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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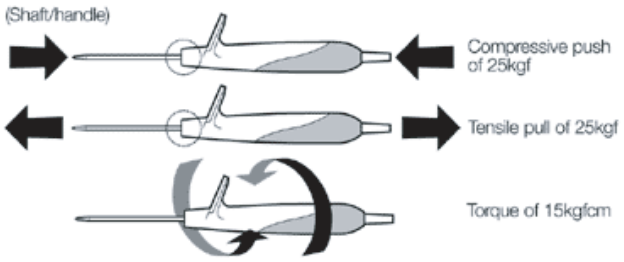
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Probes

Probe Accuracy Guide

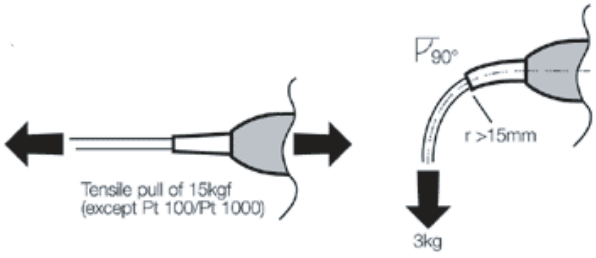
THERMOCOUPLES			
Type	**Conductors**	**Temperature Range**	**Tolerances to BS4937 Class 1**
K	Nickel Chromium/Nickel Aluminium (Ni-Cr/Ni-Al)	-200°C to +1250°C /-328°F to +2280°F	-40°C to +1000°C: ±1.5°C or ±0.4% whichever is the greater /-40°F to +1830°F ±2.5°F whichever is greater
T	Copper/Copper Nickel (Cu/Cu-Ni)	-200°C to +400°C /-328°F to +750°F	-40°C to +350°C: ±0.5°C or ±0.4% whichever is the greater / -40°F to +660°F ±1.0°F whichever is the greater Thermocouple Type T material is selected for ±0.2°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: ±0.15°C ±0.2% / -328°F to +1110°F ±0.3°F ±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.

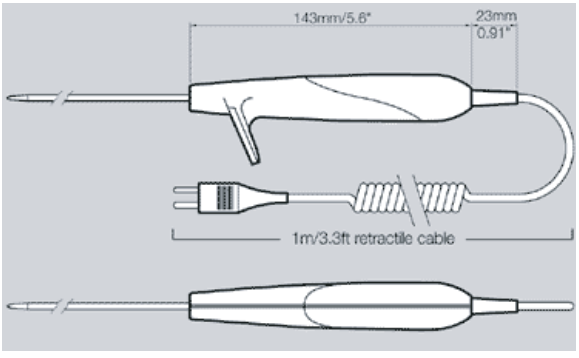
Probe Handle Strength



Probe Cable Strength



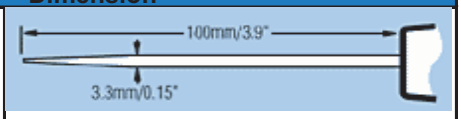
Probe Dimensions

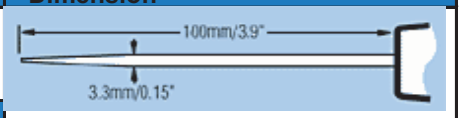


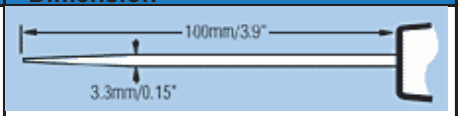
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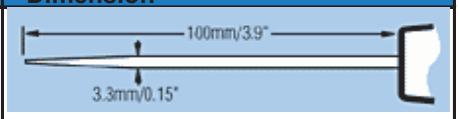
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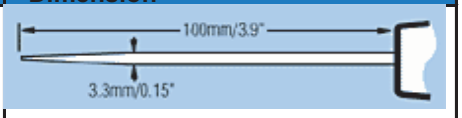
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Code	Description and Application		Tip Dimension
K0234	**GENERAL PURPOSE PROBE** K type sensor. Strong, fast responding and suitable for a wide range of applications - liquids, semisolids, air and granular penetration. Can be used for general food penetration.		
Connector Type 2 pin mini	**Time const.(secs)** 0.6	**Max. Tip Temp.** 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)** 0.6	**Max. Tip Temp.** 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)** 0.6	**Max. Tip Temp.** 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)** 0.6	**Max. Tip Temp.** 250°C/482°F	

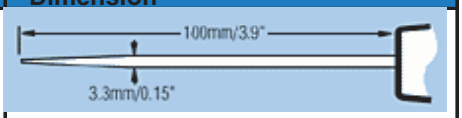
Code	Description and Application		Tip Dimension
H0234	**GENERAL PURPOSE PROBE** Thermistor sensor version of K0234, with a straight cable and dedicated connection to the 2046T.		
Connector Type Plug	**Time const.(secs)** 1.9	**Max. Tip Temp.** 120°C/248°F	

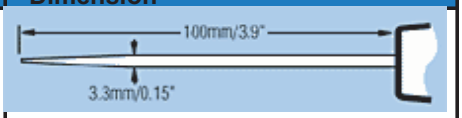
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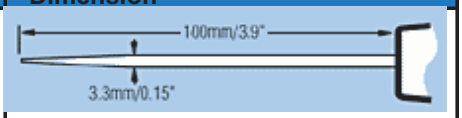
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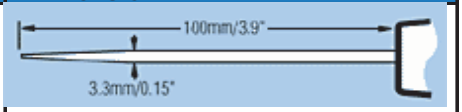
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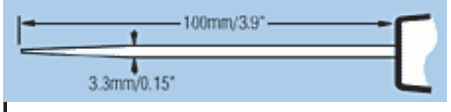
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Code	Description and Application		Tip Dimension
H0235 **Connector Type** Plug	**GENERAL PURPOSE PROBE** Thermistor sensor version of K0234, with a coiled cable and dedicated connection to the 2046T.		
	Time const.(secs)	**Max. Tip Temp.**	
	1.9	120°C/248°F	

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

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

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

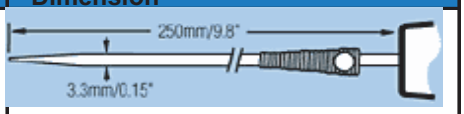
Code	Description and Application		Tip Dimension
H0234LC **Connector Type** Lumberg	**GENERAL PURPOSE PENETRATION** Thermistor version of K0234 with Lumberg connector and curly cable. Includes colour coded thumb tabs. (2146T only)		
	Time const.(secs)	**Max. Tip Temp.**	
	1.9	120°C/248°F	

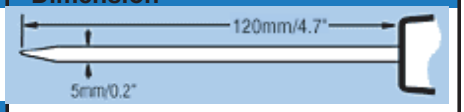
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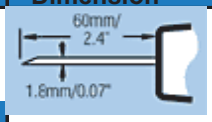
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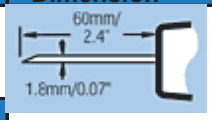
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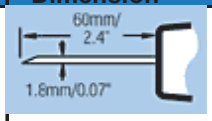
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Code	Description and Application	Tip Dimension
K0236 **Connector Type** 2 pin mini	**FLU PROBE** K-type sensor. Strong, fast response probes, complete with adjustable securing cone and screw for flue gas measurements. Particularly aimed at the heating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

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

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

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

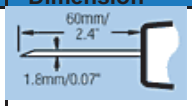
Code	Description and Application	Tip Dimension
T0112LC **Connector Type** Lumberg	**NEEDLE PROBE** ‘ T’ type sensor version of K0112 with Lumberg connector and curly cable. Includes colour coded thumb tabs (2146T only). **Time const.(secs)** **Max. Tip Temp.** 0.5 375°C/707°F	

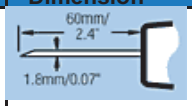
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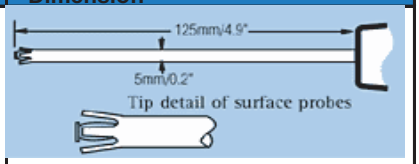
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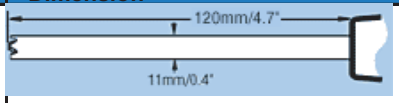
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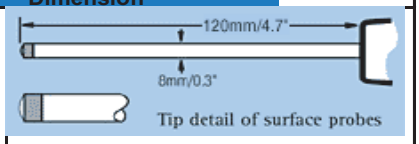
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Code	Description and Application	Tip Dimension
T0112LS	**NEEDLE PROBE** ' T' type sensor version of K0112 with Lumberg connector with straight cable 0.7m long. Includes colour coded thumb tabs (2146T only).	
Connector Type Lumberg	**Time const.(secs)** **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	

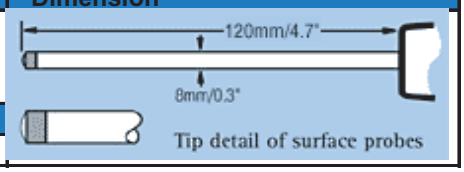
Code	Description and Application	Tip Dimension
K0584	**RUGGED SURFACE PROBE** K type sensor. Fitted with heavy-duty retractile cable,providing a fast response for all types of industrial applications, including bearing temperatures.	
Connector Type 2 pin mini	**Time const.(secs)** **Max. Tip Temp.**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

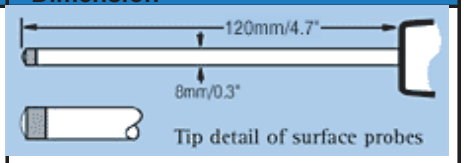
Code	Description and Application	Tip Dimension
KO684	**BAND SURFACE PROBE** K type sensor, will provide a rapid response for air and surface temperature measurements. Industrial applications include sheet metal, photocopier rollers, and electronic component testing. Other applications include the temperature measurement of food packs and hot plates.	
Connector Type 2 pin mini	**Time const.(secs)** **Max. Tip Temp.** 0.4 250°C/482°F	

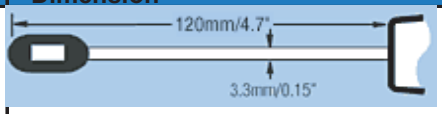
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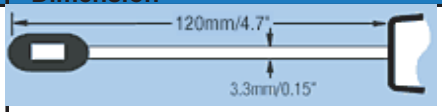
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Code	Description and Application	Tip Dimension
TO684 **Connector Type** 2 pin mini	**BAND SURFACE PROBE** T type sensor version of K0684. **Time const.(secs)** **Max. Tip Temp.** 0.4 250°C/482°F	

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

Code	Description and Application	Tip Dimension
T0834 **Connector Type** 2 pin mini	**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. **Time const.(secs)** **Max. Tip Temp.** 0.5 100°C/212°F	

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

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

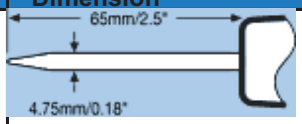
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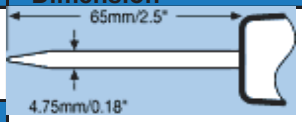
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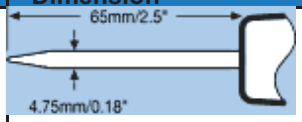
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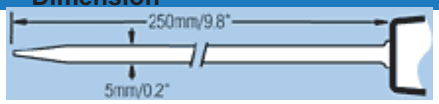
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Code	Description and Application	Tip Dimension
T0835LC **Connector Type** Lumberg	**HEAVY DUTY PALLET PROBE** 'T' type sensor, Lumberg connector and curly cable (2106T only). **Time const.(secs)** **Max. Tip Temp.** 0.5 250°C/482°F	

Code	Description and Application	Tip Dimension
K0258 **Connector Type** 2 pin mini	**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. **Time const.(secs)** **Max. Tip Temp.** 1.3 1000°C/1832°F	

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

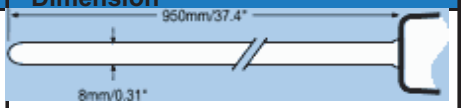
Code	Description and Application	Tip Dimension
CMT0258 **Connector Type** TCM Screw	**FROZEN FOOD PROBE** T type sensor version of K0258, with a dedicated metal screw connection to the 2006TCM or 2086TCM. **Time const.(secs)** **Max. Tip Temp.** 1.3 375°C/707°F	

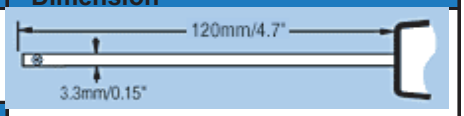
Code	Description and Application	Tip Dimension
K0256 **Connector Type** 2 pin mini	**BITUMEN PROBE** K type sensor, for taking temperature measurements in the construction industry. **Time const.(secs)** **Max. Tip Temp.** 1.3 1000°C/1832°F	

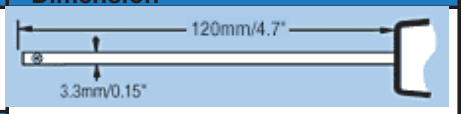
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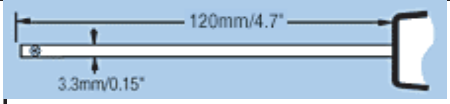
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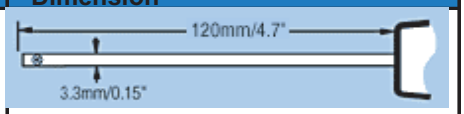
TECHNICAL DATA SHEET
Digitron Probes

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

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

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

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

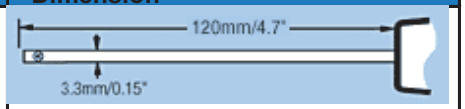
Code	Description and Application	Tip Dimension
T0334LS **Connector Type** Lumberg	**RIGID AIR PROBE** 'T' type version of K0334 with Lumberg connector and straight cable (2106T only). **Time const.(secs)** **Max. Tip Temp.** 0.3 375°C/707°F	

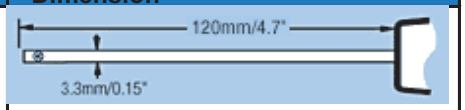
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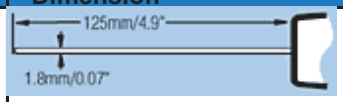
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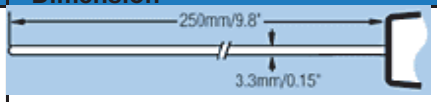
TECHNICAL DATA SHEET

Digitron Probes

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)** 1.1 — **Max. Tip Temp.** 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)** 0.3 — **Max. Tip Temp.** 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)** 1 — **Max. Tip Temp.** 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)** 2.6 — **Max. Tip Temp.** 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)** 0.5 — **Max. Tip Temp.** 250°C/482°F	

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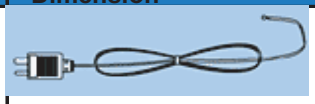
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TECHNICAL DATA SHEET

Digitron Probes

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 T0000with Lumberg connector and straight cable for 2146T thermometer.	
Connector Type Lumberg	**Time const.(secs)** / **Max. Tip Temp.** 3.5 / 120°C/248°F	

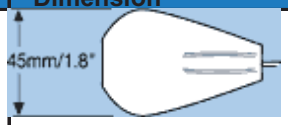
Code	Description and Application	Tip Dimension
CMT0000	**RIGID AIR PROBE** T type sensor, used to monitor temperatures by placing the wire probe inside the fridge/freezer and shutting the door to give a true reading.	
Connector Type TCM Screw	**Time const.(secs)** / **Max. Tip Temp.** 0.5 / 250°C/482°F	

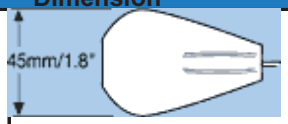
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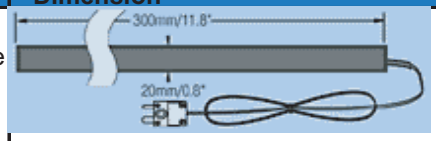
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TECHNICAL DATA SHEET
Digitron Probes

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

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

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

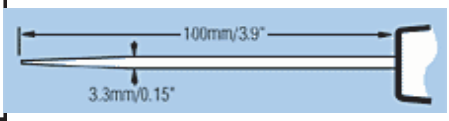
Code	Description and Application	Tip Dimension
K0900 **Connector Type** 2 pin mini	**PIPE (VELCRO) PROBE** K type sensor, for taking surface temperature measurements of pipes. Designed for the heating, refrigeration and milking industries; this probe consists of a sensor embedded in a 300 mm length of Velcro®&Mac226; which enables the user to wrap the probe securely around pipes. **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.

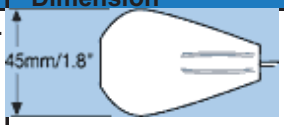
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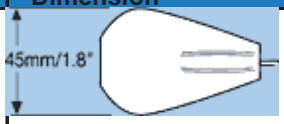
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TECHNICAL DATA SHEET
Probes for Other Manufacturers

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

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

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

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

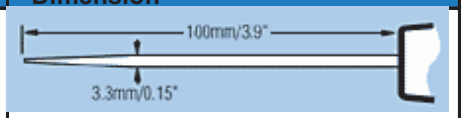
Code	Description and Application	Tip Dimension
DAT22L **Connector Type** Lumberg	**FAST RESPONSE FLEXIBLE AIR PROBE** ' T' type sensor with straight cable. **Time const.(secs) Max. Tip Temp.** 1.9 250°C/482°F	

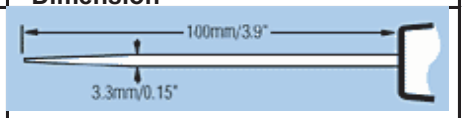
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TECHNICAL DATA SHEET
Probes for Other Manufacturers

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

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

Code	Description and Application	Tip Dimension
DPX22LC **Connector Type** Lumberg	**GENERAL PURPOSE PENETRATIOB PROBE** Thermistor sensor with curly cable. **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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