

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 thermistors 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 +250°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 | 3.0 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) |
| | WH01 | 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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