

10k Thermistor Temperature Sensor with Exposed Detector



Labfacility are the UK's leading manufacturer of Temperature Sensors, Thermocouple Connectors and associated Temperature Instrumentation and stockists of Thermocouple Cables. The Company has been trading since 1971 and is ISO 9001 accredited.

Labfacility have supplied Farnell for over 30 years, and an extensive range of our products are available to buy online, from stock, direct from Farnell.

2-wire 10K NTC exposed thermistor with a temperature range of -50 to +150°C, is a versatile temperature sensing device.

Key Features:

- Resistance Value: 10K ohms
- Type: NTC (Negative Temperature Coefficient) thermistor, meaning its resistance decreases as the temperature increases.
- Temperature Range: Capable of accurately measuring temperatures from -50°C to +150°C.
- Wiring: 2-wire configuration for simple connectivity.

Applications:

Environmental Monitoring

- HVAC Systems: Essential for regulating heating, ventilation, and air conditioning systems by providing accurate ambient temperature readings.
- Climate Control Devices: Used in smart thermostats and climate control units to maintain optimal environmental conditions in residential and commercial buildings.

Industrial Processes

- Equipment Monitoring: Critical for monitoring the operating temperatures of industrial machinery to prevent overheating and ensure optimal performance.
- Process Control: Used in various manufacturing processes where maintaining specific temperatures is crucial, such as in chemical production, food processing, and material fabrication.

Specifications

General Description	Fast response, exposed detector
Sensor Type	Exposed Thermistor
Thermistor	10K NTC Thermistor
BETA 25/85	3977K
Cable Length	300mm, 500mm, 1m, 3m, or 5m
Core / Strands	7/0.2mm
Cable Termination	Bare Tails
Max. Temperature	+150°C
Min. Temperature	-50°C
Accuracy	+/- 0.2K (over 0-70°C)
Number of Wires	2

Ordering Information

Number of Wires	Thermistor	Cable Length (mm)	Manufacturers Code	Farnell Order Code
2	10k	300	RG-S2TH-300-C5	4461833
2	10k	500	RG-S2TH-500-C5	4461834
2	10k	1000	RG-S2TH-1000-C5	4461835
2	10k	3000	RG-S2TH-3000-C5	4461837
2	10k	5000	RG-S2TH-5000-C5	4461838





Thermocouple & PRT Cable

Thermocouple cables are available in IEC or ANSI colour codes. Insulation types include PFA, PTFE, PVC & Fibreglass. Available spool lengths include 10, 25, 50, 100 and 200m.

Best Sellers

IEC PVC Insulated Flat Pair
Farnell 7082319
Newark 69C6504

ANSI PTFE Insulated Twin Twisted
Farnell 2443696
Newark 73AC8304

ANSI PFA Insulated Twin Twisted
Farnell 2443711
Newark 73AC8297



Fabricated and Specialist Thermocouples

Styles include; Magnet, Washer, Nozzle, Leaf, Bayonet & Bolt thermocouple. Various lengths and calibration types available.

Best Sellers

Washer Thermocouple
Farnell 8597952
Newark 38K1555

Bayonet Thermocouple
Farnell 2785115
Newark 37AC0993

Magnet Thermocouple
Farnell 2081298
Newark 88T2877



Exposed Junction Thermocouples

Including exposed junctions with fitted or moulded miniature plug and insulated leads, ideal for test and development applications.

1, 2, 3, 5 & 10m lengths available in IEC or ANSI colours.

Best Sellers

ANSI Type K Exposed Junction
Farnell 2443720
Newark 84X0232

IEC Type T Exposed Junction
Farnell 7076186
Newark 68C2613

IEC Type K Exposed Junction
Farnell 4100748
Newark 15J1022



Thermocouple Connectors

Range of miniature or standard thermocouple connectors. Available in thermocouple types K, J, T, E, N, RS, B, and copper. IEC, ANSI & JIS colour codes available.

Best Sellers

IEC Thermocouple PCB Socket
Farnell 2347056
Newark 06X5514

IEC Thermocouple Plug
Farnell 7086362
Newark 67C1559

ANSI Thermocouple Socket
Farnell 2347121
Newark 06X4819



RTD Detectors

Wire-wound type provides greater accuracy and stability but are vulnerable to shock.

Flat film type are resistant to shock and have quicker thermal response times.

Various lengths and diameters available, in class A, B and 1/10th Din.

Best Sellers

PT1000 Thin Film Detector
Farnell 8598550
Newark 38K0883

PT100 Wire Wound Detector
Farnell 2770776
Newark 25AC2608

PT100 Class A Thin Film Detector
Farnell 8598525
Newark 38K0885



Mineral Insulated Thermocouples

Available in various calibration types with a variety of terminations.

These include; Thermocouple plugs, Terminal heads and Thermocouple cable.

Best Sellers

ANSI Thermocouple
Farnell 2420317
Newark 53X3217

IEC Thermocouple with Mini Plug
Farnell 4248338
Newark 19J1166

IEC Melt Bolt Thermocouple
Farnell 2816490
Newark 44AC8638



Resistance Thermometer Detectors (RTD) / Platinum Resistance Thermometers (PRT)

To suit a wide range of applications and styles, available in class A or B.

Best Sellers

Pt100 Heavy Duty Sensor Probe
Farnell 8598096
Newark 38K0974

Pt100 Sensor in Stainless Steel Tube with Teflon Lead
Farnell 2420300
Newark 53X3459

Pt100 Outdoor/ Cold Store Temperature Sensor
Farnell 2816462
Newark 44AC8648



L60 Fine Wire Thermocouple Welder

The Thermocouple Welder is a compact, simple-to-use instrument designed for thermocouple and fine wire welding. Supplied with foot switch, spare electrodes, pliers & safety glasses, impact clip and pen plate.

Best Sellers



L60+ Thermocouple & Fine Wire Welder and accessories
Farnell 2897470
Newark 62AC8741

