

PCT001 Thermal Resistance 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

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.



Product overview

PCT001 thermal resistance can be used to measure the temperature of liquid, gaseous medium and solid surface in the temperature range of $-200 \sim 650^{\circ}\text{C}$. It is designed and manufactured by taking advantage of the characteristic that the resistance of the substance changes as the temperature changes. The temperature-sensing part of the thermal resistor is a metal wire (such as platinum wire, nickel wire, copper wire, etc.) with a large temperature coefficient of resistance, which is evenly wound on a frame made of insulating material or sprayed or printed with metal paste. Products are widely used in aerospace, atomic energy, petroleum, chemical, electric power, textile, food and other sectors and scientific and technological fields.

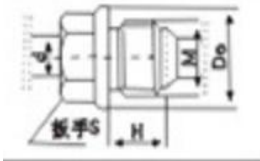
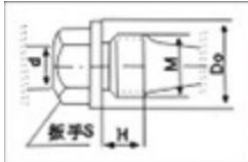
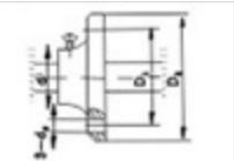
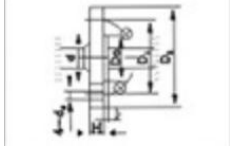
Notes:

- 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.

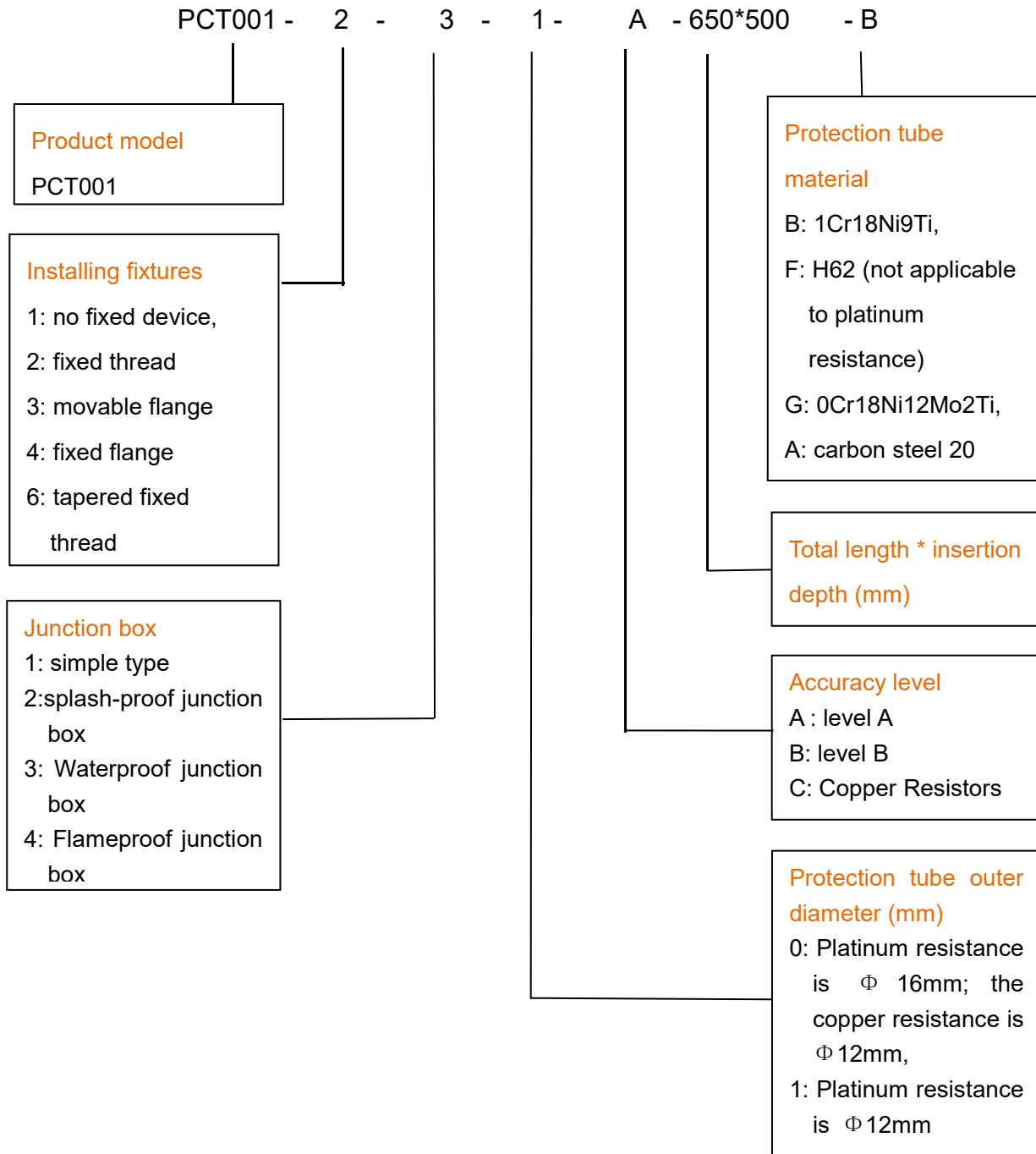
Technical Indicators

Protection tube diameter	Length	Material	Response time S
Φ12	226, 250, 350, 400, 460, 550, 600, 900, 1150	Carbon steel20# (-100-500℃) stainless steel Cr18Ni9Ti (-200-850℃) 0Cr18Ni12Mo2Ti (-200-650℃)	30-90 (Note: Copper resistance Φ16, < 180)
Φ16	300, 350, 450, 500, 650, 900, 1150, 1650, 2150		
Conical tube	225, 250, 300, 400	brassH62 (-100-200℃)	90-180

Thermal resistance	R100/RO	Measurement Ranges: °C		
Electric resistance	1, 3851	Element	Measurement Ranges	Tolerance
		ceramics	-200-850	Level A, ± (0.15 + 0.2%) Level B, ± (0.3 + 0.5% {t})
		Glass	-200-500	
		Mica	-200-420	
		Original membrane	-200-420	
Copper thermal resistance	1, 4260	-50-100		± (0.3+0.6% {t})

Name	Structure diagram	Size (in mm)				Protection tube			
		M	H	S	Do	Φ (mm)	Material	Pressure Mpa	
Fixed thread		M27×2	32	32	Φ40	Φ16	1Cr18Ni9Ti or 20 # carbon steel	≤10.0	
								≤1.0	
Conical fixed thread		M33×2	33	36	Φ48	cone	1Cr18Ni9Ti	≤30.0	
Name	Structure diagram	D1	D2	Do	do	H	Protection tube		
							Φ (mm)	Material	Pressure Mpa
Movable flange		Φ 54	Φ 70	/	Φ6		Φ12 Or Φ16	TH0-26	Under pressure
Fixed flange		Φ 65	Φ 95	Φ 45	Φ14	16 3		1Cr18Ni9Ti or 20 # carbon steel	≤6.0
									≤1.0

How to order



Example: PCT001-2-3-1-A-650 * 500-B

The model is PCT001. 2: the installation fixtures is fixed thread, 3: the junction box is waterproof junction box, 1: the outer diameter of the protection tube is platinum resistance Φ 12mm, A: the accuracy class is A, 650 * 500mm: total length (including insertion depth 500 mm), B: the material of the protection tube is 1Cr18Ni9Ti



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 Wenyong Road, Binjiang Development Zone, Nanjing, 211161, China

E-mail: dr@wtsensor.com