

STANDARD & CUSTOM-MADE TEMPERATURE SENSORS

- ⊕ NTC, PTC, PT100 & PT1000 PROBE TYPES
- ⊕ MULTIPLE CUSTOMISABLE OPTIONS
- ⊕ PURPOSE-BUILT THERMOCOUPLES
- ⊕ COMPLIANCE WITH IEC584 & IEC751 STANDARDS

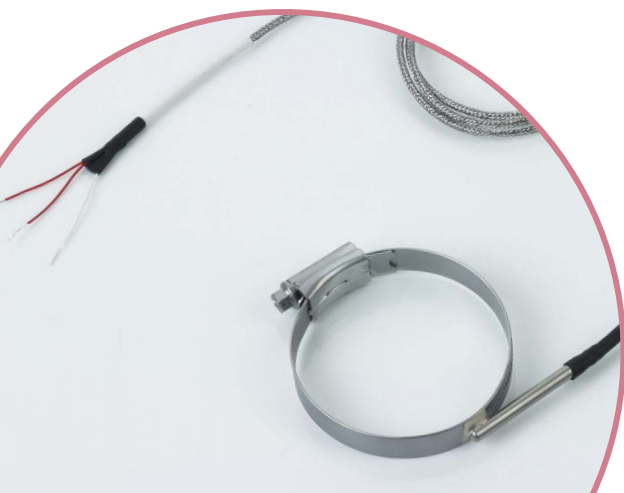
TECHNICAL ADVICE AVAILABLE ON SPECIFYING THE OPTIMAL
THERMISTOR, RTD OR THERMOCOUPLE FOR YOUR APPLICATION

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Process control systems are based on a few simple principles - but for the necessary performance to be achieved, the system must be **designed and implemented effectively** to suit the demands of each application.

By understanding every aspect of your project, we can advise on which **type of sensor** will be most appropriate for your needs, taking technical criteria and cost into consideration.

As required, we can also recommend how to **customise your probe** to optimise its position, improve operation, avoid any communication errors, prevent sensor failure, protect the probe from damage and extend its lifespan.



SELECTION SUPPORT

Wide choice of standard probe types to suit application requirements and desired cost

- 1k, 2k & 10k TPE thermistor probes supplied as standard with some digital thermostats
- Most popular items available next-day in a selection of lengths and terminations
- Stainless steel & mineral insulated types can be sourced for more aggressive environments

CUSTOM DESIGN

Numerous customisations possible to achieve optimum sensor performance and positioning

- Alterations can be made to sheath length, lead length and thermocouple diameter
- Different shaped-probes, semi-flexible options and ATEX or high temperature versions
- Available with housing and assemblies plus multiple options for surface mounting

INTEGRATION ASSISTANCE

Technical advice to ensure compatibility with your chosen digital controller or heater type

- Customisable cold end termination options such as standard and miniature connectors
- Advice on the suitability of different sensors to suit different types of temperature controller
- Fast response thermocouples available for specialist heating applications

RESPONSIVE SUPPLY

Custom-designed and special items typically delivered within 15 working days

- Sensors can be manufactured to match an existing design or a new specification
- Standard items available in 7-10 working days
- Quality production and compliance with international standards like IEC584 & IEC751

Thermistor Probes (NTC & PTC)

Recommended Temperature Range: -50°C to 150°C



Main Advantages

- General purpose use
- Versatile and low cost
- Hermetically sealed, typically IP67

Customisable Options

- Extended lead lengths
- Single and double insulation
- Terminations & fastenings including surface mounting

Resistance Temperature Detector (RTD) Probes

Recommended Temperature Range: -50°C to 600°C



Main Advantages

- Increased stability, precision and repeatability
- Robust and resistant to vibration
- Broad temperature range
- Usually PT100, but also PT1000

Customisable Options

- Different connectors, terminations and surface measurement options
- Hygienic materials for food & medical applications
- Flat film (wire wound also available)

Thermocouples

Recommended Temperature Range: -70°C to 1600°C



Main Advantages

- Widest temperature range
- Faster response times possible
- Rugged. Typically IP65-rated.
- Types include B, E, J, K, N, R, S & T

Customisable Options

- Usually custom-made with choice of shapes and material grades
- Any length of thermocouple or lead
- Diameters from 0.5 to 8 mm to achieve desired response time

Also Available



Assemblies for RTDs and Thermocouples



Thermowells



Transmitters for ATEX-Applications



Plastic Moulding



Industrial Process Control



Lab & R&D Equipment



Food Production



Catering Equipment & Foodservice



Commercial Refrigeration



Ovens and Furnaces

FOR FULL PRODUCT SPECIFICATIONS & SELECTOR TOOL, VISIT WWW.HAWCO.CO.UK/SENSORS

Custom-Designed Ready Within 2-3 Weeks

Any probe type manufactured to your exact specification

We can produce PTC or NTC probes, RTDs or thermocouples to meet the unique criteria of your application. We can either replicate a probe from an existing technical drawing or work with you to define the requirements for a new probe. Delivery of customised probes is normally 2-3 weeks after order is placed.

Available on Request Delivered Within 5-10 Days

Access to a full range of production-ready parts

We can source a wide variety of standard probes on your behalf - and supply these to you within 5 to 10 days. Ideal for single probes or small quantities.

Limited Selection Available for Next-Day Delivery

Some of our most popular refrigeration and heating probes are available to buy from our existing warehouse stock and dispatched for next-day delivery.

PTC Thermistor Probes (2 Wire)

| SERIES | SHEATH MATERIAL | RESISTANCE (AT 25°C) | LENGTH (METRES) | SUPPLIER |
|--------|-----------------|-------------------------|--------------------|----------|
| ST1K | TPE | 1K | 2, 3.5 or 5 | LAE |
| ST1N | STAINLESS STEEL | 1K | 2 | LAE |
| SN7 | TPE | 1K | 1.5 | ELIWELL |

Some standard 3-wire PTC probes also available on request

NTC Thermistor Probes (2 Wire)

| SERIES | SHEATH MATERIAL | RESISTANCE (AT 25°C) | LENGTH (METRES) | SUPPLIER |
|----------|-----------------|-------------------------|--------------------|----------|
| SN2B | TPE | 2K | 1.5, 2, 3.5 or 5 | LAE |
| SN4B | TPE | 10K | 2 | LAE |
| NTC...HP | TPE | 10K | 1.5, 3 or 6 | CAREL |
| NTC...WP | STAINLESS STEEL | 10K | 0.8, 1.5, 3 or 6 | CAREL |
| SN8 | TPE | 10K | 1.5 | ELIWELL |

GOT A PROJECT IN MIND? WE CAN HELP

Every day, our in-house design team advise OEM customers on the components they need.

We can source a suitable part from an existing design specification or set of technical drawings. Or we can investigate a number of different solutions based on original requirements.

If you want advice on how to improve your product or reduce its cost, discuss your project with us.



**REQUEST A TEST SAMPLE
FOR YOUR PRODUCT DESIGN**



**ARRANGE A MEETING
WITH A TECHNICAL EXPERT**



**SEND US YOUR
PROJECT SCOPE**



TO TALK TO OUR EXPERT TEAM,
CALL **+44 (0)1483 869 070** OR
EMAIL **SALES@HAWCO.CO.UK**

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