~900		-200~40			
antan								
Iron-constantan	-40~750		-40~750		/	/		
Copper-constant	-40~350	±1.5or	-40~350	±1.0or±	-200~40	±1.0or		
an		±4.0%t		0.75%t		±1.5%t		

Norma temper insulati	ature	High temperature insulation resistance						Test voltage
	resistance							
L≤1m	≥1m	≥100°C	<b>≥300</b> ℃	≥ <b>500</b> ℃	<b>≥850</b> ℃	≥1000℃	≥1300°C	500±50V
		<300℃	<500℃	<850℃	<1000°C	<1300℃		
100	100M	10	<b>2M</b> Ω	0.5	0.08	0.02	0.02	
$M\Omega$	Ω <b>m</b>	$M \Omega$		$M \Omega$	$M\Omega$	ΜΩ	$M \Omega$	

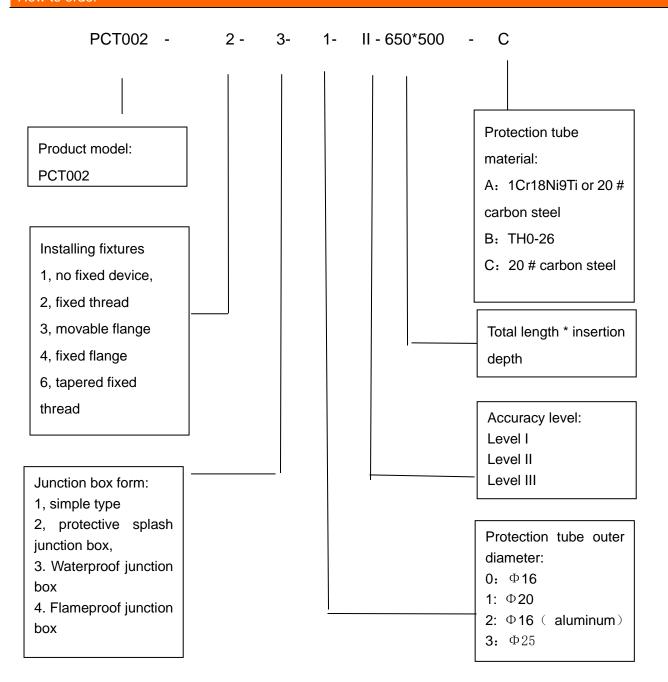
Material	Outer diameter mm	Response time T0.5s	Length mm
Not Metal	Ф16	≤240	300, 350, 400, 450, 550, 650, 900, 1150, 1850, 2150,
	Φ25	≤300	550, 650, 900, 1150, 1850, 2150
Metal	Ф16	≤180	300, 350, 400, 450, 550, 650, 900, 1150,
	Ф20	≤240	1650, 2150, 2650
	Cone	≤300	225, 250, 300, 350, 400
	Right angle		500×500, 750×750, 500×750, 750×500



name	Structure diagram	Size mm						Protection tube		
		M		Н	S		D	Dia met er: mm	material	Press ure Mpa
Fixed thread	₩¥S .H.	M27×2		3 2	32		Ф4 0	Ф16	1Cr18Ni9Ti or 20 # carbon steel	≤10.0
		M33×2		35	36	3	Ф48	Ф20		≤1.0
Conical fixed thread	M N	M33×2		33	36		Ф48	Cone	1Cr18Ni9Ti	≤30.0
		D1	D 2	Do	do	Н	h			
Movable flange		Ф54	Ф 7 0	/	Ф 6			Ф12	TH0-26	Under pressur e
Fixed flange	F. C.	Ф65	Ф	Ф 45	Ф 1 14 6		Or Ф16	1Cr18Ni9Ti	≤6.0	
		Ф75	5 1 0 5	Ф 55			1 2		or 20 # carbon steel	≤1.0



### How to order



Example: PCT002-2-3-1-II -650 \* 500- C

The model is PCT002, the installation and fixing device is fixed thread, the junction box is waterproof, the accuracy class is II, and the protective tube material is 20 # carbon steel



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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