

**LABFACILITY**  
TEMPERATURE TECHNOLOGY

**A COMPLETE RANGE OF THERMOCOUPLE  
AND RTD SENSORS FROM STOCK**

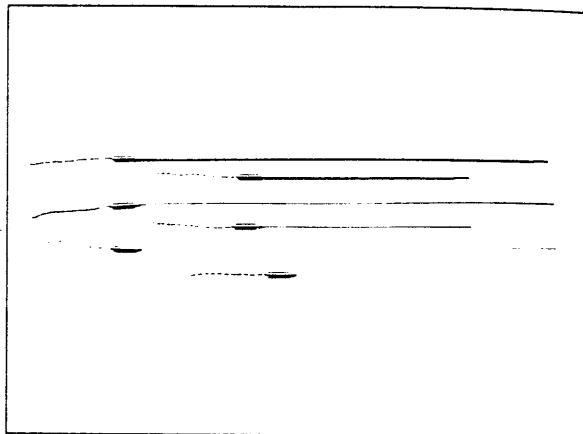
#### TYPE K MINERAL INSULATED THERMOCOUPLES

This range of rugged type K mineral insulated thermocouple probes is suitable for temperatures up to 1100°C. The probes can be bent to enable fitting in awkward locations, and being very reliable and stable, are particularly suitable for industrial applications including high pressure, high vacuum, high vibration and harsh environments in general.

The thermocouple junction is located at the tip and is insulated from the sheath.

The probes are available in various diameters and lengths. Smaller diameter probes respond to temperature changes more rapidly than larger diameters. However, larger diameter probes are mechanically stronger and have a longer operational life when used at high temperatures.

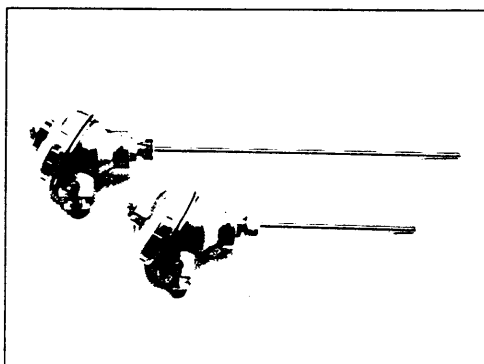
Labfacility offers a wide range of compression fittings for installation of mineral insulated thermocouples (details available on request - separate leaflet refers).



Specifications		Order Codes			
Sensor:	Type K to BS4937 Part 4	Diam x Length (mm)	Order Code	Diam x Length (mm)	Order Code
Sheath:	310 stainless steel	1.0 x 150	KMI-020-X	3.0 x 150	KMI-250-X
Temperature range of probe:	-50 to +1100°C	1.0 x 250	KMI-030-X	3.0 x 250	KMI-300-X
Max temperature of pot seal (cold end):	200°C	1.5 x 150	KMI-050-X	3.0 x 500	KMI-350-X
Lead:	100mm, PTFE insulated	1.5 x 250	KMI-100-X	3.0 x 1000	KMI-400-X
		1.5 x 500	KMI-150-X	6.0 x 250	KMI-450-X
		1.5 x 1000	KMI-200-X	6.0 x 500	KMI-500-X

Alternatively we can supply custom-made probes to special order - please contact our sales department.

#### INDUSTRIAL TYPE K THERMOCOUPLES WITH TERMINAL HEADS



This range of industrial type K thermocouples is suitable for a wide variety of applications with a maximum temperature of 1100°C. These mineral insulated thermocouples are very rugged, comprising a strong 6mm diameter stainless steel stem and waterproof aluminium terminal head. The head houses a terminal block with terminals of thermocouple material; cable entry is via a M20 cable gland.

The thermocouple junction is located at the tip and insulated from the sheath.

The probes are available in various lengths and can be installed using Labfacility compression fittings and/or thermopockets.

These assemblies can be supplied with head mounting 4-20mA transmitters to special order - please contact our sales department

Specifications		Order Codes	
Sensor:	Type K to BS4937 Part 4	Probe Length(mm)	Order Code
Sheath:	6mm diameter 310 stainless steel	150	K-150-KNE-X
Terminal Head:	Waterproof, die cast aluminium with epoxy coating. Screw lid with retaining chain	200	K-200-KNE-X
Temperature range of probe:	-50 to +1100°C	300	K-300-KNE-X
		400	K-400-KNE-X
		600	K-600-KNE-X

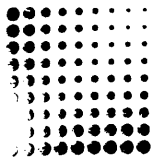
Alternatively we can supply custom-made probes to special order - please contact our sales department.

LABFACILITY LIMITED

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# LABFACILITY

TEMPERATURE TECHNOLOGY

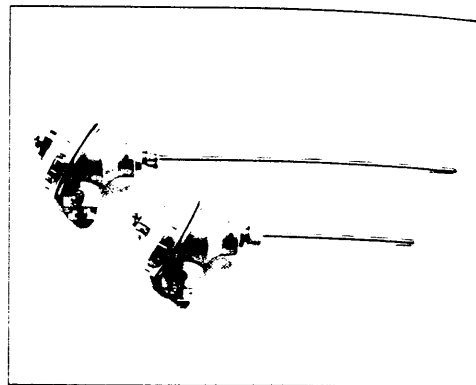
**A COMPLETE RANGE OF THERMOCOUPLE AND RTD SENSORS FROM STOCK**

## INDUSTRIAL Pt100 PROBES WITH TERMINAL HEADS

This range of industrial Pt100 probes is suitable for a wide range of applications. For use up to 450°C, the probes are recommended where the superior accuracy of Pt100s over thermocouples is required. The assemblies utilise a 6mm diameter stainless steel stem below a waterproof terminal head. The head contains a terminal block allowing connection to the measuring instrument via a M20 cable gland.

The probes are 4 wire configured allowing connection to any Pt100 instrument using 2,3, or 4 wire.

The probes are available in various lengths and can be installed using Labfacility compression fittings or thermopockets.



These assemblies can be supplied with head mounting 4-20mA transmitters to special order - please contact our sales department.

Specifications		Order Codes	
Sensor:	Pt100 to BS1904 (1984) Class B and DIN 43760. 100 ohms at 0°C. 4 wire.	Probe Length(mm)	Order code
Sheath:	6mm diameter stainless steel	150	Pt-150-KNE-X
Terminal head:	Waterproof, die cast aluminium with epoxy coating. Screw lid with retaining chain.	200	Pt-200-KNE-X
Temperature range of probe:	-100 to +450°C	300	Pt-300-KNE-X
		400	Pt-400-KNE-X
		600	Pt-600-KNE-X

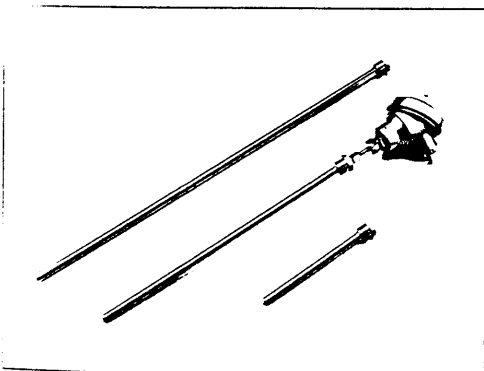
Alternatively we can supply custom-made probes to special order - please contact our sales department.

## STAINLESS STEEL THERMPOCKETS

This is a range of competitively priced stainless steel thermopockets for use with Labfacility industrial style sensors or other probes up to 1/4" diameter. The use of thermopockets is recommended where the removal of temperature probes without a pocket would require process shut down or draining of the system.

Probes are secured within the pockets using a suitable compression fitting (available separately) and the pocket has a 1/2" BSP (P) male thread for installation in the process.

The pockets are available in a variety of lengths. We recommend the pocket to be 50mm shorter than the associated probe length to ensure complete entry and seating of the probe.



Specifications		Order Codes		
Material:	Stainless Steel	Pocket Length (mm)	Recommended Minimum Probe Length (mm)	Order Code
Outside diameter:	7/16"	100	150	TP-100-X
Wall thickness:	0.08"	150	200	TP-150-X
Male process thread:	1/2"BSP(P)	250	300	TP-250-X
Internal thread:	1/8"BSP(P)	350	400	TP-350-X
		550	600	TP-550-X

Alternatively we can supply custom-made thermopockets to special order - please contact our sales department.

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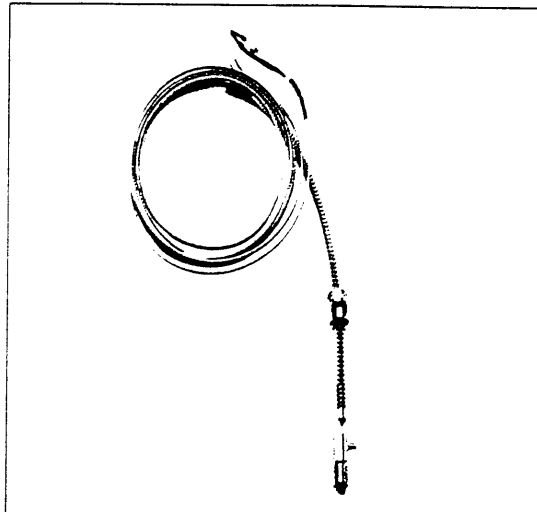


**THERMOCOUPLES FOR PLASTICS AND GENERAL PURPOSE APPLICATIONS**

**ADJUSTABLE BAYONET THERMOCOUPLE**

These low cost adjustable bayonet thermocouples are designed primarily for extruders, injection moulders, and packaging machinery. The thermocouple junction is housed in a rugged stainless steel tip with 2 metres of stainless steel braided lead; a 170mm spring with an adjustable fixing cap are fitted and a separate bayonet adaptor is available.

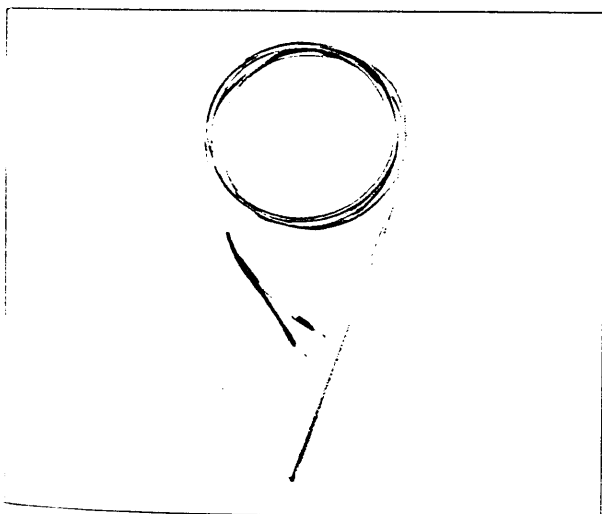
Suitable for temperatures up to 350°C, these versatile sensors cater for most applications. The bayonet adaptor locates in the process via a 1/8" BSP male thread and the thermocouple is fitted using the fixing cap to ensure secure spring loaded contact. Type J versions are available from stock.



Tip 6mm dia x 8mm. Single slot bayonet cap

Other thermocouple types or Pt100 versions are available to special order.

Order Codes	
Type J bayonet thermocouple	J-ABT-2-X
1/8" BSP adaptor (22mm long)	CA-400



Probe 3/16" (4.76mm) dia x 150 mm

**HEAVY DUTY THERMOCOUPLE**

Low cost heavy duty stainless steel thermocouple for a variety of applications up to 350°C, particularly in the plastics industry.

Complete with 2 metres of rugged stainless steel braided lead, the probe has a grounded hot junction for fast response. Types J and K are available from stock.

Other thermocouple types or Pt100 are available to special order.

Order Codes	
Type K heavy duty thermocouple	K-HD-150-X
Type J heavy duty thermocouple	J-HD-150-X



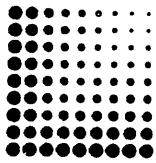
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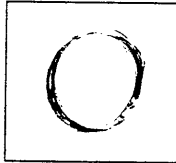
LABFACILITY LTD



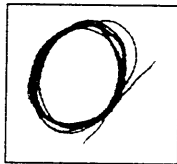
### EXPOSED JUNCTION, PATCH, AND MAGNETIC THERMOCOUPLES

- ◆ Fast response exposed junction thermocouples
- ◆ Magnetic thermocouples for ferrous metals
- ◆ Many applications including pharmaceutical, food, test laboratories, and heating and ventilating
- ◆ Self adhesive patch thermocouples
- ◆ Low cost and available from stock
- ◆ For surface and air temperature measurement

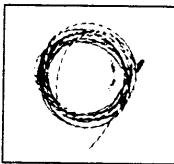
#### Fast Response exposed junction thermocouples



- ◆ 0.2mm bare wire with welded bead
- ◆ 1 metre long
- ◆ Available from stock in types K, J and T

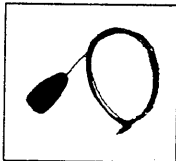


- ◆ 0.2mm wire with PTFE insulation
- ◆ Welded bead
- ◆ 1 metre long
- ◆ Maximum 250°C
- ◆ Available from stock in types K, J and T
- ◆ Optional miniature plug termination



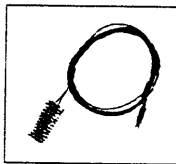
- ◆ 0.2mm wire with glassfibre insulation
- ◆ Welded bead
- ◆ 1 metre long
- ◆ Maximum 400°C
- ◆ Available from stock in types K, J and T
- ◆ Optional miniature plug termination

#### Self Adhesive Patch Thermocouples



- ◆ Silicone rubber patch thermocouple with self-adhesive aluminium foil backing
- ◆ 1 metre PTFE insulated lead
- ◆ Fast response
- ◆ Robust and waterproof
- ◆ Range -60 to +250°C
- ◆ Good resistance to oils and chemicals
- ◆ Available from stock in types K and T
- ◆ Optional miniature plug termination

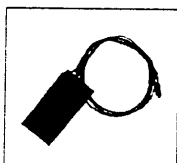
Patch 35mm long x  
13mm wide x 2mm



- ◆ Self adhesive patch thermocouple
- ◆ Very fast response
- ◆ Maximum 250°C
- ◆ 1 metre PTFE insulated lead
- ◆ Available from stock in types K and T
- ◆ Optional miniature plug termination

Patch 24mm long x  
10mm wide

#### Magnetic Thermocouples



- ◆ Flexible magnetic patch thermocouple for ferrous metals
- ◆ 1 metre PTFE insulated lead
- ◆ Fast response
- ◆ Maximum 120°C
- ◆ Insulated hot junction
- ◆ Available from stock in type K
- ◆ Optional miniature plug termination

Patch 50mm long x  
25mm wide x 1mm

#### Order codes

Type K Z1-K-1  
Type J Z1-J-1  
Type T Z1-T-1

Type K Z2-K-1  
Type J Z2-J-1  
Type T Z2-T-1

Type K Z3-K-1  
Type J Z3-J-1  
Type T Z3-T-1

Type K SRS-K-1  
Type T SRS-T-1

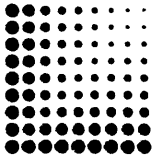
Type K W-K-1  
Type T W-T-1

Type K FMS-K-1

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Magnet 12.5mm dia x  
10mm high

- ◆ Powerful magnetic disc thermocouple for ferrous metals
- ◆ Grounded hot junction
- ◆ Maximum 250°C
- ◆ 1 metre PTFE insulated lead
- ◆ Available from stock in type K
- ◆ Optional miniature plug termination

### Pt100 SENSORS FOR SURFACE AND AIR TEMPERATURE MEASUREMENT

- ◆ Self adhesive patch Pt100 sensor
- ◆ Wall mounting air temperature sensors
- ◆ All 4 wire sensors allowing connection to any Pt100 instrument, 2,3 or 4 wire
- ◆ Pt100 sensors to BS 1904 (1984) class B and DIN 43760. 100 ohms at 0°C
- ◆ Available from stock

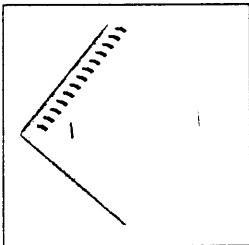
#### Self adhesive patch Pt100 Sensor



Patch 35mm long x  
13mm wide x 2mm

- ◆ Silicone rubber patch with self adhesive foil backing
- ◆ Good resistance to oils and chemicals
- ◆ Range -60 to +250°C
- ◆ 1 metre PTFE insulated lead

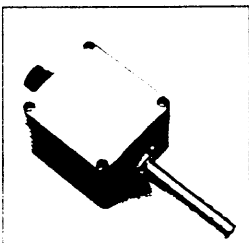
#### Indoor air temperature Pt100 sensor



Case 85mm x 85mm x 30mm

- ◆ Wall mounting moulded case
- ◆ Maximum 75°C
- ◆ Mounts on standard electrical conduit
- ◆ Optional 4-20mA transmitter (consult sales office)

#### Outdoor air temperature Pt100 sensor



Case 80mm x 74mm x 54mm high  
Probe 75mm long x 12.5mm o/d

- ◆ Wall mounting
- ◆ Rugged stainless steel probe with waterproof connection box
- ◆ Recommended for outdoor use, cold stores, etc
- ◆ Range -50 to +150°C
- ◆ Perforated sheath acts as radiated heat shield and mechanical protection
- ◆ Optional 4-20mA transmitter (consult sales office)

Type K BMS-K-1

RTF-4

RTZ-Pt100

RTP-Pt100

All dimensions stated are nominal



Specifications may be subject to change

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