

Tempatron Tel: +44(0)1621 859500 Fax: +44(0)1621 855335

Temperature Probes

Tempatron temperature probes include thermistors, 3-wire PT100 resistance thermometer devices (RTDs) and J and K type thermocouples. The thermistors are available in negative temperature coefficient (NTC) or positive temperature coefficient (PTC) versions.

All probes are available with a 6mm diameter stainless steel sheath and the NTC themistors are also available with a plastic sheath. The probes are available in 1.5m, 3m and 6m lengths and optional industrial probe heads, thermowells and compression fittings are also available.

Customer specified probes are also available - please contact our sales team for further details.

Models Available

NTC 10K NTC Probe
PTC 1K PTC Probe
PT100 3 Wire PT100 Probe
THJ J Type Thermocouple
THK K Type Thermocouple

Product Features

- Plastic or stainless steel sheaths
- NTC probes in 1.5m, 3m or 6m lengths
- PTC probes in IP65 or IP67 versions
- Stainless steel braided cable option
- Custom specified probes also available

Temperature probes for detection of temperature in industrial applications

Specification

Temperature Range:
- NTC plastic sheath:
  -50°C to +50°C in water
  -50°C to +105°C in air
- NTC S/S sheath: -50°C to +105°C
- PTC0150000: 0°C to +150°C
- PTC015W000: -50°C to +100°C
- PT100000A1: -50°C to +200°C
- PT100000A2: -50°C to +400°C
- THJ030A1: -50°C to +200°C
- THK030A1: -50°C to +400°C

Thermistor Resistance:
- NTC: 10kohms at 25°C
- PTC: 1kohm at 25°C

PT100 RTD:
- 3 wire (2 or 4 wire by request)
- 100ohms at 0°C
- Platinum detector - class A accuracy to BS EN 60751:1996 (see table)

J Type Thermocouple:
- PTFE insulated cable

K Type Thermocouple:
- Glass fibre insulated cable

Weight:
- NTC: 50g
- PTC: 50g
- PT100: 125g
- J/K Thermocouple: 125g

Specification subject to change without notice.

Ordering information

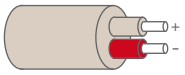
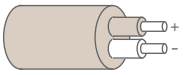
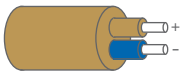
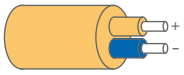
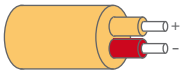
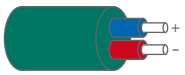
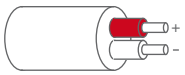
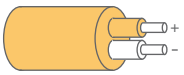
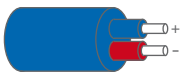
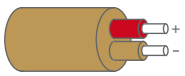
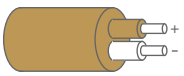
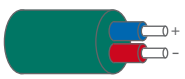
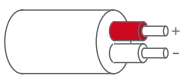
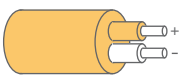
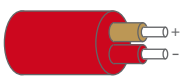
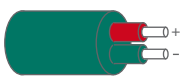
Model	Code	Description
	NTC	NTC 10K Thermistor
	PTC	PTC 1K Thermistor
	PT100	PT100 3 Wire RTD
	THJ	J Type Thermocouple
	THK	K Type Thermocouple

Probe Length	Code	Description
	000	1.5 metres (PT100 only)
	015	1.5 metres (NTC & PTC only)
	030	3.0 metres (NTC, THJ & THK only)
	060	6.0 metres (NTC only)

Sheath/Temperature	Code	Description
	0000	6x40mm Stainless Steel IP65 Sheath 0 to 150°C (PTC only)
	HP00	6x15mm Plastic IP67 Sheath (NTC only)
	WP00	6x50mm Stainless Steel IP68 Sheath (NTC only)
	W000	6x40mm Stainless Steel IP67 Sheath (PTC only) -50 to 100°C (PTC only)
	A1	6x100mm Stainless Steel IP65 Sheath -50 to 200°C (PT100 & THJ only)
	A2	6x100mm Stainless Steel IP65 Sheath -50 to 400°C (PT100 & THK only)

Example	PT100000A1

Thermocouple Cable Insulation Colour Standards

Thermocouple Type	Conductor Materials (+/-)	BS1843	ANSI MC96.1	DIN43714	IEC584
B	Plat Rhodium Plat Rhodium				
E	Ni Chromium Constantan				
J	Iron Constantan				
K	Ni Chromium Ni Aluminium				
N	Nicrosil Nisil				
R/S	Plat Rhodium Platinum				
T	Copper Constantan				
U Compensating cable for Types R/S	Copper Copper Nickel				
Vx Compensating cable for Type K	Copper Constantan				

Notes:
1. Thermocouples must be directly connected to the temperature controller and not joined, unless correct compensating cable is used.
2. The colours shown above may not exactly match the insulation colour due to printing reproduction limitations.

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