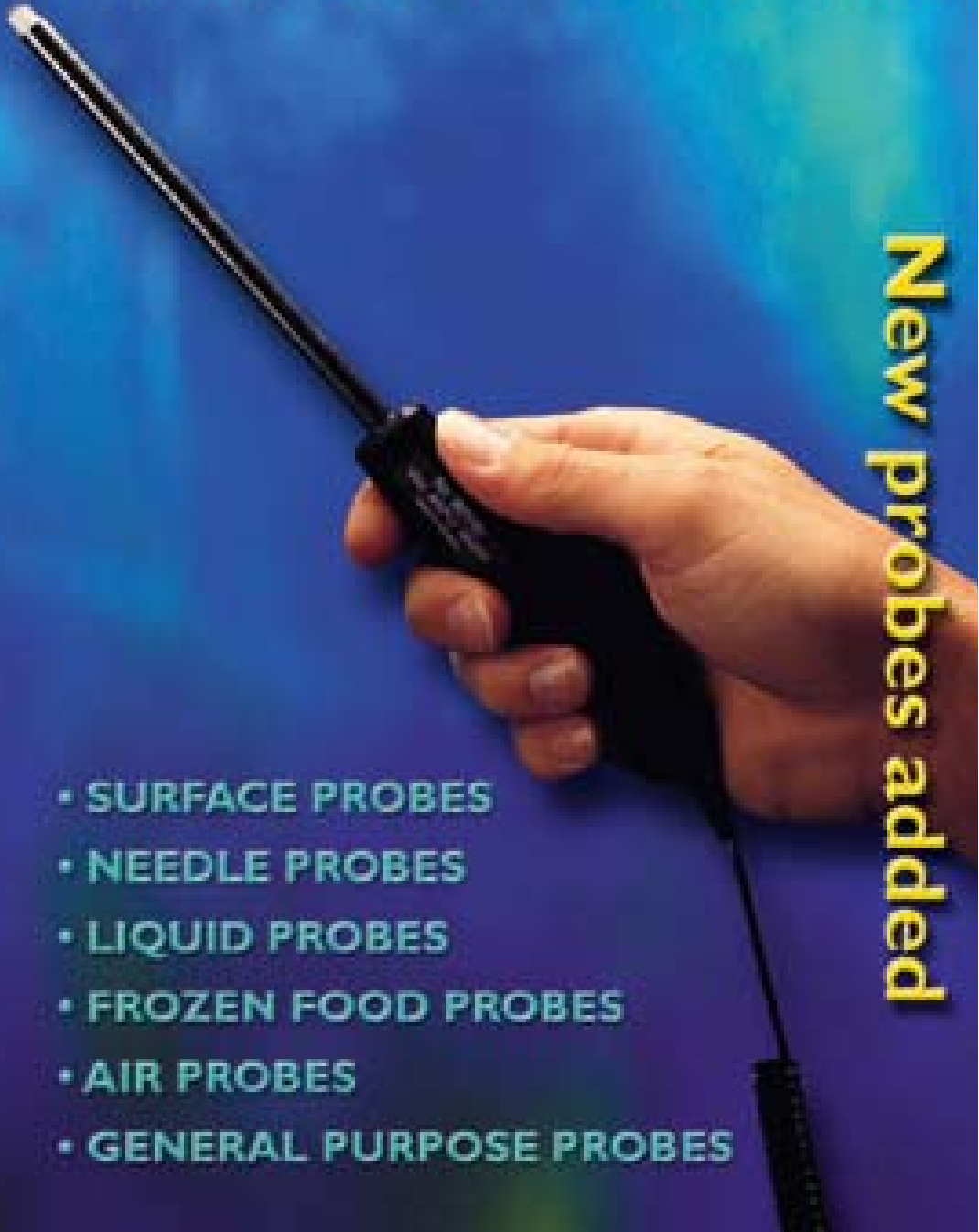


# TEMPERATURE PROBES



**New probes added**

- SURFACE PROBES
- NEEDLE PROBES
- LIQUID PROBES
- FROZEN FOOD PROBES
- AIR PROBES
- GENERAL PURPOSE PROBES

## Technical data probes

|                   |   |
|-------------------|---|
| <b>Probe Type</b> | : K type thermocouple   |
| <b>Accuracy</b>   | : Class I Premium grade   |
| <b>Handle</b>     | : ABS, 110 mm long, 90°C max.   |
| <b>Shaft</b>      | : Stainless steel   |
| <b>Cable</b>      | : 1000 mm standard.<br>Coiled polyurethan cable for probes with a handle. |
| <b>Plug</b>       | : K type miniature thermocouple plug                                      |


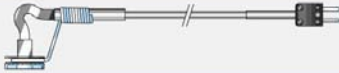



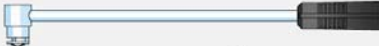






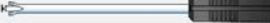



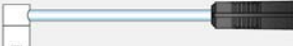




## Ordering details

### Model

### Surface probes

|               |  |
|---------------|--|
| <b>80100</b>  | <b>Magnetic surface probe</b><br>Measures surface temperature of ferrous materials, Ø 14 mm.           |
| <b>80103</b>  | <b>Heavy duty right angle surface probe</b><br>Springloaded measuring disk, shaft 130 mm.              |
| <b>80103A</b> | <b>Heavy duty right angle surface probe</b><br>Springloaded measuring disk, shaft 300 mm.              |
| <b>80109</b>  | <b>Pipe clamp probe</b><br>Measures pipe surface temperature, Ø 35 mm max                              |
| <b>80110</b>  | <b>High temperature surface probe</b><br>Ceramic springloaded tip, fast response spring type junction. |
| <b>80110A</b> | <b>High temperature surface probe</b><br>Right angle measuring head as 80110, shaft 130 mm.            |
| <b>80101</b>  | <b>Surface probe</b><br>Designed with a springloaded measuring disk. Shaft 130 mm.                     |
| <b>80102A</b> | <b>Electrical insulated surface probe</b><br>Prevents short circuiting by the shaft. Shaft 130 mm.     |
| <b>80111</b>  | <b>PTFE right angle surface probe</b><br>Band type measuring tip, shaft 130 mm.                        |
| <b>80111A</b> | <b>PTFE right angle surface probe</b><br>Band type measuring tip, shaft 300 mm.                        |
| <b>80117</b>  | <b>Heavy duty surface probe</b><br>For harsh environments fast response. Shaft 130 mm.                 |

# K

| Dimensions (mm)   |   | Response time | Max.temp. at tip |
|---|---|---------------|------------------|
|    |    | 7 sec.        | 220°C<br>428°F   |
|   |    | 8 sec.        | 450°C<br>842°F   |
|  |  | 8 sec.        | 450°C<br>842°F   |
|   |  | 8 sec.        | 200°C<br>392°F   |
|  |  | 2 sec.        | 900°C<br>1652°F  |
|  |  | 2 sec.        | 900°C<br>1652°F  |
|  |  | 5 sec.        | 450°C<br>842°F   |
|  |  | 2 sec.        | 200°C<br>392°F   |
|  |  | 4 sec.        | 200°C<br>392°F   |
|  |  | 4 sec.        | 200°C<br>392°F   |
|  |  | 2 sec.        | 450°C<br>842°F   |





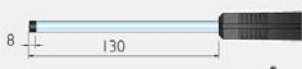
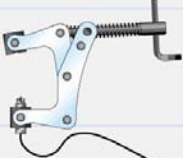



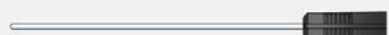



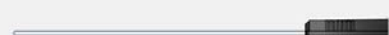
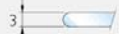
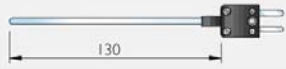

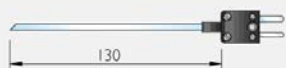
## Ordering details

| Model  | Surface probes   |
|--------|--|
| 80118  | <b>Block type flexible band</b><br>For moving or stationary surfaces, dimensions 50 x 40 x 30 mm.  |
| 80118R | <b>Rotating block type flexible band</b><br>For moving or stationary surfaces. R min. 50 mm.   |
| 80500  | <b>Fast response springtip sensor</b><br>For flat surfaces. Shaft 130 mm.  |
| 80506  | <b>Flat springblade probe</b><br>0,3 mm thick blades for surface measurement or between paper, plates etc, dimensions 40 x 8 mm.         |
| 80507  | <b>Flat Kapton insulated leaf probe</b><br>Fast response flexible to curve.  |
| 80508  | <b>Hook and loop thermocouple</b><br>Fastens back to back for pipe surface measurement, Ø 100 mm max.                                    |
| 80509  | <b>Self adhesive patch thermocouple</b><br>PTFE impregnated fibreglass tape.   |
| 80511  | <b>Clamp type surface probe</b><br>Fits to max. 20 mm plates etc.  |
| 80512  | <b>Rugged magnetic surface probe</b><br>To suit industrial measurements, Ø 80 x 15 mm.   |
| 80513  | <b>Miniature magnetic surface probe</b><br>Dimensions 5 x 5 x 2 mm<br>Twisted pair thermocouple wire PTFE insulated.                     |
| 80514  | <b>Foundry probe with solid thermocouple pins</b><br>Measures hot metal surfaces or molten metal castings, shaft 500 mm.                 |
| 80515  | <b>Wire mill surface probe</b><br>To measure running wire in cable mill's.   |
| 80516  | <b>Universal bearing probe</b><br>Sensortip adjustable 6..70mm can be placed in upper or lower jaw, springloaded. Sensor is replaceable. |

|   |   | K             |                  |
|---|---|---------------|------------------|
| Dimensions (mm)   |   | Response time | Max.temp. at tip |
|   |    | 3 sec.        | 250°C<br>482°F   |
|   |    | 1 sec.        | 200°C<br>392°F   |
|    |    | 3 sec.        | 400°C<br>752°F   |
|    |    | 5 sec.        | 400°C<br>752°F   |
|    |    | 1 sec.        | 300°C<br>572°F   |
|   |   | 5 sec.        | 100°C<br>212°F   |
|  |  | 2 sec.        | 250°C<br>482°F   |
|   |  | 7 sec.        | 200°C<br>392°F   |
|  |  | 12 sec.       | 150°C<br>302°F   |
|  |  | 2 sec.        | 200°C<br>392°F   |
|   |  | 2 sec.        | 1260°C<br>2300°F |
|   |  | 2 sec.        | 250°C<br>482°F   |
|   |  | 3 sec.        | 400°C<br>752°F   |

## Ordering details

| Model  | Surface probes  |
|--------|---|
| 80521  | <b>Surface block probe for clamp mounting</b><br>Shaped to suit flat round and curved surfaces, dimensions 50 x 12 mm. Silicon cable. IP 65 |
| 80522  | <b>Miniature bandtype surface probe</b><br>For electronic parts IC's, transistors etc.  |
| 80530  | <b>Sturdy surface probe</b><br>Fast response spring type junction, embedded in silicon.   |
| 80531  | <b>Clamp surface probe</b><br>Fits any surface, jaws adjustable, 50 mm max. Fixation with a crank.  |
| Model  | General purpose probes  |
| 80104  | <b>Bendable probe</b><br>For gas, liquids, open fire etc. Shaft 130 mm.   |
| 80104A | <b>Bendable probe</b><br>For gas, liquids, open fire etc. Shaft 300 mm.   |
| 80105  | <b>Bendable probe, fast response</b><br>For gas, liquids, open fire etc. Shaft 130 mm.  |
| 80105A | <b>Bendable probe, fast response</b><br>For gas, liquids, open fire etc. Shaft 300 mm.  |
| 80114  | <b>Bendable probe</b><br>Mini plug termination. Insulated hot junction.   |
| 80115  | <b>Bendable probe</b><br>Sharp tip mini plug termination. Insulated hot junction.   |

| <b>K</b>  |   |                      |                         |
|---|---|----------------------|-------------------------|
| <b>Dimensions (mm)</b>  |   | <b>Response time</b> | <b>Max.temp. at tip</b> |
|    |    | 20 sec.              | 200°C<br>392°F          |
|   |    | 3 sec.               | 250°C<br>482°F          |
|    |    | 2 sec.               | 300°C<br>572°F          |
|   |    | 3 sec.               | 300°C<br>572°F          |
| <b>Dimensions (mm)</b>  |   | <b>Response time</b> | <b>Max. temp.</b>       |
|  |  | 12 sec.              | 1100°C<br>2012°F        |
|  |  | 12 sec.              | 1100°C<br>2012°F        |
|  |  | 6 sec.               | 900°C<br>1652°F         |
|  |  | 6 sec.               | 900°C<br>1652°F         |
|  |  | 12 sec.              | 600°C<br>1112°F         |
|  |  | 12 sec.              | 600°C<br>1112°F         |

## Ordering details

### Model Needle probes

|              |  |
|--------------|--|
| <b>80106</b> | <b>Heavy duty penetration probe</b><br>Sharp tip for easy penetration into semi solids like rubber, soil, plastic, fruit etc. Shaft 130 x 3 mm.      |
| <b>80107</b> | <b>Penetration probe</b><br>Fast response sharp tip for easy penetration into semi solids like rubber, soil, plastic, fruit etc. Shaft 130 x 1,5 mm. |
| <b>80119</b> | <b>Frozen food probe -180°C and up.</b><br>To screw in to product. Detachable cable.   |
| <b>80504</b> | <b>Hypodermic needle probe</b><br>With direct cable, stiff insertion into hard semi solids.  |
| <b>80505</b> | <b>Hypodermic needle probe</b><br>Stiff insertion into hard semi solids  |
| <b>80525</b> | <b>Tyre probe</b><br>With stiff penetration shaft to measure the tyre temperature at races etc.  |












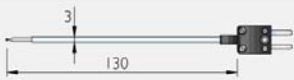



### Model Air probes

|              |  |
|--------------|--|
| <b>80108</b> | <b>Air temperature probe</b><br>Fast response for use in air or gas flows. Shaft 130 mm. |
| <b>80116</b> | <b>Air temperature probe</b><br>Mini plug termination exposed hot junction.              |
| <b>80510</b> | <b>Clamp type air probe</b><br>Fits to max. 20 mm.                                       |

### Model Wire probes

|              |   |
|--------------|---|
| <b>80120</b> | <b>Wire probe</b><br>Glasfibre insulated, exposed junction. |
|--------------|---|



|   |   |               | K                |
|---|---|---------------|------------------|
| Dimensions (mm)   |   | Response time | Max.temp. at tip |
|    |    | 12 sec.       | 600°C<br>1112°F  |
|    |    | 6 sec.        | 600°C<br>1112°F  |
|   |    | 18 sec.       | 200°C<br>392°F   |
|   |    | 3 sec.        | 200°C<br>392°F   |
|   |    | 3 sec.        | 200°C<br>392°F   |
|   |  | 3 sec.        | 200°C<br>392°F   |
| Dimensions (mm)   |   | Response time | Max.temp. at tip |
|  |  | 2 sec.        | 600°C<br>1112°F  |
|  |  | 2 sec.        | 600°C<br>1112°F  |
|   |  | 2 sec.        | 200°C<br>392°F   |
| Dimensions (mm)   |   | Response time | Max.temp. at tip |
|  |  | 1 sec.        | 480°C<br>896°F   |

## Ordering details

### Model










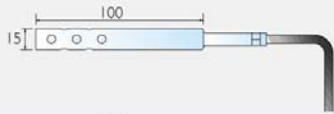

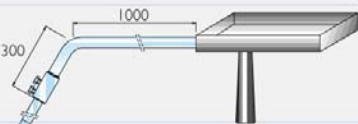







## Wire probes

|              |  |
|--------------|--|
| <b>80121</b> | <b>High temperature wire probe</b><br>Ceramic fibre insulated, exposed hot junction. Each wire 0,8 mm. |
| <b>80501</b> | <b>Twisted wire probe</b><br>Each wire 0,2 mm, PTFE insulated.<br>Exposed hot junction.                |
| <b>80502</b> | <b>Wire probe</b><br>Insulated hot junction, PTFE jacket. Flexible to use.                             |
| <b>80503</b> | <b>Caddy plug wire probe</b><br>PTFE insulated wire with exposed hot junction.                         |

### Model

## Custom measurement sensors

|              |  |
|--------------|--|
| <b>80517</b> | <b>Chemical resistant tank probe.</b><br>Stainless steel weight for straight down insertion in liquids.<br>Length 10 meter PTFE insulated cable. |
| <b>80518</b> | <b>Non ferrous foundry probe</b><br>Holder incl. dip element, universal instrument area,<br>dimensions 175 x 75 mm.                              |
| <b>80524</b> | <b>Bolt-on washer type sensor</b><br>8 mm hole in nickel plated brass ring.  |
| <b>80526</b> | <b>PFA coated probe</b><br>For caustic and corrosive chemical liquids.<br>Bendable shaft 300 mm.   |
| <b>80540</b> | <b>Black body probe</b><br>Absorbs and measures all radiation incidents upon it, supplied<br>incl. support.                                      |
| <b>80570</b> | <b>Solder iron probe</b><br>To measure soldering iron tips.  |

|   |   |               | K                |
|---|---|---------------|------------------|
| Dimensions (mm)   |   | Response time | Max.temp. at tip |
|    |    | 1 sec.        | 1430°C<br>2606°F |
|    |    | 1 sec.        | 250°C<br>482°F   |
|    |    | 1 sec.        | 250°C<br>482°F   |
|    |    | 1 sec.        | 250°C<br>482°F   |
| Dimensions (mm)   |   | Response time | Max.temp. at tip |
|  |  | 12 sec.       | 250°C<br>482°F   |
|  |  | 30 sec.       | 1260°C<br>2300°F |
|  |  | 15 sec.       | 200°C<br>392°F   |
|  |  | 12 sec.       | 220°C<br>428°F   |
|   |  |               | 250°C<br>482°F   |
|  |  | 2 sec.        | 500°C<br>932°F   |

## Ordering details







| Model  | Accessories  |
|--------|--|
| 80122  | <b>Thermocouple wire</b><br>2 x 0,2 mm. each wire and overall jacket teflon FEP  |
| 80516A | <b>Spare sensor</b> for 80516  |
| 80518A | <b>Spare dip element</b> for 80518   |
| 80520  | <b>Thermocouple extension cable</b><br>Length 10 meter for use with all miniplug type K probes (other length available) max. 85°C. |
| 80550  | <b>Adaptor plug</b> mini female/ large (round pin)male   |
| 80551  | <b>Adaptor plug</b> mini male/ large (round pin)female   |
| 80560  | <b>Thermal attachment pads</b><br>Attaching small diameter thermocouples e.g. exposed hot junction wire probes e.g. 80122          |

## Technical data probes



**Probe Type** : Pt100 resistance element 3 wire system  
**Accuracy** : according to IEC 751 class B  
**Handle** : ABS, 110 mm long, 90°C max.  
**Cable** : 1000mm standard.  
 Coiled polyurethan cable for probes with a handle.  
**All Pt100 probes come with stripped ends, connector optional**

## Model Surface probes

|       |  |
|-------|--|
| 82109 | <b>Every angle surface probe</b><br>Flexible tip for surface measurement.  |
| 82509 | <b>Self adhesive bendable Pt 100 sensor</b><br>Silicon patch size 35 x 13 x 2 mm fast response by use of aluminium contact foil. PTFE wires length 4 meter.<br>Good chemical resistance. |

|   |               |                  | <b>K</b> |
|---|---------------|------------------|----------|
| Dimensions (mm)   | Response time | Max.temp. at tip |          |
|    |               | 215°C<br>419°F   |          |
|    | 3 sec.        | 400°C<br>752°F   |          |
|    | 30 sec.       | 1260°C<br>2300°F |          |
|    |               | 85°C             |          |
|   |               |                  |          |
|  |               | 250°C<br>482°F   |          |

# Pt 100

| Dimensions (mm)   | Response time | Max.temp. at tip |  |
|---|---------------|------------------|--|
|  | 4 sec.        | 300°C<br>572°F   |  |
|  | 2 sec.        | 250°C<br>482°F   |  |

## Ordering details

### Model Surface probes

**82521** **Surface block probe for clamp mounting**  
 Shaped to suit flat round and curved surfaces.  
 Dimensions 50 x 12 mm. Silicon cable. IP 65

### Model General purpose probes

**82104** **Bendable probe**  
 For gas, liquids, open fire etc. Shaft 130 mm.

**82525** **Close-end tube probe**  
 Dim. 50 x 6 mm, PTFE insulated wires 1000 mm.

### Model Needle probes

**82106** **Heavy duty penetration probe**  
 Sharp tip for easy penetration into semi solids like rubber, soil, plastic, fruit etc. Shaft 130 mm.

### Model Air probes




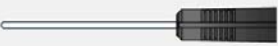



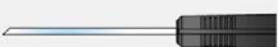





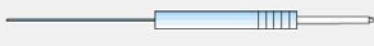


**82108** **Air temperature probe**  
 Fast response for use in air or gas flows.

### Model Custom measurement sensor

**82526** **PFA coated probe**  
 For caustic and corrosive chemical liquids, bendable shaft 300 mm.

**82527** **Laboratory probe**  
 Length 200 mm Ø 0,5 mm, PTFE insulated cable.

**82524** **Bolt-on type sensor**  
 Stainless steel mounting plate.  
 Dim. 23 x 10 with twisted wire, length 1000 mm.

|   |   | <b>Pt 100</b>        |                         |
|---|---|----------------------|-------------------------|
| <b>Dimensions (mm)</b>  |   | <b>Response time</b> | <b>Max.temp. at tip</b> |
|    |    | 20 sec.              | 200°C<br>392°F          |
| <b>Dimensions (mm)</b>  |   | <b>Response time</b> | <b>Max.temp. at tip</b> |
|    |    | 7 sec.               | 600°C<br>1112°F         |
|    |    | 7 sec.               | 200°C<br>392°F          |
| <b>Dimensions (mm)</b>  |   | <b>Response time</b> | <b>Max.temp. at tip</b> |
|  |  | 7 sec.               | 600°C<br>1112°F         |
| <b>Dimensions (mm)</b>  |   | <b>Response time</b> | <b>Max.temp. at tip</b> |
|  |  | 5 sec.               | 600°C<br>1112°F         |
| <b>Dimensions (mm)</b>  |   | <b>Response time</b> | <b>Max.temp. at tip</b> |
|  |  | 12 sec.              | 220°C<br>428°F          |
|  |  | 4 sec.               | 240°C<br>464°F          |
|  |  | 15 sec.              | 200°C<br>392°F          |



P.O. Box 50, 2760 AB Zevenhuizen, The Netherlands  
Tel: 0180 - 631344 Fax: 0180 - 632917

E-mail: [info@tqcinfo.com](mailto:info@tqcinfo.com)

<http://www.tqcinfo.com>





# heavy duty hand held type K thermometer probes

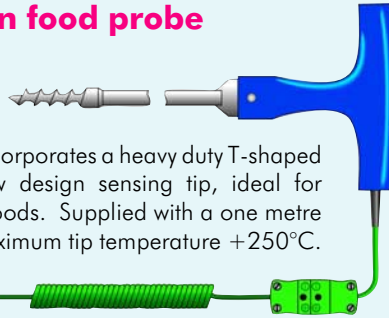
T-shaped handle or heavy duty ribbed handle with colour-coded caps



This range of heavy duty hand held probes is supplied with a heavy duty ribbed or T-shaped handle, a one metre straight PVC lead and a miniature connector. If you require a one metre coiled PVC lead, replace the first digit (1) of the order code with the number 3.

## corkscrew frozen food probe

Ø8 x 100mm

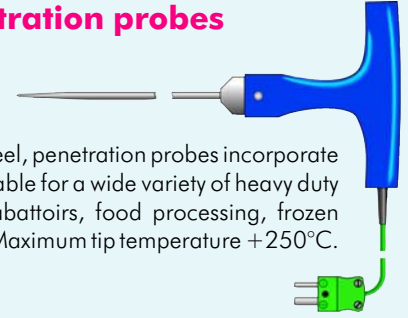


This frozen food probe incorporates a heavy duty T-shaped handle and a corkscrew design sensing tip, ideal for measuring deep frozen foods. Supplied with a one metre PU detachable lead. Maximum tip temperature +250°C.

| order code | description                 |
|------------|-----------------------------|
| 333-175    | corkscrew frozen food probe |

## T-shaped penetration probes

Ø3.3 or 4 x 100mm

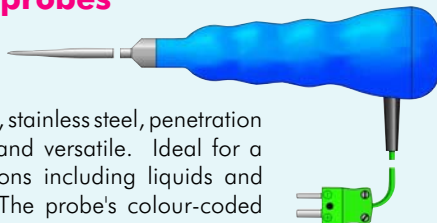


These robust, stainless steel, penetration probes incorporate a T-shaped handle. Suitable for a wide variety of heavy duty applications including abattoirs, food processing, frozen and refrigerated foods. Maximum tip temperature +250°C.

| order code | description             |
|------------|-------------------------|
| 133-123    | heavy duty probe Ø3.3mm |
| 133-124    | heavy duty probe Ø4mm   |

## penetration probes

Ø3.3 x 130mm

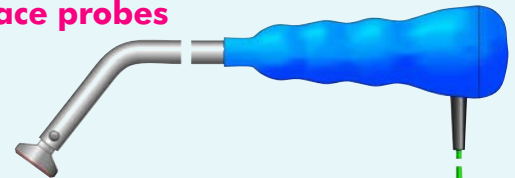


These colour-coded, stainless steel, penetration probes are strong and versatile. Ideal for a variety of applications including liquids and semi-solid foods. The probe's colour-coded cap assists users to identify a particular probe for a specific application. Maximum tip temperature +250°C.

| order code | description                    |
|------------|--------------------------------|
| 143-162    | penetration probe - blue cap   |
| 143-163    | penetration probe - brown cap  |
| 143-164    | penetration probe - green cap  |
| 143-165    | penetration probe - red cap    |
| 143-166    | penetration probe - white cap  |
| 143-167    | penetration probe - yellow cap |

## bell surface probes

Ø19 x 130mm



These fast response surface probes have a bell-shaped housing with a thin, flat, stainless steel measuring disc, ideal for measuring surface temperatures. The probes are available in three designs, straight, right-angled (90°) or with a 45° angled head. The 143-088 is supplied with a one metre armoured lead. Maximum tip temperature +250°C.

| order code | description                    |
|------------|--------------------------------|
| 143-080    | bell surface probe - straight  |
| 143-084    | bell surface probe - 45° angle |
| 143-086    | bell surface probe - 90° angle |
| 143-088    | bell surface probe - 90° angle |

## fast response probes

### exposed junction wire thermocouples

These fast response, general purpose, exposed junction thermocouple wire probes are small in size and of a low mass. They are suitable for a wide variety of applications. When used in conjunction with the self-adhesive attachment pads, these thermocouples provide a quick and easy solution to the measurement of surface or air temperatures.

### exposed junction wire probes

Ø1.5 x 1000mm

These PTFE insulated exposed junction wire probes are suitable for measuring the air temperature inside fridges and freezers. Maximum wire temperature +250°C.

| order code | description                        |
|------------|------------------------------------|
| 133-362    | 1000mm exposed junction wire probe |
| 133-363    | 2000mm exposed junction wire probe |
| 133-365    | 3000mm exposed junction wire probe |

### exposed junction wire probes

Ø1.5 x 1000mm

These fibreglass exposed junction wire probes are ideal for measuring the temperature of ovens, hot cupboards etc. Maximum wire temperature +350°C.

| order code | description                        |
|------------|------------------------------------|
| 133-382    | 1000mm exposed junction wire probe |
| 133-383    | 2000mm exposed junction wire probe |
| 133-385    | 3000mm exposed junction wire probe |

## heavy duty wire probes

Ø2.4 x 1000mm

These heavy duty PTFE insulated exposed junction wire probes are suitable for measuring the air temperature inside fridges and freezers. Maximum wire temperature +250°C.

| order code | description                  |
|------------|------------------------------|
| 133-372    | 1000mm heavy duty wire probe |
| 133-373    | 2000mm heavy duty wire probe |
| 133-375    | 3000mm heavy duty wire probe |

## self-adhesive attachment pads

Thermocouple attachment pads are recommended for attaching small diameter exposed junction wire thermocouples to surfaces, i.e. hotplates, pipes etc. These easy to use PTFE pads operate in the range of -50 to +200°C.



| order code | description                |
|------------|----------------------------|
| 600-485    | pack of 25 attachment pads |



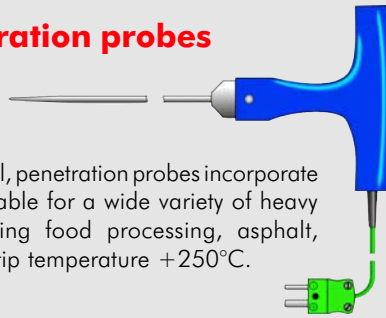
# heavy duty hand held type K thermometer probes

T-shaped handle or heavy duty ribbed handle with colour-coded caps



This range of heavy duty hand held probes is supplied with a heavy duty ribbed or T-shaped handle, a one metre straight PVC lead and a miniature connector. If you require a one metre coiled PU lead, replace the first digit (1) of the order code with the number 3.

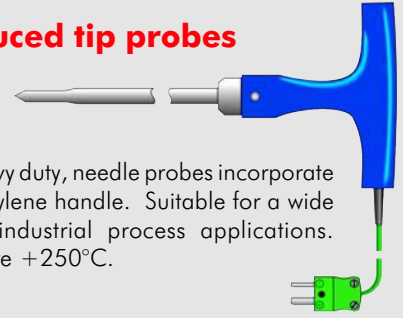
## T-shaped penetration probes



These robust, stainless steel, penetration probes incorporate a T-shaped handle. Suitable for a wide variety of heavy duty applications including food processing, asphalt, blacktop etc. Maximum tip temperature +250°C.

| order code | description                  |
|------------|------------------------------|
| 133-123    | Ø3.3mm heavy duty probe      |
| 133-124    | Ø4mm heavy duty probe        |
| 133-126    | Ø6.35/4.8mm heavy duty probe |
| 333-175    | Ø8mm corkscrew probe         |

## heavy duty reduced tip probes

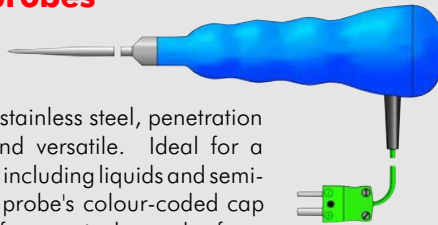


These stainless steel, heavy duty, needle probes incorporate a T-shaped blue polyethylene handle. Suitable for a wide variety of heavy duty industrial process applications. Maximum tip temperature +250°C.

| order code | description                    |
|------------|--------------------------------|
| 133-120    | Ø6.35 x 300mm h/d needle probe |
| 133-130    | Ø8 x 500mm h/d needle probe    |
| 133-135    | Ø9.5 x 1400mm h/d needle probe |
| 133-133    | Ø9.5 x 2000mm h/d needle probe |

## penetration probes

Ø3.3 x 130mm

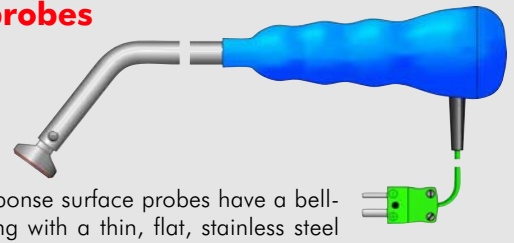


These colour-coded, stainless steel, penetration probes are strong and versatile. Ideal for a variety of applications including liquids and semi-solid materials. The probe's colour-coded cap assists users to identify a particular probe for a specific application. Maximum tip temperature +250°C.

| order code | description                    |
|------------|--------------------------------|
| 143-162    | penetration probe - blue cap   |
| 143-163    | penetration probe - brown cap  |
| 143-164    | penetration probe - green cap  |
| 143-165    | penetration probe - red cap    |
| 143-166    | penetration probe - white cap  |
| 143-167    | penetration probe - yellow cap |

## surface probes

Ø19 x 130mm



These fast response surface probes have a bell-shaped housing with a thin, flat, stainless steel measuring disc, ideal for measuring surface temperatures. The probes are available in three designs, straight, right-angled (90°) or with a 45° angled head. The 143-088 is supplied with a one metre armoured lead. Maximum tip temperature +250°C.

| order code | description                    |
|------------|--------------------------------|
| 143-080    | bell surface probe - straight  |
| 143-084    | bell surface probe - 45° angle |
| 143-086    | bell surface probe - 90° angle |
| 143-088    | bell surface probe - 90° angle |

## HVAC type K thermometer probes

ideal for measuring the temperature of pipework, radiators & ovens

This range of HVAC probes is supplied with a one/two metre straight PVC, PTFE or stainless steel, braided lead and miniature connector.

### velcro pipe probe

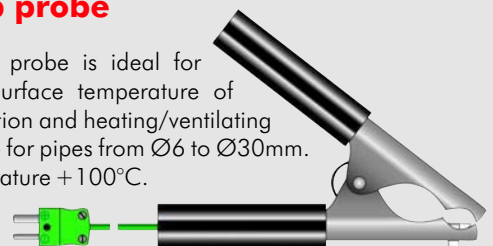


This 500mm long velcro pipe probe is a wrap-around probe suitable for medium and large pipe temperature measurement in HVAC industries. Maximum tip temperature +100°C.

| order code | description       |
|------------|-------------------|
| 133-080    | velcro pipe probe |

### pipe clamp probe

The pipe clamp probe is ideal for measuring the surface temperature of pipes in refrigeration and heating/ventilating systems. Suitable for pipes from Ø6 to Ø30mm. Maximum temperature +100°C.



| order code | description      |
|------------|------------------|
| 133-040    | pipe clamp probe |

### magnet surface probe



This easy to use magnet probe is supplied with a one metre PTFE lead. Ideal for monitoring the surface temperature of ferrous metals, e.g. radiators. Maximum tip temperature +150°C.

| order code | description          |
|------------|----------------------|
| 133-016    | magnet surface probe |


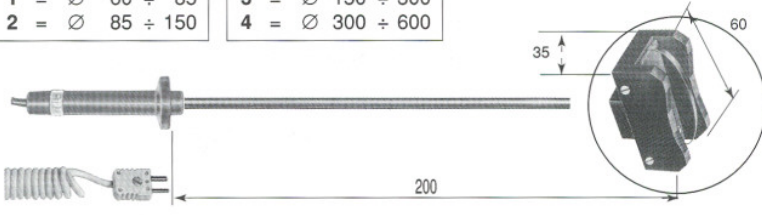


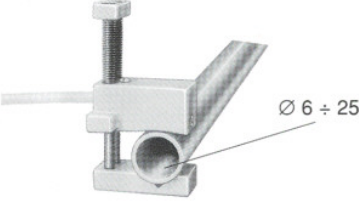

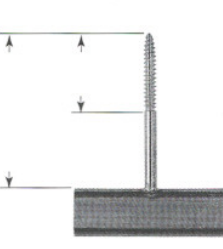

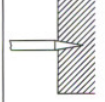



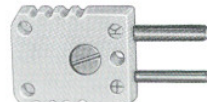
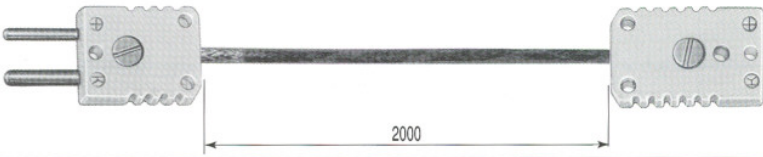
### black ball radiation probe



The black ball probe is designed to measure the radiation temperatures in kilns and ovens. Supplied with a two metre stainless steel braided lead. Maximum ball temperature +200°C.

| order code | description                |
|------------|----------------------------|
| 133-475    | black ball radiation probe |

SONDE SENSORE TERMOCOPPIA TIPO "K" (CHROMEL-ALUMEL) - THERMOCOUPLE K TYPE PROBES (CHROMEL-ALUMEL)  
 SONDES A THERMOCOUPLE TYPE K (CHROMEL-ALUMEL) - THERMOAARFÜHLER TYP K (CHROMEL-ALUMEL) - SONDAS TERMOPARES TIPO K (CHROMEL-ALUMEL)

| COD.   | °C max.    | τ** sec. | DIMENSIONI   | DIMENSIONS | DIMENSIONS   | ABMESSUNGEN   | DIMENSIONES | IMPIEGO<br>USE<br>UTILISATION<br>GEBRAUCH<br>EMPLEO                                 |  |  |  |
|--|------------|----------|--|------------|--|---|-------------|---|---|--|--|
| TP 774   | 250        | 2"       | <p>1 = ∅ 60 ÷ 85<br/>2 = ∅ 85 ÷ 150</p> <p>3 = ∅ 150 ÷ 300<br/>4 = ∅ 300 ÷ 600</p>   |            |  |   |             |  |   |  |  |
| TP 655   | 180        | 2"       |   |            |  |   |             |  |   |  |  |
| TP 661   | -60<br>+50 | 30"      |   |            |  |   |             |  | HD 8802<br>HD 8704<br>HD 9016<br>HD 9218<br>DO 9416                                 |  |  |
| TP 909   |            |          |    |            |  |   |             |   |   |  |  |
| KCAL TEST  |            |          | <p>Simula 8 valori fissi della scala della termocoppia K da -100°C a +800°C. Completo di batteria al litio. Indicato per gli strumenti con ingresso a termocoppia K, connettore mignon.</p> <p>Simulates 8 fixed values of the K type thermocouple range from -100°C to +800°C. Complete with a lithium battery. Suitable for the instruments with K thermocouple input, mini connector.</p> |            |  |   |             |   |   |  |  |
| CM   | "K"        |          |   |            |  |   |             |   |   |  |  |
| CS   | "K"        |          |   |            |  |   |             |   |   |  |  |
| PW   | "K"        |          |    |            |  |   |             |   |   |  |  |
| <p>* A temperature sopra i 400°C evitare urti violenti o shock termici, si può danneggiare irrimediabilmente il sensore.<br/>                 At temperatures above 400°C avoid hard knocks or thermal shocks which could cause irremediable damages.<br/>                 A température supérieure aux 400°C éviter les coups violents et les chocs thermiques qui pourraient abîmer irrémédiablement le capteur.<br/>                 Vermeide man heftige stöße, besonders bei Temperaturen über 400°C, oder Temperaturschocks um die Fühler nicht wiedergutzumachender Weise beschädigen können.<br/>                 Cuando las temperaturas son mayores que 400°C evitar golpes fuertes y los cambios bruscos de temperatura qui pueden ocasionar danos irremediables el la sonda.</p> |            |          | <p>Time constant at 63% of final temperature variation.<br/>                 Response time is referred: For immersion probes at 100°C<br/>                 For surface probes with metallic surface at 200°C<br/>                 For air probe at air temperature of 100°C</p>  |            |  | <p>Constante du temps au 63% de la variation de la température finale.<br/>                 Le temps de réponse: Pour sondes à immersion à 100°C<br/>                 Pour sondes à surface avec une surface métallique à 200°C<br/>                 Sondes à air à une température de l'air de 100°C</p>         |             |   |   |  |  |
| <p>** Costante di tempo per rispondere al 63% della variazione di temperatura finale.<br/>                 I tempi di risposta sono riferiti: Per le sonde ad immersione in acqua a 100°C<br/>                 Per le sonde a contatto al contatto di una superficie metallica a 200°C<br/>                 Per le sonde in aria alla temperatura dell'aria a 100°C</p>  |            |          | <p>Ansprechzeit:<br/>                 Für Eintauchfühler 100°C<br/>                 Für Kontakfühler beim Kontakt mit metallischen Oberflächen bei 200°C<br/>                 Für Luftfühler bei 100°C Lufttemperatur</p>  |            |  | <p>Constante de tiempo al 63% de la variación de la temperatura final.<br/>                 Tiempo de respuesta: Para sondas de inmersión a 100°C<br/>                 Para sondas de superficie con superficie metálica a 200°C<br/>                 Para sondas de aire a una temperatura del aire de 100°C</p> |             |   |   |  |  |