

TECHNICAL DATA SHEET

Probes

Designed for accuracy and durability

Developed from extensive research, destructive testing and analysis of similar products, these probes are designed to meet today's demanding standards.

Built to withstand considerable push, pull and twist forces, the probe has been especially designed to fit comfortably into the hand and features a unique "thumb-stop" for ease of use as well as protection against slipping. Furthermore, for penetration applications, the angle of the general purpose probe's point has been set to provide less resistance at the insertion point.

Our 2100 Series Probes are available with either straight or curly cables



Clean styling

The probe's handle parts are ultrasonically welded and sealed to IP67, so that it may be scrubbed clean without affecting the internal wiring. With sealed tip probes, the complete unit is protected to IP67. To prevent cross-contamination, we recommend that probes are cleaned with anti-bacterial wipes.

Colour coding on the handles

Our 2100 Series Probes are supplied complete with a selection of colour coded tangs in a range of colours. (Also supplied on request for other probes)

Special Probe Manufacture

Frequently, customers require probes manufactured for their specialist applications and Digitron can produce these special probes on request.



Probe Types

Sensor Type	Range
K	For type K thermometers, eg: 2000T, 3208is, TM Series
T	For type T thermometers eg: 2000T, 2100 Series
P	Pt 100 platinum resistance, for thermometers with TCM Connectors
Q	Pt 1000 platinum resistance, for use with T600i thermometers
H	Thermistor, for use with Digitron thermistor thermometers

Effective in prevention of cross contamination and promotion of hygiene in the work place, Digitron offers a selection of probe wipes ideal for cleansing and sanitising of all types of sensor probes.

- ✓ Use between and after use of probes
- ✓ Effective in prevention of bacteria spread
- ✓ Available in handy containers



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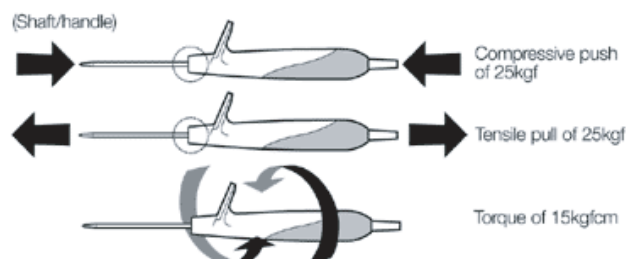
Probes

Probe Accuracy Guide

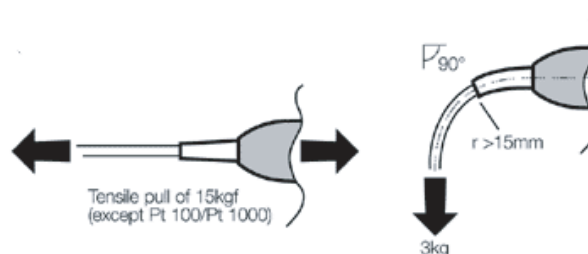
THERMOCOUPLES			
Type	Conductors	Temperature Range	Tolerances to BS4937 Class 1
K	Nickel Chromium/Nickel Aluminium (Ni-Cr/Ni-Al)	-200°C to +1250°C / -328°F to +2280°F	-40°C to +1000°C: $\pm 1.5^{\circ}\text{C}$ or $\pm 0.4\%$ whichever is the greater / -40°F to +1830°F $\pm 2.5^{\circ}\text{F}$ whichever is greater
T	Copper/Copper Nickel (Cu/Cu-Ni)	-200°C to +400°C / -328°F to +750°F	-40°C to +350°C: $\pm 0.5^{\circ}\text{C}$ or $\pm 0.4\%$ whichever is the greater / -40°F to +660°F $\pm 1.0^{\circ}\text{F}$ whichever is the greater Thermocouple Type T material is selected for $\pm 0.2^{\circ}\text{C}$ over the range -20°C to +70°C.
Thermistor Type		-40°C to +150°C	
Used for precision measurements using a semi-conductor sensor. Provides high accuracy over a narrow temperature range and good performance over long lead runs. Suitable for cold store and many			
Platinum Resistance		Temperature Range	Tolerances to BS1904 Grade A
Pt100 Platinum Resistance		-200°C to +800°C / -328°F to +1470°F	-200°C to +600°C: $\pm 0.15^{\circ}\text{C}$ $\pm 0.2\%$ / -328°F to +1110°F $\pm 0.3^{\circ}\text{F}$ $\pm 0.2\%$

Note: For probes and instruments we can supply system (instrument & sensor) calibration certificates to UKAS standard if required. Ask for details. For measurements below -40°C/-40°F, please contact Digitron or your local distributor about special manufactured probes.

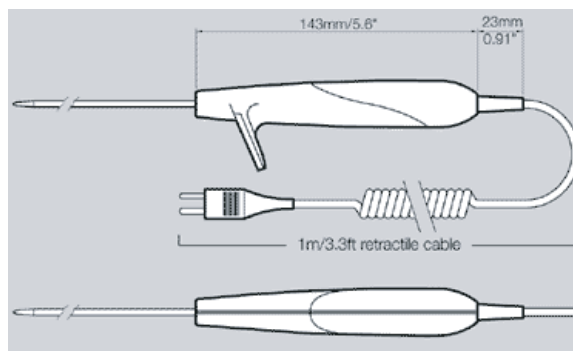
Probe Handle Strength



Probe Cable Strength



Probe Dimensions



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Digitron Probes

Code	Description and Application	Tip Dimension
K0234	GENERAL PURPOSE PROBE K type sensor. Strong, fast responding and suitable for a wide range of applications - liquids, semisolids, air and granular penetration. Can be used for general food penetration.	
Connector Type 2 pin mini	Time const.(secs)	Max. Tip Temp.
	0.6	1000°C/1832°F

Code	Description and Application	Tip Dimension
T0234	GENERAL PURPOSE PENETRATION T type sensor version of K0234	
Connector Type 2 pin mini	Time const.(secs)	Max. Tip Temp.
	0.6	250°C/482°F

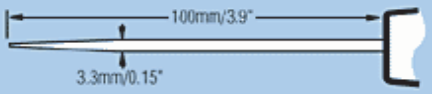
Code	Description and Application	Tip Dimension
TO234LS	GENERAL PURPOSE PENETRATION With 'T' type sensor, straight cable, 0.7m long and Lumberg connector and set of coloured thumb tabs (2106T only)	
Connector Type Lumberg	Time const.(secs)	Max. Tip Temp.
	0.6	250°C/482°F

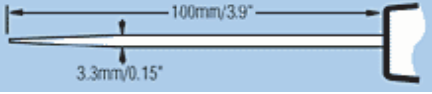
Code	Description and Application	Tip Dimension
TO234LC	GENERAL PURPOSE PENETRATION With 'T' type sensor, curly cable and Lumberg connector – includes colour coded thumb tabs (2106T only)	
Connector Type Lumberg	Time const.(secs)	Max. Tip Temp.
	0.6	250°C/482°F

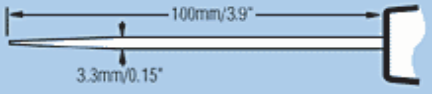
Code	Description and Application	Tip Dimension
H0234	GENERAL PURPOSE PROBE Thermistor sensor version of K0234, with a straight cable and dedicated connection to the 2046T.	
Connector Type Plug	Time const.(secs)	Max. Tip Temp.
	1.9	120°C/248°F

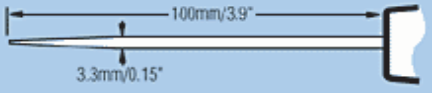
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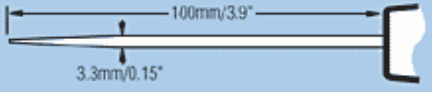
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Code	Description and Application	Tip Dimension
H0235	GENERAL PURPOSE PROBE Thermistor sensor version of K0234, with a coiled cable and dedicated connection to the 2046T.	
Connector Type Plug	Time const.(secs)	Max. Tip Temp.
	1.9	120°C/248°F

Code	Description and Application	Tip Dimension
P0234	GENERAL PURPOSE PROBE General Purpose Probe. Pt 100 sensor version of the K0234, ideal for laboratory use	
Connector Type TCM Screw	Time const.(secs)	Max. Tip Temp.
	2	600°C/1110°F

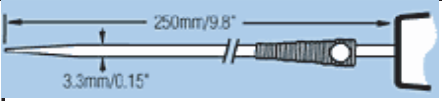
Code	Description and Application	Tip Dimension
CMT0234	GENERAL PURPOSE PROBE T type sensor version of K0234, with a	
Connector Type TCM Screw	Time const.(secs)	Max. Tip Temp.
	0.5	1000°C/1832°F

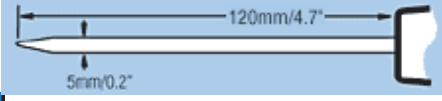
Code	Description and Application	Tip Dimension
H0234LS	GENERAL PURPOSE PENETRATION Thermistor version of K0234 with Lumberg connector and straight cable. Includes colour coded thumb tabs. (2146T only)	
Connector Type Lumberg	Time const.(secs)	Max. Tip Temp.
	1.9	120°C/248°F

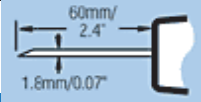
Code	Description and Application	Tip Dimension
H0234LC	GENERAL PURPOSE PENETRATION Thermistor version of K0234 with Lumberg connector and curly cable. Includes colour coded thumb tabs. (2146T only)	
Connector Type Lumberg	Time const.(secs)	Max. Tip Temp.
	1.9	120°C/248°F

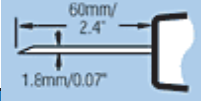
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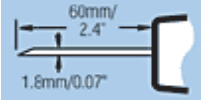
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Code	Description and Application	Tip Dimension
K0236	FLU PROBE K-type sensor. Strong, fast response probes, complete with adjustable securing cone and screw for flue gas measurements. Particularly aimed at the heating and ventilating industries.	
Connector Type 2 pin mini	Time const.(secs)	Max. Tip Temp.
	0.6	1000°C/1830°F

Code	Description and Application	Tip Dimension
K0254	HEAVY DUTY GENERAL PURPOSE K type sensor, suitable for a wide range of	
Connector Type 2 pin mini	Time const.(secs)	Max. Tip Temp.
	1.3	1000°C/1830°F

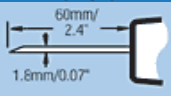
Code	Description and Application	Tip Dimension
K0112	NEEDLE PROBE K type sensor, for rapid temperature	
Connector Type 2 pin mini	Time const.(secs)	Max. Tip Temp.
	0.5	400°C/752°F

Code	Description and Application	Tip Dimension
T0112	NEEDLE PROBE T type sensor version of K0112.	
Connector Type 2 pin mini	Time const.(secs)	Max. Tip Temp.
	0.5	375°C/707°F

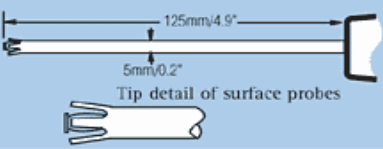
Code	Description and Application	Tip Dimension
T0112LC	NEEDLE PROBE 'T' type sensor version of K0112 with Lumberg connector and curly cable. Includes colour coded thumb tabs (2146T only).	
Connector Type Lumberg	Time const.(secs)	Max. Tip Temp.
	0.5	375°C/707°F

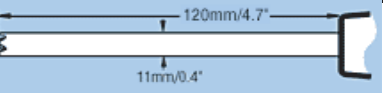
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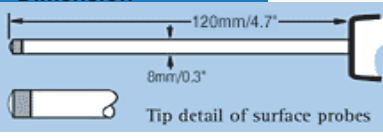
Digitron Probes

Code	Description and Application	Tip Dimension
T0112LS	NEEDLE PROBE 'T' type sensor version of K0112 with Lumberg connector with straight cable 0.7m long. Includes colour coded thumb tabs (2146T only).	
Connector Type Lumberg	Time const.(secs) Max. Tip Temp. 0.5 375°C/707°F	

Code	Description and Application	Tip Dimension
CMT0112	NEEDLE PROBE FT type sensor version of K0112, with a dedicated metal screw connection to the 2006TCM or 2086TCM.	
Connector TCM Screw	Time const.(secs) Max. Tip Temp. 0.5 100°C/1832°F	

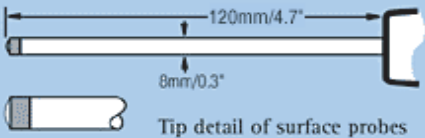
Code	Description and Application	Tip Dimension
K0454	SURFACE PROBE K type sensor. Providing a fast response and comprising of a 3.5mm diameter spring loaded copper disc to allow uniform pressure on surface to be measured.	
Connector Type 2 pin mini	Time const.(secs) Max. Tip Temp. 0.4 500°C/932°F	

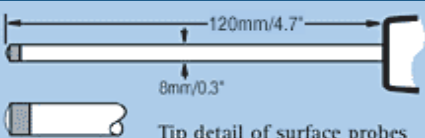
Code	Description and Application	Tip Dimension
K0584	RUGGED SURFACE PROBE K type sensor. Fitted with heavy-duty retractile cable, providing a fast response for all types of industrial applications, including bearing temperatures.	
Connector Type 2 pin mini	Time const.(secs) Max. Tip Temp. 0.5 750°C/1382°F	

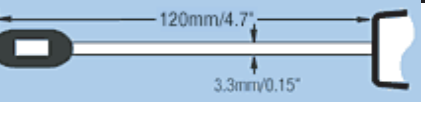
Code	Description and Application	Tip Dimension
K0684	BAND SURFACE PROBE K type sensor, will provide a rapid response for air and surface temperature measurements. Industrial applications include sheet metal, photocopier rollers, and electronic component testing. Other applications include the temperature measurement of food packs and hot plates.	
Connector Type 2 pin mini	Time const.(secs) Max. Tip Temp. 0.4 250°C/482°F	

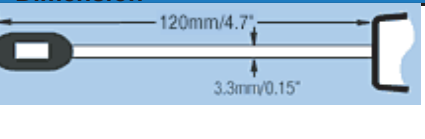
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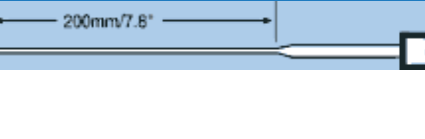
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Code	Description and Application	Tip Dimension
TO684	BAND SURFACE PROBE T type sensor version of K0684.	
Connector Type 2 pin mini		
	Time const.(secs) Max. Tip Temp. 0.4 250°C/482°F	

Code	Description and Application	Tip Dimension
CMT684	BAND SURFACE PROBE T type sensor version of K0684, with a dedicated metal screw connection to the 2006TCM or 2086TCM.	
Connector Type TCM Screw		
	Time const.(secs) Max. Tip Temp. 0.4 250°C/482°F	

Code	Description and Application	Tip Dimension
T0834	AIR/BETWEEN PACK PROBE T type sensor. The sensor is encased at the end of a long flat probe, which is designed to slide between food packs without causing damage.	
Connector Type 2 pin mini		
	Time const.(secs) Max. Tip Temp. 0.5 100°C/212°F	

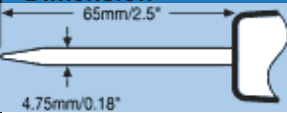
Code	Description and Application	Tip Dimension
CMT834	AIR/BETWEEN PACK PROBE T type sensor version of T0834, with a dedicated metal screw connection to the 2006TCM or 2086TCM.	
Connector Type TCM Screw		
	Time const.(secs) Max. Tip Temp. 0.5 100°C/212°F	

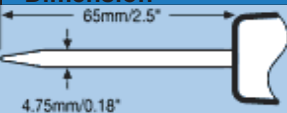
Code	Description and Application	Tip Dimension
T0835LS	HEAVY DUTY PALLET PROBE 'T' type sensor, Lumberg connector and straight cable (2106T only).	
Connector Type Lumberg		
	Time const.(secs) Max. Tip Temp. 0.5 250°C/482°F	

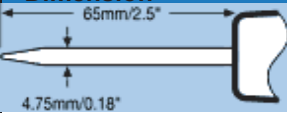
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Code	Description and Application	Tip Dimension
T0835LC	HEAVY DUTY PALLET PROBE 'T' type sensor, Lumberg connector and curly cable (2106T only).	
Connector Type Lumberg	Time const.(secs) Max. Tip Temp. 0.5 250°C/482°F	

Code	Description and Application	Tip Dimension
K0258	FROZEN FOOD PROBE K type sensor, with a sharpened tip and shorter shaft has been designed to be used with frozen foods. Before readings are taken, it is recommended that a hole should be drilled and then the probe inserted.	
Connector Type 2 pin mini	Time const.(secs) Max. Tip Temp. 1.3 1000°C/1832°F	

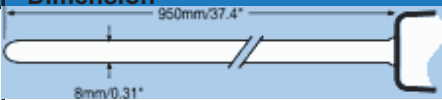
Code	Description and Application	Tip Dimension
T0258	FROZEN FOOD PROBE T type sensor version of K0258.	
Connector Type 2 pin mini	Time const.(secs) Max. Tip Temp. 1.3 375°C/707°F	

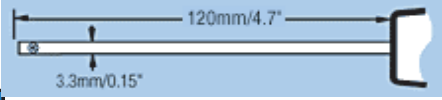
Code	Description and Application	Tip Dimension
CMT0258	FROZEN FOOD PROBE T type sensor version of K0258, with a dedicated metal screw connection to the 2006TCM or 2086TCM.	
Connector Type TCM Screw	Time const.(secs) Max. Tip Temp. 1.3 375°C/707°F	

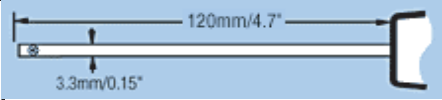
Code	Description and Application	Tip Dimension
K0256	BITUMEN PROBE K type sensor, for taking temperature measurements in the construction industry.	
Connector Type 2 pin mini	Time const.(secs) Max. Tip Temp. 1.3 1000°C/1832°F	

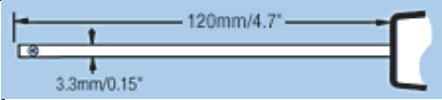
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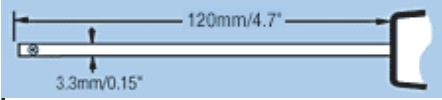
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Code	Description and Application	Tip Dimension
K0642	HEAVY DUTY BITUMEN PROBE K type sensor, with metal handle and I metal armoured cable for taking tar temperature measurements in the construction industry.	
Connector Type 2 pin mini	Time const.(secs) Max. Tip Temp. 1.3 1000°C/1832°F	

Code	Description and Application	Tip Dimension
K0334	RIGID AIR PROBE K type sensor. Extremely fast response ideal	
Connector Type 2 pin mini	Time const.(secs) Max. Tip Temp. 0.3 500°C/932°F	

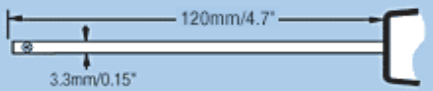
Code	Description and Application	Tip Dimension
T0334	RIGID AIR PROBE T type sensor version of K0334.	
Connector Type 2 pin mini	Time const.(secs) Max. Tip Temp. 0.3 375°C/707°F	

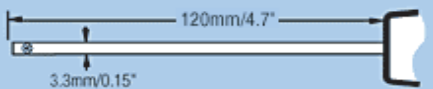
Code	Description and Application	Tip Dimension
T0334LC	RIGID AIR PROBE T' type version of K0334 with Lumberg connector and curly cable (2106T only).	
Connector Type Lumberg	Time const.(secs) Max. Tip Temp. 0.3 375°C/707°F	

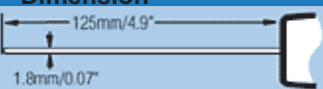
Code	Description and Application	Tip Dimension
T0334LS	RIGID AIR PROBE 'T' type version of K0334 with Lumberg connector and straight cable (2106T only).	
Connector Type Lumberg	Time const.(secs) Max. Tip Temp. 0.3 375°C/707°F	

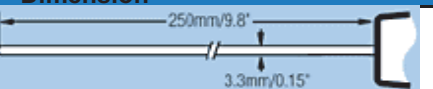
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Code	Description and Application	Tip Dimension
H0334	RIGID AIR PROBE Thermistor sensor version of K0334, with a straight cable and dedicated connection to the 2046T.	
Connector Type Plug	Time const.(secs) Max. Tip Temp. 1.1 120°C/248°F	

Code	Description and Application	Tip Dimension
CMT0334	RIGID AIR PROBE T type sensor version of K0334, with a dedicated metal screw connection to the 2006TCM or 2086TCM.	
Connector Type TCM Screw	Time const.(secs) Max. Tip Temp. 0.3 500°C/932°F	

Code	Description and Application	Tip Dimension
K0714	SEMI FLEXIBLE GENERAL PURPOSE K type sensor. Versatile probe with mineral insulated sensor and inconel sheath for measurements of substances where access is restricted.	
Connector Type 2 pin mini	Time const.(secs) Max. Tip Temp. 1 1000°C/1832°F	

Code	Description and Application	Tip Dimension
K0736	HEAVY DUTY SEMI FLEXIBLE GENERAL K type sensor. Versatile probe with mineral insulated sensor and inconel sheath for measurements of substances where access is restricted.	
Connector Type 2 pin mini	Time const.(secs) Max. Tip Temp. 2.6 1000°C/1832°F	

Code	Description and Application	Tip Dimension
K0000	EXPOSED JUNCTION THERMOCOUPLE K type sensor, for general purpose use in heating and refrigeration industries, including radiators, water, air temperatures.	
Connector Type 2 pin mini	Time const.(secs) Max. Tip Temp. 0.5 250°C/482°F	

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Code	Description and Application	Tip Dimension
H0000	FLEXIBLE AIR PROBE Thermistor sensor, for the non-destructive checking of food temperatures with a dedicated connection to the 2046T.	
Connector Type Plug		
	Time const.(secs) Max. Tip Temp. 3.5 120°C/248°F	

Code	Description and Application	Tip Dimension
T0000	FLEXIBLE AIR PROBE T type sensor, used to monitor temperatures by placing the wire probe inside the fridge/freezer and shutting the door to give a true reading	
Connector Type 2 pin mini		
	Time const.(secs) Max. Tip Temp. 0.5 250°C/482°F	

Code	Description and Application	Tip Dimension
T0000LS	FLEXIBLE AIR PROBE Flexible Air Probe as T0000 with Lumberg connector and straight cable, 1m long (2106T only).	
Connector Type Lumberg		
	Time const.(secs) Max. Tip Temp. 0.5 250°C/482°F	

Code	Description and Application	Tip Dimension
H0000LS	FLEXIBLE AIR PROBE Thermistor version of T0000 with Lumberg connector and straight cable for 2146T thermometer.	
Connector Type Lumberg		
	Time const.(secs) Max. Tip Temp. 3.5 120°C/248°F	

Code	Description and Application	Tip Dimension
CMT0000	RIGID AIR PROBE T type sensor, used to monitor temperatures by placing the wire probe inside the fridge/freezer and shutting the door to give a true reading.	
Connector Type TCM Screw		
	Time const.(secs) Max. Tip Temp. 0.5 250°C/482°F	

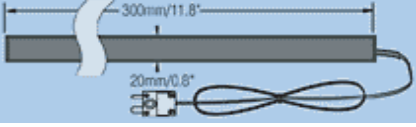
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Code	Description and Application	Tip Dimension
H0800	BETWEEN PACK FOIL PROBE Thermistor foil sensor, for increased response with dedicated connection to the 2046T.	 45mm/1.8"
Connector Type Plug		
	Time const.(secs) Max. Tip Temp. 3.5 100°C/212°F	

Code	Description and Application	Tip Dimension
H0800LS	BETWEEN PACK FOIL PROBE Thermistor type with Lumberg connector, foil tip sensor for increased responses and straight cable for 2146T thermometer.	 45mm/1.8"
Connector Type Lumberg		
	Time const.(secs) Max. Tip Temp. 3.5 100°C/212°F	

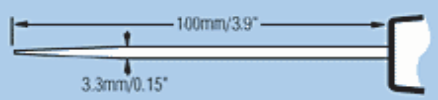
Code	Description and Application	Tip Dimension
T0800LS	BETWEEN PACK FOIL PROBE T type sensor with Lumberg connector, foil tip sensor for increased responses and straight cable for 2146T thermometer.	 45mm/1.8"
Connector Type Lumberg		
	Time const.(secs) Max. Tip Temp. 3.5 250°C/482°F	

Code	Description and Application	Tip Dimension
K0900	PIPE (VELCRO) PROBE K type sensor, for taking surface temperature measurements of pipes. Designed for the heating, refrigeration and milking industries; this probe consists of a sensor embedded in a 300 mm length of Velcro®&Mac226; which enables the user to wrap the probe securely around pipes.	 300mm/11.8" 20mm/0.8"
Connector Type 2 pin mini		
	Time const.(secs) Max. Tip Temp. 2.6 100°C/212°F	

Please note that Type T and Type K probes with 2 pin mini plug can be used with other manufacturer's instruments. Please contact us to confirm compatibility.

TECHNICAL DATA SHEET

Probes for Other Manufacturers

Code	Description and Application	Tip Dimension
DPT24L	GENERAL PURPOSE PENETRATION PROBE 'T' type sensor with straight cable. Includes colour coded thumb tabs.	
Connector Type Lumberg	Time const.(secs) Max. Tip Temp.	
	0.6 250°C/482°F	

Code	Description and Application	Tip Dimension
DST38L	HEAVY DUTY PALLET PROBE 'T' type sensor with 200mm long shaft, Lumberg connector and straight cable	
Connector Type Lumberg	Time const.(secs) Max. Tip Temp.	
	0.6 250°C/482°F	

Code	Description and Application	Tip Dimension
DST23L	BETWEEN PACK FOIL PROBE WITH FOIL TIP 'T' type sensor for increased response with straight cable.	
Connector Type Lumberg	Time const.(secs) Max. Tip Temp.	
	0.6 260°C/482°F	

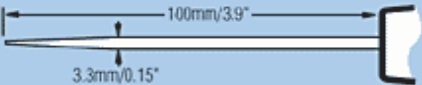
Code	Description and Application	Tip Dimension
DSX23L	BETWEEN PACK FOIL PROBE Thermistor sensor for increased response with straight cable.	
Connector Type Lumberg	Time const.(secs) Max. Tip Temp.	
	0.6 120°C/248°F	

Code	Description and Application	Tip Dimension
DAT22L	FAST RESPONSE FLEXIBLE AIR PROBE 'T' type sensor with straight cable.	
Connector Type Lumberg	Time const.(secs) Max. Tip Temp.	
	1.9 250°C/482°F	

TECHNICAL DATA SHEET

Probes for Other Manufacturers

Code	Description and Application	Tip Dimension
DAX24L	FAST RESPONSE FLEXIBLE AIR PROBE Thermistor sensor with straight cable.	
Connector Type Lumberg	Time const.(secs) Max. Tip Temp.	
	1.9 120°C/248°F	

Code	Description and Application	Tip Dimension
DPX22LS	GENERAL PURPOSE PENETRATIOB PROBE Thermistor sensor with straight cable.	
Connector Type Lumberg	Time const.(secs) Max. Tip Temp.	
	1.3 120°C/248°F	

Code	Description and Application	Tip Dimension
DPX22LC	GENERAL PURPOSE PENETRATIOB PROBE Thermistor sensor with curly cable.	
Connector Type Lumberg	Time const.(secs) Max. Tip Temp.	
	1.3 120°C/248°F	

Please note that Type T and Type K probes with 2 pin mini plug can be used with other manufacturer's instruments. Please call us to confirm compatibility.

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