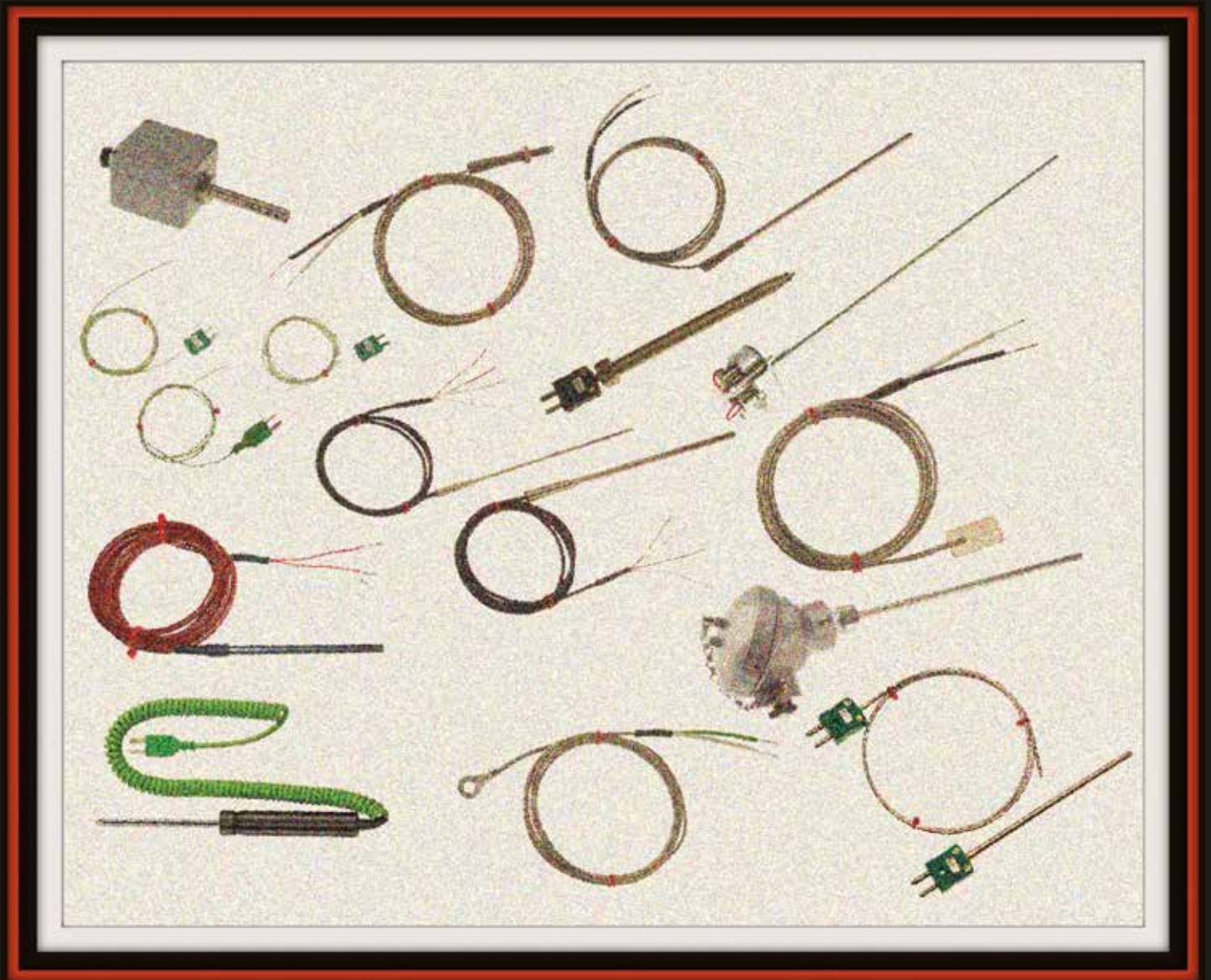


Thermocouple and Resistance Thermometer Sensors



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Thermocouple & Resistance Thermometer Sensors

Labfacility is the UK's leading manufacturer of Temperature Sensors , Thermocouple Connectors and associated Temperature Instrumentation and stockists of Thermocouple Cables . The Company has been trading since 1971, is ISO 9001 accredited, we have two UK sites – West Sussex and South Yorkshire and exports to over 85 countries. In addition to the stocked items, Labfacility also offers bespoke Temperature Sensors.

Quality and Service are key elements in the continued growth of Labfacility; technical support for both sensing and instrumentation is always freely available from our experienced technical sales teams.

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Temperature sensors, thermocouple connectors & cables are available in IEC, ANSI & JIS colour codes



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Fine Wire Versatile Thermocouples, IEC

Fine Wire Exposed Junction Thermocouple – PFA insulated



- Thermocouple types K & T to IEC 584
- Fast response, welded exposed junction
- 5 metre long Teflon® PFA insulated twin-twisted lead
- Durable construction with choice of conductor size, 1/0.315mm solid or 7/0.2mm stranded
- Miniature plug termination
- Temperature range -75°C to +250°C
- Ideal for test & development applications

Type	Conductors	Length	Part Number
K	1/0.315mm	5m	XE-3530-001
K	7/0.2mm	5m	XE-3531-001
T	1/0.315mm	5m	XE-3532-001
T	7/0.2mm	5m	XE-3533-001

Fine Wire Exposed Junction Thermocouple – PTFE insulated



- Thermocouple types K&T to IEC584
- Fast response, exposed junction
- PTFE insulated wires
- Twin-twist 1/0.2mm, class 1
- Available in 1 or 2 Metre Lengths
- Range-75 to 250°C
- Ideal for test & development work
- Fitted Miniature Plug (re-wireable) option available
- Pack sizes of 1 or 5

Calibration Type	No. per pack	Length (Metres)	Miniature Plug	Part Number
K	1	1m	No	XE-3500-001
K	5	1m	No	XE-3500-005
K	1	2m	No	XE-3501-001
K	5	2m	No	XE-3501-005
K	1	1m	Yes	XE-3505-001
K	5	1m	Yes	XE-3505-005
K	1	2m	Yes	XE-3506-001
K	5	2m	Yes	XE-3506-005
T	1	1m	No	XE-3520-001
T	5	1m	No	XE-3520-005
T	1	2m	No	XE-3521-001
T	5	2m	No	XE-3521-005
T	1	1m	Yes	XE-3525-001
T	5	1m	Yes	XE-3525-005
T	1	2m	Yes	XE-3526-001
T	5	2m	Yes	XE-3526-005

Fine Wire Exposed Junction Thermocouple – Glassfibre insulated



- Thermocouple types J,K&T to IEC584
- Fast response, exposed junction
- Glassfibre insulated wires with silicone varnish
- Flat pair, 1/0.315, 2 Metres long
- Fitted Miniature Plug option available
- Range -60 to 350°C
- Ideal for test & development work

Calibration Type	Miniature Plug	Part Number
K	No	XE-3551-001
K	Yes	XE-3552-001
T	No	XE-3561-001
J	No	XE-3571-001

Fine Gauge Bare Wire Thermocouple



- Ultra-fine Type K welded tip Thermocouple
- 0.001" (0.025mm) fine gauge bare wire x 200mm long
- Optimum Sensitivity
- Very fast response to a fraction of a second
- Ideal for minimal invasive temperature sensing

Calibration Type	Wire Diameter	Length (mm)	Part Number
K	1/0.025mm	200	XE-3517-001

Cable Tidy Thermocouple with Fitted Miniature Plug



A complete, precision fine wire, high sensitivity type K thermocouple with a fitted miniature connector

- Quick and easy integral storage of the thermocouple
- Type K thermocouple 2 metres long
- Class 1 wire for high accuracy
- PFA insulated wire, 0.2mm conductors
- Rated 220°C continuous
- Ideal & convenient for scientific and industrial test & measurement

Type	Length	Cable	Part Number
K	2M	PFA TTP 1/0.2	XE-7028-001

Fine Wire Disc Thermocouple



- Fine wire disc thermocouple, type K
- PTFE insulated wires terminated in a 6.35mm copper disc
- Supplied with 5 adhesive tapes
- Twin-twist 1/0.2mm, class 1, 1 Metre long
- Range 0 to 200°C
- Ideal for fast response surface measurement

Calibration Type	Part Number
K	XE-3515-001

Thermo Attachment Pads



- Self-adhesive pads in PTFE glass cloth for locating welded tip thermocouples
- Rated -50°C to 200°C
- Pad size 13x18mm
- Sheet contains 20 pads

Part Number
XE-3599-001

Probe Disinfectant Wipes



Probe Disinfectant Wipes are effective against 99.9% of gram-positive and gram-negative bacteria, as well as most viruses, fungi and other micro-organisms including spores. They are pre-dosed with a dual active formulation ideal for providing effective infection control and preventing cross contamination of probes and utensils. Designed for the disinfection of small surfaces, Pal Probe Disinfectant wipes are ideal for use in food environments on temperature probes and small utensils. They are also suitable for use in laboratories and clinical environments.

- Controlled dosage ensures effective disinfection for every use.
- Reduces the risk of cross contamination.
- Convenient
- Replaces the need to continuously wash probes and utensils.
- Fast to use and easy to use
- Cost effective
- 70 small wipes per canister means very low cost per unit

Product	Part Number
70 Wipes Canister	XE-6500-001

Fine Wire Versatile Thermocouples, ANSI

ANSI Exposed Junction Thermocouple Glassfibre Insulated Mini Plug



- Thermocouple type K
- Fast response, welded exposed junction
- 1, 2, 5 or 10 metre long glassfibre insulated flat pair cable
- 1/0.3mm conductors
- Temperature range -60°C to +350°C (short periods up to 400°C)
- Tolerance to ANSI MC96.1 Class 2
- Colour code to ANSI MC96.1

Type	Length	Description	Part Number
K - G/F ANSI	1m	Z3-K-1.0-1/0.315-MP-ANSI	XE-3586-001
K - G/F ANSI	2m	Z3-K-2.0-1/0.315-MP-ANSI	XE-3588-001
K - G/F ANSI	5m	Z3-K-5.0-1/0.315-MP-ANSI	XE-3562-001
K - G/F ANSI	10m	Z3-K-10.0-1/0.315-MP-ANSI	XE-3573-001

ANSI Exposed Junction Thermocouple PFA Insulated Mini Plug



- Thermocouple types K & T to ANSI MC96.1
- Fast response, welded exposed junction
- 1, 2, 5 or 10 metre long Teflon® PFA insulated twin-twisted lead
- Durable construction with choice of conductor size, 1/0.2, 1/0.3mm solid or 7/0.2mm stranded
- Class 1 cable specification in accordance with BS EN 60584-3:2008
- Tolerance to ANSI MC96.1 Class 1
- Temperature range -75°C to +250°C

Type	Length	Description	Part Number
K PFA ANSI	1m	Z2-K-1.0-1/0.2-MP-ANSI	XE-3583-001
K PFA ANSI	2m	Z2-K-2.0-1/0.2-MP-ANSI	XE-3581-001
K PFA ANSI	5m	Z2-K-5.0-1/0.2-MP-ANSI	XE-3559-001
K PFA ANSI	10m	Z2-K-10.0-1/0.2-MP-ANSI	XE-3570-001
K PFA ANSI	1m	Z2-K-1.0-1/0.3-MP-ANSI	XE-3580-001
K PFA ANSI	2m	Z2-K-2.0-1/0.3-MP-ANSI	XE-3582-001
K PFA ANSI	5m	Z2-K-5.0-1/0.3-MP-ANSI	XE-3560-001
K PFA ANSI	10m	Z2-K-10.0-1/0.3-MP-ANSI	XE-3572-001
T PFA ANSI	1m	Z2-T-1.0-1/0.3-MP-ANSI	XE-3589-001
T PFA ANSI	2m	Z2-T-2.0-1/0.3-MP-ANSI	XE-3587-001
T PFA ANSI	5m	Z2-T-5.0-1/0.3-MP-ANSI	XE-3563-001
T PFA ANSI	10m	Z2-T-10.0-1/0.3-MP-ANSI	XE-3574-001
K PFA ANSI	1m	Z2-K-1.0-7/0.2-MP-ANSI	XE-3584-001
K PFA ANSI	2m	Z2-K-2.0-7/0.2-MP-ANSI	XE-3585-001
K PFA ANSI	5m	Z2-K-5.0-7/0.2-MP-ANSI	XE-3564-001
K PFA ANSI	10m	Z2-K-10.0-7/0.2-MP-ANSI	XE-3575-001

ANSI Fine Wire Exposed Junction thermocouple PFA Tails



- Thermocouple types K & T to ANSI MC96.1
- Fast response, welded exposed junction
- 1, 2, 5 or 10 metre long Teflon® PFA insulated twin-twisted lead
- Durable construction with choice of conductor size, 1/0.2, 1/0.3mm solid or 7/0.2mm stranded
- Class 1 cable specification in accordance with BS EN 60584-3:2008
- Tolerance to ANSI MC96.1 Class 1
- Temperature range -75°C to +250°C

Type	Strands	Length	Part Number
K	1/0.2	1m	XE-3542-001
K	1/0.2	2m	XE-3541-001
K	1/0.2	5m	XE-3554-001
K	1/0.2	10m	XE-3565-001
K	1/0.3	1m	XE-3543-001
K	1/0.3	2m	XE-3544-001
K	1/0.3	5m	XE-3555-001
K	1/0.3	10m	XE-3566-001
T	1/0.3	1m	XE-3548-001
T	1/0.3	2m	XE-3547-001
T	1/0.3	5m	XE-3557-001
T	1/0.3	10m	XE-3568-001
K	7/0.2	1m	XE-3549-001
K	7/0.2	2m	XE-3550-001
K	7/0.2	5m	XE-3558-001
K	7/0.2	10m	XE-3569-001

ANSI Glassfibre Exposed Welded Tip Thermocouples



- Thermocouple type K
- Fast response, welded exposed junction
- 1, 2, 5 & 10 metre long glassfibre insulated flat pair cable
- 1/0.3mm conductors
- Temperature range -60°C to +350°C (short periods up to 400°C)
- Tolerance to ANSI MC96.1 Class 2
- Colour code to ANSI MC96.1

Length	Termination	Part Number
1m	TAILS	XE-3545-001
2m	TAILS	XE-3546-001
5m	TAILS	XE-3556-001
10m	TAILS	XE-3567-001

Mineral Insulated Thermocouples with Threaded Pot and Tails, IEC

Mineral Insulated Thermocouple with Threaded Pot & Tails – TYPE K



- Sensor range-100 to 1100° C
- Tails 100mm,PFA insulated twin twisted,7/0.2mm
- M8 x 1.0mm threaded pot seal (200°C)
- 1.0, 1.5, 3.0, 4.5 and 6.0mm diameters in different lengths
- Calibration Type K
- 310 Stainless Steel Sheath

Type	Diameter	Length	Part Number
K	1.0 mm	150 mm	XE-3305-001
K	1.0 mm	250 mm	XE-3306-001
K	1.0 mm	500 mm	XE-3307-001
K	1.0 mm	1000 mm	XE-3308-001
K	1.0 mm	1500 mm	XE-3309-001
K	1.0 mm	2000 mm	XE-3310-001
K	1.5 mm	150 mm	XE-3311-001
K	1.5 mm	250 mm	XE-3312-001
K	1.5 mm	500 mm	XE-3313-001
K	1.5 mm	1000 mm	XE-3314-001
K	1.5 mm	1500 mm	XE-3315-001
K	1.5 mm	2000 mm	XE-3316-001
K	3.0 mm	150 mm	XE-3331-001
K	3.0 mm	250 mm	XE-3332-001
K	3.0 mm	500 mm	XE-3333-001
K	3.0 mm	1000 mm	XE-3334-001
K	3.0 mm	1500 mm	XE-3335-001
K	3.0 mm	2000 mm	XE-3336-001
K	4.5 mm	150 mm	XE-3337-001
K	4.5 mm	250 mm	XE-3338-001
K	4.5 mm	500 mm	XE-3339-001
K	4.5 mm	1000 mm	XE-3340-001
K	6.0 mm	250 mm	XE-3341-001
K	6.0 mm	500 mm	XE-3342-001
K	6.0 mm	1000 mm	XE-3343-001
K	6.0 mm	2000 mm	XE-3344-001

Mineral Insulated Thermocouple with Threaded Pot & Tails – TYPE T



- Sensor range -100 to 400° C
- Tails 100mm, PFA insulated twin twisted, 7/0.2mm
- M8 x 1.0mm threaded pot seal (200°C)
- 1.0, 1.5, 3.0 and 6.0mm diameters in different lengths
- Calibration Type T
- 316 Stainless Steel sheath

Type	Diameter	Length	Part Number
T	1.0 mm	150 mm	XE-3345-001
T	1.0 mm	250 mm	XE-3346-001
T	1.0 mm	500 mm	XE-3347-001
T	1.0 mm	1000 mm	XE-3348-001
T	1.5 mm	150 mm	XE-3349-001
T	1.5 mm	250 mm	XE-3350-001
T	1.5 mm	500 mm	XE-3351-001
T	1.5 mm	1000 mm	XE-3352-001
T	3.0 mm	150 mm	XE-3353-001
T	3.0 mm	250 mm	XE-3354-001
T	3.0 mm	500 mm	XE-3355-001
T	3.0 mm	1000 mm	XE-3356-001
T	3.0 mm	2000 mm	XE-3357-001
T	6.0 mm	250 mm	XE-3358-001
T	6.0 mm	500 mm	XE-3359-001
T	6.0 mm	1000 mm	XE-3360-001
T	6.0 mm	2000 mm	XE-3361-001

Mineral Insulated Thermocouple with Threaded Pot & Tails – TYPE J



- Sensor range-100 to 760° C
- Tails 100mm, PFA insulated twin twisted,7/0.2mm
- M8 x 1.0mm threaded pot seal (200°C)
- 1.0, 1.5, 3.0 and 6.0mm diameters in different lengths
- Calibration Type J
- 321 Stainless Steel Sheath

Type	Diameter	Length	Part Number
J	1.0 mm	150 mm	XE-3362-001
J	1.0 mm	250 mm	XE-3363-001
J	1.0 mm	500 mm	XE-3364-001
J	1.0 mm	1000 mm	XE-3365-001
J	1.5 mm	150 mm	XE-3366-001
J	1.5 mm	250 mm	XE-3367-001
J	1.5 mm	500 mm	XE-3368-001
J	1.5 mm	1000 mm	XE-3369-001
J	3.0 mm	150 mm	XE-3370-001
J	3.0 mm	250 mm	XE-3371-001
J	3.0 mm	500 mm	XE-3372-001
J	3.0 mm	1000 mm	XE-3373-001
J	3.0 mm	2000 mm	XE-3374-001
J	6.0 mm	250 mm	XE-3375-001
J	6.0 mm	500 mm	XE-3376-001
J	6.0 mm	1000 mm	XE-3377-001
J	6.0 mm	2000 mm	XE-3378-001

Mineral Insulated Thermocouple with Threaded Pot & Tails – TYPE N

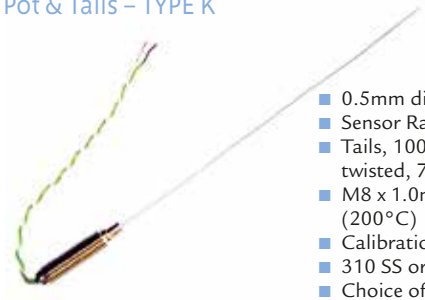


- Sensor range-100 to 1250° C
- Tails 100mm, PFA insulated twin twisted, 7/0.2mm
- M8 x 1.0mm threaded pot seal (200°C)
- 1.0, 1.5, 3.0 and 6.0mm diameters in different lengths
- Calibration Type N
- Nicrosil Sheath

Type	Diameter	Length	Part Number
N	1.0 mm	150 mm	XE-3379-001
N	1.0 mm	250 mm	XE-3380-001
N	1.0 mm	500 mm	XE-3381-001
N	1.0 mm	1000 mm	XE-3382-001
N	1.5 mm	150 mm	XE-3383-001
N	1.5 mm	250 mm	XE-3384-001
N	1.5 mm	500 mm	XE-3385-001
N	1.5 mm	1000 mm	XE-3386-001
N	3.0 mm	150 mm	XE-3387-001
N	3.0 mm	250 mm	XE-3388-001
N	3.0 mm	500 mm	XE-3389-001
N	3.0 mm	1000 mm	XE-3390-001
N	3.0 mm	2000 mm	XE-3391-001
N	6.0 mm	250 mm	XE-3392-001
N	6.0 mm	500 mm	XE-3393-001
N	6.0 mm	1000 mm	XE-3394-001
N	6.0 mm	2000 mm	XE-3395-001

Fast Response Mineral Insulated Thermocouples with Threaded Pot and Tails, IEC

Fast Response MI Thermocouple Threaded Pot & Tails – TYPE K

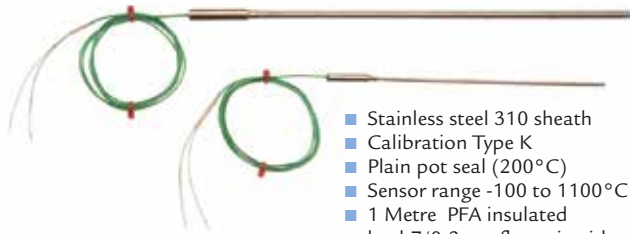


- 0.5mm diameter probe
- Sensor Range -100 to 800°C
- Tails, 100mm, PFA insulated twin twisted, 7/0.2mm
- M8 x 1.0mm threaded pot seal (200°C)
- Calibration Type K
- 310 SS or Inconel 600 Sheath available
- Choice of Insulated or Grounded Hot Junctions

Type	Length	Sheath	Junction	Part Number
K	150 mm	SS310	Insulated	XE-3281-001
K	250 mm	SS310	Insulated	XE-3282-001
K	500 mm	SS310	Insulated	XE-3284-001
K	1000 mm	SS310	Insulated	XE-3285-001
K	2000 mm	SS310	Insulated	XE-3286-001
K	500 mm	Inconel 600	Insulated	XE-3289-001
K	150 mm	SS310	Grounded	XE-3291-001
K	250 mm	SS310	Grounded	XE-3292-001
K	500 mm	SS310	Grounded	XE-3294-001
K	1000 mm	SS310	Grounded	XE-3295-001
K	2000 mm	SS310	Grounded	XE-3296-001
K	500 mm	Inconel 600	Grounded	XE-3299-001

Mineral Insulated Thermocouples with Plain Pot Seal and Lead

Mineral Insulated Thermocouple with Plain Pot Seal & – Lead TYPE K



- Stainless steel 316 sheath
- Calibration Type K
- Plain pot seal (200°C)
- Sensor range -100 to 1100°C
- 1 Metre PFA insulated lead, 7/0.2mm flat pair with tails
- 1.0, 1.5, 3.0, 4.5 & 6.0 mm diameters available

Type	Probe Size	Part No.	Type	Probe Size	Part No.
K	1.0 x 150 mm	XE-3095-001	K	3.0 x 500 mm	XE-3113-001
K	1.0 x 250 mm	XE-3096-001	K	3.0 x 1000 mm	XE-3114-001
K	1.0 x 500 mm	XE-3097-001	K	3.0 x 1500 mm	XE-3115-001
K	1.0 x 1000 mm	XE-3098-001	K	3.0 x 2000 mm	XE-3116-001
K	1.0 x 1500 mm	XE-3099-001	K	4.5 x 150 mm	XE-3117-001
K	1.0 x 2000 mm	XE-3100-001	K	4.5 x 250 mm	XE-3118-001
K	1.5 x 150 mm	XE-3101-001	K	4.5 x 500 mm	XE-3119-001
K	1.5 x 250 mm	XE-3102-001	K	4.5 x 1000 mm	XE-3120-001
K	1.5 x 500 mm	XE-3103-001	K	6.0 x 150 mm	XE-3121-001
K	1.5 x 1000 mm	XE-3104-001	K	6.0 x 250 mm	XE-3122-001
K	1.5 x 1500 mm	XE-3105-001	K	6.0 x 500 mm	XE-3123-001
K	1.5 x 2000 mm	XE-3106-001	K	6.0 x 1000 mm	XE-3124-001
K	3.0 x 150 mm	XE-3111-001	K	6.0 x 2000 mm	XE-3125-001
K	3.0 x 250 mm	XE-3112-001			

Mineral Insulated Thermocouple with Plain Pot Seal & Lead – TYPE T



- Sensor range -100 to 400°C
- Calibration Type T
- Plain pot seal (200°C)
- 1 Metre PFA insulated lead, 7/0.2mm flat pair with tails
- 1.0, 1.5, 3.0 & 6.0 mm diameters available
- 316 Stainless Steel sheath

Type	Probe Size	Part No.	Type	Probe Size	Part No.
T	1.0 x 150 mm	XE-3126-001	T	3.0 x 250 mm	XE-3135-001
T	1.0 x 250 mm	XE-3127-001	T	3.0 x 500 mm	XE-3136-001
T	1.0 x 500 mm	XE-3128-001	T	3.0 x 1000 mm	XE-3137-001
T	1.0 x 1000 mm	XE-3129-001	T	3.0 x 2000 mm	XE-3138-001
T	1.5 x 150 mm	XE-3130-001	T	6.0 x 250 mm	XE-3139-001
T	1.5 x 250 mm	XE-3131-001	T	6.0 x 500 mm	XE-3140-001
T	1.5 x 500 mm	XE-3132-001	T	6.0 x 1000 mm	XE-3141-001
T	1.5 x 1000 mm	XE-3133-001	T	6.0 x 2000 mm	XE-3142-001
T	3.0 x 150 mm	XE-3134-001			

Mineral Insulated Thermocouple with Plain Pot Seal & – Lead TYPE J



- Stainless steel 321 sheath
- Calibration Type J
- Plain pot seal (200°C)
- Sensor range -100 to 760°C
- 1 Metre PFA insulated lead, 7/0.2mm flat pair with tails
- 1.0, 1.5, 3.0 & 6.0 mm diameters available

Type	Probe Size	Part No.	Type	Probe Size	Part No.
J	1.0 x 150 mm	XE-3143-001	J	3.0 x 250 mm	XE-3152-001
J	1.0 x 250 mm	XE-3144-001	J	3.0 x 500 mm	XE-3153-001
J	1.0 x 500 mm	XE-3145-001	J	3.0 x 1000 mm	XE-3154-001
J	1.0 x 1000 mm	XE-3146-001	J	3.0 x 2000 mm	XE-3155-001
J	1.5 x 150 mm	XE-3147-001	J	6.0 x 150 mm	XE-3156-001
J	1.5 x 250 mm	XE-3148-001	J	6.0 x 250 mm	XE-3157-001
J	1.5 x 500 mm	XE-3149-001	J	6.0 x 500 mm	XE-3158-001
J	1.5 x 1000 mm	XE-3150-001	J	6.0 x 1000 mm	XE-3159-001
J	3.0 x 150 mm	XE-3151-001	J	6.0 x 2000 mm	XE-3160-001

Mineral Insulated Thermocouple with Plain Pot Seal & Lead – TYPE N



- Nicrosil sheath
- Calibration Type N
- Plain pot seal (200°C)
- Sensor range -100 to 1300°C
- 1 Metre PFA insulated lead, 7/0.2mm flat pair with tails
- 1.0, 1.5, 3.0 & 6.0 mm diameters available

Type	Probe Size	Part Number	Type	Probe Size	Part Number
N	1.0 x 150 mm	XE-3161-001	N	3.0 x 500 mm	XE-3171-001
N	1.0 x 250 mm	XE-3162-001	N	3.0 x 1000 mm	XE-3172-001
N	1.5 x 250 mm	XE-3166001	N	3.0 x 2000 mm	XE-3173-001
N	1.5 x 500 mm	XE-3167-001	N	6.0 x 250 mm	XE-3174-001
N	1.5 x 1000 mm	XE-3168-001	N	6.0 x 500 mm	XE-3175-001
N	3.0 x 150 mm	XE-3169-001	N	6.0 x 1000 mm	XE-3176-001
N	3.0 x 250 mm	XE-3170-001	N	6.0 x 2000 mm	XE-3177-001

Mineral Insulated Thermocouples with Miniature Plug, IEC

Mineral Insulated Thermocouple with Miniature Plug - TYPE K



- Stainless steel 310 sheath
- Type K Calibration
- Hot junction insulated from sheath
- Miniature plug termination (220°C) for quick, simple connection
- Sensor range -100 to 1100°C
- 1.0, 1.5 & 3.0 mm diameters available

Type	Probe Size	Part No.
K	1.0 x 150 mm	XE-3216-001
K	1.0 x 250 mm	XE-3217-001
K	1.0 x 500 mm	XE-3218-001
K	1.0 x 1000 mm	XE-3219-001
K	1.5 x 150 mm	XE-3220-001
K	1.5 x 250 mm	XE-3221-001
K	1.5 x 500 mm	XE-3222-001
K	1.5 x 1000 mm	XE-3223-001
K	3.0 x 150 mm	XE-3230-001
K	3.0 x 250 mm	XE-3231-001
K	3.0 x 500 mm	XE-3232-001
K	3.0 x 1000 mm	XE-3233-001
K	3.0 x 2000 mm	XE-3234-001

Mineral Insulated Thermocouple with Miniature Plug - TYPE T



- Stainless steel 316 sheath
- Type T Calibration
- Hot junction insulated from sheath
- Miniature plug termination (220°C) for quick, simple connection
- Sensor range -100 to 400°C
- 1.0, 1.5 & 3.0 mm diameters available

Type	Probe Size	Part No.
T	1.0 x 150 mm	XE-3235-001
T	1.0 x 250 mm	XE-3236-001
T	1.0 x 500 mm	XE-3237-001
T	1.0 x 1000 mm	XE-3238-001
T	1.5 x 150 mm	XE-3239-001
T	1.5 x 250 mm	XE-3240-001
T	1.5 x 500 mm	XE-3241-001
T	1.5 x 1000 mm	XE-3242-001
T	3.0 x 150 mm	XE-3243-001
T	3.0 x 250 mm	XE-3244-001
T	3.0 x 500 mm	XE-3245-001
T	3.0 x 1000 mm	XE-3246-001
T	3.0 x 2000 mm	XE-3247-001

Mineral Insulated Thermocouple with Miniature Plug - TYPE J



- Stainless Steel 321 sheath
- Type J Calibration
- Hot junction insulated from sheath
- Miniature plug termination (220°C) for quick, simple connection
- Sensor range -100 to 760°C
- 1.0, 1.5 & 3.0 mm diameters available

Type	Probe Size	Part No.
J	1.0 x 150 mm	XE-3263-001
J	1.0 x 250 mm	XE-3264-001
J	1.0 x 500 mm	XE-3265-001
J	1.0 x 1000 mm	XE-3266-001
J	1.5 x 150 mm	XE-3267-001
J	1.5 x 250 mm	XE-3268-001
J	1.5 x 500 mm	XE-3269-001
J	1.5 x 1000 mm	XE-3270-001
J	3.0 x 150 mm	XE-3271-001
J	3.0 x 250 mm	XE-3272-001
J	3.0 x 500 mm	XE-3273-001
J	3.0 x 1000 mm	XE-3274-001
J	3.0 x 2000 mm	XE-3275-001

Fast Response Mineral Insulated Thermocouple with Miniature Plug - Type K



- Stainless Steel 310 Sheath
- Insulated or Grounded Hot Junction available
- Miniature Plug Termination (220°C) for quick, simple connection
- Sensor Range -100 to 800°C

Type	Probe Size	Hot Junction	Part No.
K	0.5 x 150mm	Grounded	XE-3200-001
K	0.5 x 250mm	Grounded	XE-3201-001
K	0.5 x 500mm	Grounded	XE-3202-001
K	0.5 x 1000mm	Grounded	XE-3203-001
K	0.5 x 2000mm	Grounded	XE-3204-001
K	0.5 x 150mm	Insulated	XE-3205-001
K	0.5 x 250mm	Insulated	XE-3206-001
K	0.5 x 500mm	Insulated	XE-3207-001
K	0.5 x 1000mm	Insulated	XE-3208-001
K	0.5 x 2000mm	Insulated	XE-3209-001

Mineral Insulated Thermocouples with Standard Plug, IEC

Mineral Insulated Thermocouple with Standard Plug - TYPE K



- Stainless steel 310 sheath
- Type K Calibration
- Hot junction insulated from sheath
- Standard plug termination (220°C) for quick, simple connection
- Sensor range -100 to 1100°C
- 1.5, 3.0 & 6.0 mm diameters available

Type	Probe Size	Part No.
K	1.5 x 150 mm	XE-3700-001
K	1.5 x 250 mm	XE-3701-001
K	1.5 x 500 mm	XE-3702-001
K	1.5 x 1000 mm	XE-3703-001
K	3.0 x 150 mm	XE-3704-001
K	3.0 x 250 mm	XE-3705-001
K	3.0 x 500 mm	XE-3706-001
K	3.0 x 1000 mm	XE-3707-001
K	3.0 x 2000 mm	XE-3708-001
K	6.0 x 150 mm	XE-3709-001
K	6.0 x 250 mm	XE-3710-001
K	6.0 x 500 mm	XE-3711-001
K	6.0 x 1000 mm	XE-3712-001
K	6.0 x 2000 mm	XE-3713-001

Mineral Insulated Thermocouple with Standard Plug - TYPE T



- Stainless steel 316 sheath
- Type T Calibration
- Hot junction insulated from sheath
- Standard plug termination (220°C) for quick, simple connection
- Sensor range -100 to 400°C
- 1.5, 3.0 & 6.0 mm diameters available

Type	Probe Size	Part No.
T	1.5 x 150 mm	XE-3714-001
T	1.5 x 250 mm	XE-3715-001
T	1.5 x 500 mm	XE-3716-001
T	1.5 x 1000 mm	XE-3717-001
T	3.0 x 150 mm	XE-3718-001
T	3.0 x 250 mm	XE-3719-001
T	3.0 x 500 mm	XE-3720-001
T	3.0 x 1000 mm	XE-3721-001
T	3.0 x 2000 mm	XE-3722-001
T	6.0 x 250 mm	XE-3723-001
T	6.0 x 500 mm	XE-3724-001
T	6.0 x 1000 mm	XE-3725-001
T	6.0 x 2000 mm	XE-3726-001

Mineral Insulated Thermocouple with Standard Plug - TYPE J



- Stainless Steel 321 sheath
- Type J Calibration
- Hot junction insulated from sheath
- Miniature plug termination (220°C) for quick, simple connection
- Sensor range -100 to 760°C
- 1.5, 3.0 & 6.0 mm diameters available

Type	Probe Size	Part No.
J	1.5 x 150 mm	XE-3727-001
J	1.5 x 250 mm	XE-3728-001
J	1.5 x 500 mm	XE-3729-001
J	1.5 x 1000 mm	XE-3730-001
J	3.0 x 150 mm	XE-3731-001
J	3.0 x 250 mm	XE-3732-001
J	3.0 x 500 mm	XE-3733-001
J	3.0 x 1000 mm	XE-3734-001
J	3.0 x 2000 mm	XE-3735-001
J	6.0 x 250 mm	XE-3736-001
J	6.0 x 500 mm	XE-3737-001
J	6.0 x 1000 mm	XE-3738-001
J	6.0 x 2000 mm	XE-3739-001

Mineral Insulated Thermocouple with Standard Plug - TYPE N



- Nicrosil sheath
- Type N Calibration
- Hot junction insulated from sheath
- Standard plug termination (220°C) for quick, simple connection
- Sensor range -100 to 1250°C
- 1.5, 3.0 & 6.0 mm diameters available

Type	Probe Size	Part No.
N	1.5 x 150 mm	XE-3740-001
N	1.5 x 250 mm	XE-3741-001
N	1.5 x 500 mm	XE-3742-001
N	1.5 x 1000 mm	XE-3743-001
N	3.0 x 150 mm	XE-3744-001
N	3.0 x 250 mm	XE-3745-001
N	3.0 x 500 mm	XE-3746-001
N	3.0 x 1000 mm	XE-3747-001
N	3.0 x 2000 mm	XE-3748-001
N	6.0 x 250 mm	XE-3749-001
N	6.0 x 500 mm	XE-3750-001
N	6.0 x 1000 mm	XE-3751-001
N	6.0 x 2000 mm	XE-3752-001

Mineral Insulated Thermocouples, ANSI

ANSI Fast Response Mineral Insulated Thermocouple

- Mineral insulated Type 'K' Thermocouple
- 0.5mm diameter
- Choice of 310 stainless steel or Inconel® Alloy 600 sheath
- Probe temperature range -40°C to +750°C
- M8 x 1.0mm fine pitch threaded pot seal (200°C)
- 100mm tails, PFA Teflon® twin twisted 7/0.2mm



Sheath	Diameter	Sheath length	Part No.
Insulated	S/S 0.5	150mm	XE-3050-001
Insulated	S/S 0.5	250mm	XE-3051-001
Insulated	S/S 0.5	500mm	XE-3052-001
Insulated	INCONEL 0.5	500mm	XE-3041-001
Grounded	S/S 0.5	150mm	XE-3038-001
Grounded	S/S 0.5	250mm	XE-3039-001
Grounded	S/S 0.5	500mm	XE-3040-001
Grounded	INCONEL 0.5	500mm	XE-3037-001

ANSI Mineral Insulated Thermocouple with Miniature Plug



- Mineral insulated Type 'K' Thermocouple
- 310 stainless steel sheath
- Diameters include 1.0, 1.5 & 3.0mm
- Probe temperature range -40°C up to +1100°C

Type	Probe size	Part No.
K	1.0 x 150mm	XE-3010-001
K	1.0 x 250mm	XE-3011-001
K	1.0 x 500mm	XE-3012-001
K	1.0 x 1000mm	XE-3015-001
K	1.5 x 150mm	XE-3000-001
K	1.5 x 250mm	XE-3001-001
K	1.5 x 500mm	XE-3013-001
K	1.5 x 1000mm	XE-3014-001
K	3.0 x 150mm	XE-3002-001
K	3.0 x 250mm	XE-3003-001
K	3.0 x 500mm	XE-3017-001
K	3.0 x 1000mm	XE-3018-001

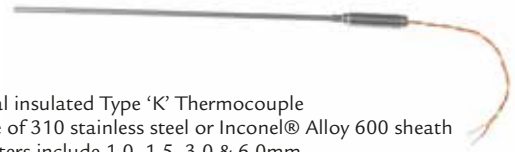
ANSI Mineral Insulated Thermocouple with Standard Plug



- Mineral insulated Type 'K' Thermocouple
- 310 stainless steel sheath
- Choice of 1.5 or 3.0 diameters
- Probe temperature range -40°C up to +1100°C

Type	Probe size	Part No.
K	1.5 x 150mm	XE-3004-001
K	1.5 x 250mm	XE-3005-001
K	1.5 x 500mm	XE-3016-001
K	1.5 x 1000mm	XE-3019-001
K	3.0 x 150mm	XE-3006-001
K	3.0 x 250mm	XE-3007-001
K	3.0 x 500mm	XE-3020-001
K	3.0 x 1000mm	XE-3021-001

ANSI Mineral Insulated Thermocouple with PFA tails



- Mineral insulated Type 'K' Thermocouple
- Choice of 310 stainless steel or Inconel® Alloy 600 sheath
- Diameters include 1.0, 1.5, 3.0 & 6.0mm
- Probe temperature range -40°C to +1100°C
- M8 x 1.0mm fine pitch threaded pot seal (200°C)
- 100mm tails, PFA twin twisted 7/0.2mm

Sheath	Diameter	Sheath Length	Cable length	Part No.
S/S	1	150	100mm	XE-3054-001
S/S	1	250	100mm	XE-3055-001
S/S	1	500	100mm	XE-3056-001
S/S	1	1000	100mm	XE-3053-001
S/S	1.5	150	100mm	XE-3058-001
S/S	1.5	250	100mm	XE-3059-001
S/S	1.5	500	100mm	XE-3060-001
S/S	1.5	1000	100mm	XE-3057-001
S/S	3	150	100mm	XE-3062-001
S/S	3	250	100mm	XE-3064-001
S/S	3	500	100mm	XE-3065-001
S/S	3	1000	100mm	XE-3061-001
S/S	3	2000	100mm	XE-3063-001
S/S	6	250	100mm	XE-3068-001
S/S	6	500	100mm	XE-3069-001
S/S	6	1000	100mm	XE-3066-001
S/S	6	2000	100mm	XE-3067-001
INCONEL	1	1000	100mm	XE-3042-001
INCONEL	1.5	500	100mm	XE-3044-001
INCONEL	1.5	1000	100mm	XE-3043-001
INCONEL	3	500	100mm	XE-3048-001
INCONEL	3	1000	100mm	XE-3045-001
INCONEL	3	2000	100mm	XE-3046-001
INCONEL	3	3000	100mm	XE-3047-001
INCONEL	6	1000	100mm	XE-3049-001

ANSI Mineral Insulated Thermocouple with 1m of PFA tails



- Mineral insulated Thermocouple to ANSI MC96.1
- Type 'K' with 310 stainless steel sheath
- Plain pot seal (200°C)
- 1 metre 7/0.2mm PFA Teflon® insulated flat pair cable and tails

Sheath	Diameter	Sheath Length	Cable length	Part No.
S/S	1	150	1m	XE-3022-001
S/S	1	250	1m	XE-3023-001
S/S	1	500	1m	XE-3024-001
S/S	1.5	150	1m	XE-3025-001
S/S	1.5	250	1m	XE-3026-001
S/S	1.5	500	1m	XE-3027-001
S/S	3	150	1m	XE-3028-001
S/S	3	250	1m	XE-3029-001
S/S	3	500	1m	XE-3030-001
S/S	4.5	150	1m	XE-3031-001
S/S	4.5	250	1m	XE-3032-001
S/S	4.5	500	1m	XE-3033-001
S/S	6	150	1m	XE-3034-001
S/S	6	250	1m	XE-3035-001
S/S	6	500	1m	XE-3036-001

ANSI Fast Response Mineral Insulated Thermocouple with Mini plug



- Mineral insulated Type 'K' Thermocouple
- 310 stainless steel sheath
- 0.5mm diameter fast response
- Insulated hot junction
- Probe temperature range -40°C up to +1100°C

Type	Probe size	Hot Junction	Part No.
K	0.5 x 150mm	Insulated	XE-3008-001
K	0.5 x 250mm	Insulated	XE-3009-001

Industrial Style Thermocouple with Terminal Head, IEC

Industrial Style Thermocouple with Terminal Head – TYPE K



- Stainless steel 310 Sheath
- Calibration type K
- Weatherproof aluminium IP67 terminal head with screw fit lid
- 6mm Diameter
- 100, 150, 200, 300, 400, 500 & 600 mm lengths available
- M20x1.5mm cable entry
- Sensor range -100 to 1100°C

Type	Probe Size	Part No.	Type	Probe Size	Part No.
K	6.0 x 100 mm	XE-3249-001	K	6.0 x 400 mm	XE-3254-001
K	6.0 x 150 mm	XE-3250-001	K	6.0 x 500 mm	XE-3253-001
K	6.0 x 200 mm	XE-3252-001	K	6.0 x 600 mm	XE-3255-001
K	6.0 x 300 mm	XE-3251-001			

Industrial Style Thermocouple with Terminal Head – TYPE J



- Stainless steel 321 Sheath
- Calibration type J
- Weatherproof aluminium IP67 terminal head with screw fit lid
- 6mm Diameter
- 100, 150, 200, 300, 400, 500 & 600 mm lengths available
- M20x1.5mm cable entry
- Sensor range -100 to 760°C

Type	Probe Size	Part No.	Type	Probe Size	Part No.
J	6.0 x 100 mm	XE-3256-001	J	6.0 x 400 mm	XE-3260-001
J	6.0 x 150 mm	XE-3257-001	J	6.0 x 500 mm	XE-3261-001
J	6.0 x 200 mm	XE-3258-001	J	6.0 x 600 mm	XE-3262-001
J	6.0 x 300 mm	XE-3259-001			

Fabricated & Specialist Thermocouples, IEC

General Purpose Thermocouple Probe



- Rugged thermocouple with stainless steel sheath
- Probe 4.5mm diameter x 150mm long
- Grounded hot junction for fast response
- Rated -60 to 350°C
- 2 Metre glassfibre insulated lead with stainless steel overbraid, 7/0.2mm
- Type J or K available

Calibration Type	Part No.
J	XE-3400-001
K	XE-3401-001

Fabricated & Specialist Thermocouples, IEC

Melt Bolt Thermocouples



- Type J or K Melt Bolt Thermocouple
- Typically used in plastics extruders and injection moulders
- Designed to withstand high pressure applications experienced with molten plastics & polymers
- Stainless steel bolt with 1/2"UNF-20 thread
- Choice of 76mm or 152mm bolt lengths
- 5mm long (x 3mm diameter) immersion length
- Temperature range to 500°C
- Insulated hot junction
- Standard plug termination (round pin)

Type	Thread	Bolt Length	Tip Immersion Length	Part No.
J	1/2 inch UNF-20	76mm (3 inch)	5.0mm (3.0mm Diameter)	XE-3920-001
J	1/2 inch UNF-20	152mm (6 inch)	5.0mm (3.0mm Diameter)	XE-3921-001
K	1/2 inch UNF-20	76mm (3 inch)	5.0mm (3.0mm Diameter)	XE-3922-001
K	1/2 inch UNF-20	152mm (6 inch)	5.0mm (3.0mm Diameter)	XE-3923-001

Adjustable Bayonet Thermocouple



- Thermocouple with adjustable insertion depth
- 6.0mm diameter tip
- 170mm spring with adjustable fixing cap (11.4mm I.D. single slot)
- Glassfibre insulated lead with stainless steel overbraid, 7/0.2mm
- Overall Length 2 Metres
- Rated 350°C
- Type J or K available

Calibration Type	Part No.
J	XE-3405-001
K	XE-3406-001

Nozzle Thermocouple



- Thermocouple housed in a stainless steel threaded bolt
- M6x1mm thread
- Grounded tip for fast response
- Rated 350°C
- 2 Metre glassfibre insulated lead with stainless steel overbraid, 7/0.2mm
- Type J or K available

Calibration Type	Part No.
J	XE-3410-001
K	XE-3411-001

Thermocouples

Fabricated & Specialist Thermocouples, IEC

Washer Thermocouple with Lead



- Thermocouple housed in a washer eyelet
- Grounded tip for quick response
- Rated 350°C
- Washer with 6mm clearance hole
- 2 Metre glassfibre insulated, stainless steel overbraided extension lead, 7/0.2mm

Calibration Type	Part No.
J	XE-3415-001
K	XE-3416-001

Leaf Thermocouple



- Thermocouple mounted on a stainless steel shim
- 25x13mm shim
- Junction grounded at tip for fast response
- Rated 350°C
- 2 Metre glassfibre insulated lead with stainless steel overbraid, 7/0.2mm
- Type J or K available

Calibration Type	Part No.
J	XE-3420-001
K	XE-3421-001

Silicone Patch Thermocouple with Miniature Plug Type K



- Moulded silicone patch thermocouple
- 40x15mm patch, self adhesive with aluminium foil backing
- PFA insulated twin-twist wire, 1 Metre long
- Fitted with miniature plug
- Range -50 to 150°C
- Resistant to many oils & chemicals

Calibration Type	Part No.
K	XE-3450-001

Magnetic Strip Thermocouple with Miniature Plug Type K



- Magnetic strip thermocouple
- PTFE insulated wires terminated in a 50 x 25 x 1mm magnetic strip
- Twin-twist wires, 2 Metres long
- Fitted miniature plug
- Range 0 to 120°C
- Ideal for ferrous metal surface measurement

Calibration Type	Part No.
K	XE-3455-001

Button Magnet Thermocouple with Miniature Plug Type K



- Button magnet thermocouple
- PTFE insulated twin-twist wires, 1m long
- Fitted miniature plug (200°C)
- Sensor range to 250°C
- Ideal for ferrous metal surface measurement

Calibration Type	Part No.
K	XE-3460-001

Magnet Thermocouple Type K



- Strong magnet housing type K thermocouple
- 2 metres stainless steel over-braided PFA Teflon® cable fitted with miniature plug
- Temperature rating -50°C to +250°C
- Rapid, reliable temperature sensing on ferrous surfaces
- Grounded measuring junction

Calibration Type	Part No.
K	XE-3470-001

Pipe Surface Thermocouples



- Stainless steel pipe clamp sensor with adjustable diameter
- Available in thermocouple type K or J
- Fits pipe diameters from 13-20mm, 22-30mm, 30-45mm and 40-55mm
- Grounded tip for fast response
- Rated up to 350°C
- Fitted with 2 metres of Glassfibre stainless steel braided extension cable, 7/0.2mm

Thermocouple Type	To fit pipe Diameter	Part Number
J	13 - 20 mm	XE-3910-001
J	22 - 30 mm	XE-3911-001
J	30 - 45 mm	XE-3912-001
J	40 - 55 mm	XE-3913-001
K	13 - 20 mm	XE-3914-001
K	22 - 30 mm	XE-3915-001
K	30 - 45 mm	XE-3916-001
K	40 - 55 mm	XE-3917-001

Autoclave Thermocouple



- Probe Diameter: 4mm
- Probe Length: 250mm
- Thermocouple Type: T Duplex
- 2 x insulated tip junctions
- Cable is silicon rubber throughout
- First 2.5m section in a flexible stainless steel conduit
- Temperature range -50 to +200°C
- Stainless steel (316) sheath
- Class 1 specification

Description	Part Number
Type T Duplex Autoclave Load Probe	XE-9510-001

Fabricated Platinum Resistance Thermometer Sensors

General Purpose Pt100 Probe with PFA / PTFE lead



- Pt100, class B, 4 wire
- Sensor temperature range -50 to 250°C
- 1 metre PTFE insulated screened lead 7/0.1mm for 3mm sheath
- 1 metre PFA insulated screened lead 7/0.2mm for 6mm sheath
- Stainless steel 316 sheath

Sheath	Lead Type	Part Number
3 x 100 mm	PTFE 7/0.1m	XE-3601-001
3 x 150 mm	PTFE 7/0.1m	XE-3602-001
3 x 250 mm	PTFE 7/0.1m	XE-3604-001
6 x 150 mm	PFA 7/0.2mm	XE-3622-001
6 x 250 mm	PFA 7/0.2mm	XE-3624-001

General Purpose Pt100 Silicone Rubber Lead



- Pt100, class B, 4 wire
- Sensor temperature range -50 to 200°C
- 2 Metre Silicone Rubber insulated screened lead 7/0.2mm

Sheath	Part Number
6 x 50 mm	XE-3630-001
6 x 100 mm	XE-3631-001

Heavy Duty Pt100 Probe fitted with Terminal Head



- Pt100, class B, 4 wire
- Stainless steel 316 sheath
- Weatherproof aluminium IP67 terminal head with screw fit lid, M20x1.5mm cable entry
- Sensor range -100 to 450°C

Sheath	Part Number
6 x 200mm	XE-3652-001
6 x 400mm	XE-3654-001

Pt100 Precision Probe with 2 metre lead



- High accuracy, +/- 0.06°C at 0°C
- Pt100 1/5th Din, 4 wire
- Sensor temperature range -50 to 250°C
- 2m PTFE insulated screened lead 7/0.2mm
- Stainless steel 316 sheath 6 x 250mm

Part Number

XE-3690-001

Specialist Platinum Resistance Thermometers

Self Adhesive Patch Pt100 Sensor



- Silicone rubber patch with self adhesive foil backing
- Pt100 class B, 4 wire sensor
- Dimensions L40 x W15
- Good resistance to oils & chemicals
- Temperature range -50 to 150°C
- 2m or 5m PTFE insulated twisted leads, 7/0.2mm

Product Code	Length	Part Number
RTF4-2M	2 Metres	XE-3660-001
RTF4-5M	5 Metres	XE-3661-001

Self-Adhesive Patch Pt1000 Sensor – Silicone rubber patch



- Pt1000 sensor to IEC751 Class B
- Temperature range -50°C to +150°C
- Pt1000 element encapsulated in a silicone rubber patch
- 1 metre 7/0.2mm Teflon® insulated twin twisted lead
- Self-adhesive, aluminium foil backing
- Resistant to many oils & chemicals

Product Code	Length	Part Number
RTF-1000	1 Metre	XE-3662-001

Specialist Platinum Resistance Thermometers

Pt100 Class B Sensors with Teflon® insulated lead



- Pt100 element to IEC 751 Class B
- 4 wire configuration
- Temperature range -50°C to +200°C
- Pt100 element in a 3.0mm diameter 316 stainless steel probe
- 1 metre 7/0.16mm Teflon® insulated twisted lead, 4 core

Diameter	Length	Part Number
3mm	25mm	XE-3663-001
3mm	50mm	XE-3664-001

Stainless Steel Sheathed Pt100 Sensor



- Stainless steel sheathed Pt100 element for surface mounting
- Class B, 2 wire
- Dimensions L35 x W6 x H2mm
- 1m PTFE insulated twisted leads, 7/0.2mm
- Temperature range -50°C to 250°C

Product Code	Part Number
Surface RT/SS-1M	XE-3665-001

Air Temperature/Indoor Pt100 Sensor



- Moulded, wall mounting Pt100 for accurate indoor air temperature sensing
- Moulded case H85 xW85 xD30mm
- Surface or standard electrical conduit mounting
- Pt100, class B, 2, 3 or 4 wire
- Temperature range 0 to 70°C

Product Code	Part Number
RTZ	XE-3670-001

Room Temperature Sensor

An indoor sensor in modern housing design senses the temperature in the range of -30 up to +60°C. The temperature probe can be mounted directly on-wall or onto a junction box by 2 fixing screws. The extra wide ventilation slots ensures a good air circulation for a high accuracy of measurement.



- Measurement range temp: -30 to +60°C
- Sensor: Pt100
- Circuit type: 2-wire connection
- Measurement current: approx. 1mA
- Electrical connection: screw terminals max. 1.5mm²
- Leakage resistance: >100MOhm, at +20°C (500 V DC)
- Housing: ABS polymer, colour signal white like RAL 9003
- Dimensions: housing L82 x W82 x H25mm
- Protection type: IP30
- Protection class: III
- Storage temperature: -20 to +50°C
- Installation: on-wall or on flush-mounted box
- Standards: CE-conformity, GOST, RoHS

Description	Type	Part Number
Room Temperature Sensor	Pt100	XE-6330-001

Pt100 Outdoor / Cold Store Temperature Sensors



- Weatherproof IP67 rated wall mounting Pt100 for accurate outdoor air temperature sensing
- Housing 80 x 74 x 54mm
- Perforated stainless steel probe, 12.7 x 75mm
- Surface mounting
- Pt100, class B, 4 wire
- Temperature range -50 to 150°C
- M20 cable gland
- XE-3673-001: 4 wire single element
- XE-3674-001: 2 x 4 wire dual element
- XE-3675-001: 3 wire single element with transmitter, 4-20mA 2 wire current loop output, default range -50 to +150°C (other ranges can be scaled/configured by user, 25°C minimum span)
- *Note - transmitter device has an ambient operating range of -40 to +85°C

Type	Part Number
Single Element	XE-3673-001
Dual Element	XE-3674-001
Single Element with 4-20mA Output	XE-3675-001

Ceramic Sheathed Pt100 Inserts



- Pt100 thin film element housed in ceramic sheath
- Ceramic 5mm dia x 35mm long
- Class B, 2 wire 50mm or 4 wire 450mm available
- PTFE insulated wires, 7/0.2mm SPC
- Temperature range -50°C to 250°C

Lead Length	No. of Wires	Part Number
50 mm	2	XE-3666-001
450 mm	4	XE-3667-001

Mineral Insulated Pt100 Probe With Extension Lead

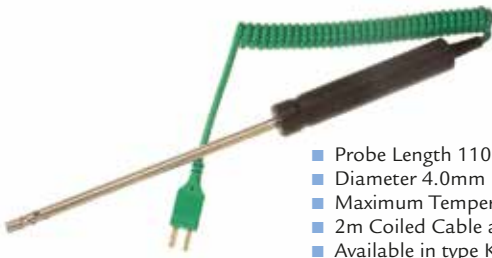


- High temperature, rugged, flexible Pt100 probe
- Pt100 (100 Ohms @ 0°C) to IEC 751, Class B, 4 wire
- Rugged mineral insulated probe, 316 stainless steel sheath
- Suitable for many industrial applications including high pressure, vacuum and vibration
- Probe can be bent to enable fitting in awkward locations, Probe bending radius: 9.0mm for 3.0mm dia. probe, 18mm for 6.0mm dia. Probe. (Note: cannot be bent for 30mm at sensing tip)
- Sensor temperature rating -50°C to +500°C
- Plain pot seal rated 200°C max.
- 1 metre Teflon® insulated, screened lead, 7/0.2mm, 4-core
- 4-wire tails - allows connection to any PT100 instrument 2, 3 or 4 wire

Dimensions	Part Number
3mm x 150mm	XE-3480-001
3mm x 250mm	XE-3481-001
6mm x 150mm	XE-3482-001
6mm x 250mm	XE-3483-001

Handheld Sensors

Handheld Stainless Steel Air Probes



- Probe Length 110mm
- Diameter 4.0mm
- Maximum Temperature 400°C
- 2m Coiled Cable and Fitted Mini Plug
- Available in type K or T

Description	Part Number
Type K Air Probe 110mm x 4mm	XE-3800-001
Type T Air Probe 110mm x 4mm	XE-3801-001

Handheld Mineral Insulated General Purpose Probe



- Probe Length 100mm, 120mm & 300mm
- Diameter 1.5mm, 3.0mm & 6.0mm
- Maximum Temperature 850°C
- 2m Coiled Cable and Fitted Mini Plug

Description	Part No.
Type K General Probe 100 x 1.5mm	XE-3806-001
Type T General Probe 100 x 1.5mm	XE-3807-001
Type K General Probe 100 x 3.0mm	XE-3808-001
Type T General Probe 100 x 3.0mm	XE-3809-001
Type K General Probe 300 x 1.5mm	XE-3810-001
Type T General Probe 300 x 1.5mm	XE-3811-001
Type K General Probe 300 x 3.0mm	XE-3812-001

Handheld Stainless Steel Penetration Probes



- Probe Length 120mm or 300mm
- Diameter 3.3mm
- Maximum Temperature 400°C
- 2m Coiled Cable and Fitted Mini Plug
- Available in type K or T

Description	Part Number
Type K Penetration 120 x 3.3mm	XE-3802-001
Type T Penetration 120 x 3.3mm	XE-3803-001
Type K Penetration 300 x 3.3mm	XE-3804-001
Type T Penetration 300 x 3.3mm	XE-3805-001

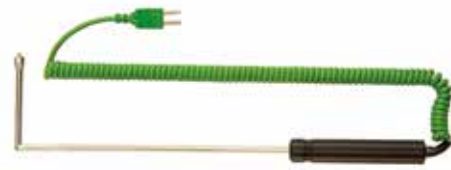
K Type Spring Loaded Thermocouple with Copper Disc Tip



- Surface temperature spring loaded thermocouple with copper disc tip
- Maximum Temperature +600°C
- Probe 4.7mmØ x 80mm long
- Tip 4mmØ

Description	Part Number
K Type Spring Loaded Thermocouple with Copper Disc Tip	XE-3816-001

K Type Right Angled Probe and Copper Disc Tip



- Surface temperature spring loaded thermocouple with right angled probe and copper disc tip
- Right Angled
- Maximum Temperature: +600°C
- Probe 4.7mmØ x 75mm hot leg and 200mm cold leg

Description	Part Number
K Type Right Angled Probe and Copper Disc Tip	XE-3817-001

K Type Thermocouple with Ceramic Tip and Coiled Element



- Surface temperature fast response thermocouple with ceramic tip and coiled element
- Ceramic Tip
- Maximum Temperature: +900°C
- Probe 7.9mmØ x 100mm long
- Coiled element diameter 5.5mm

Description	Part Number
K Type Thermocouple With Ceramic Tip and Coiled Element	XE-3818-001

K Type Right Angled Probe



- Surface temperature fast response thermocouple.
- Ceramic Tip
- Coiled Element
- Right angled Probe
- Maximum Temperature +900°C
- Probe 12.7mmØ x 20mm Hot Leg and 4.7mmØ x 190mm Cold Leg
- Coiled element diameter 5.5mm

Description	Part Number
K Type Right Angled Probe	XE-3819-001

K Type Penetration Temperature Probe



- Heavy Duty Penetration thermocouple with pointed tip for pushing into solid material.
- Maximum Temperature: +350°C
- Probe 6mmØ x 150mm long

Description	Part Number
K Type Penetration Temperature Probe	XE-3820-001

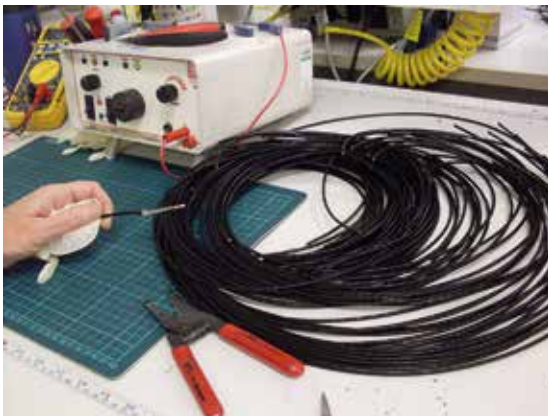
Labfacility are specialists in the design and manufacture of custom-built temperature sensors at their 1200 square foot Yorkshire plant located in Dinnington.

Shipments are made to world-wide destinations on a daily basis; technical and application advice is always freely available.

- Thermocouple, Resistance thermometer or Thermistor
- Mineral Insulated or Fabricated
- Single or Duplex elements
- Terminations with cable and/or thermocouple connector or terminal head with block or transmitter
- High accuracy and close tolerance options
- Multi-way thermocouple extension harnesses with identification markers & connectors; typically used on data logging applications, where multiple sensor connections are required such as in automotive / vehicle development & testing.



Dinnington Factory



Custom Sensor Manufacturing



Sensor manufacturing



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Automotive wiring loom



Special autoclave probe

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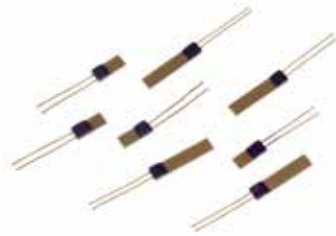
www.labfacility.com

info@labfacility.com

Platinum Resistance Thermometer Detectors

100 Ohm Flat Film Detectors

- Pt100 to IEC751
- Thin film construction
- Resists vibration & shock
- Temperature range -50 to 500°C
- Class B, A and 1/3DIN available in accordance with IEC 60751



(mm)	Length (mm)	Class	Quantity	Part Number
2	5	B	1	XE-4400-001
2	5	B	5	XE-4400-005
2	10	B	1	XE-4403-001
2	2.3	B	1	XE-4406-001
1.2	4	B	1	XE-4409-001
1.2	1.6	B	1	XE-4410-001
1	3	B	1	XE-4416-001
2	5	A	1	XE-4430-001
2	10	A	1	XE-4433-001
2	2.3	A	1	XE-4436-001
1.2	4	A	1	XE-4439-001
1.2	1.6	A	1	XE-4440-001
1	3	A	1	XE-4446-001
2	5	1/3 DIN	1	XE-4460-001
2	10	1/3 DIN	1	XE-4463-001
2	2.3	1/3 DIN	1	XE-4466-001

500 Ohm Flat Film Detectors

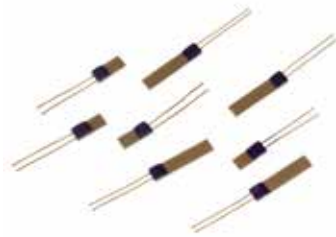
- Pt500 to IEC751
- Thin film construction
- Resists vibration & shock
- Temperature range -50 to 500°C
- Class B or A available in accordance with IEC 60751



Width (mm)	Length (mm)	Class	Part Number
2	5	B	XE-4600-001
2	10	B	XE-4603-001
2	5	A	XE-4630-001
2	10	A	XE-4633-001

1000 Ohm Flat Film Detectors

- Pt1000 to IEC751
- Thin film construction
- Resists vibration & shock
- Temperature range -50 to 500°C
- Class B, A and 1/3DIN available in accordance with IEC60751



Width (mm)	Length (mm)	Class	Part Number
2	10	B	XE-4503-001
1.25	1.7	B	XE-4514-001
1	3	B	XE-4516-001
2	10	A	XE-4533-001
2	10	1/3 DIN	XE-4563-001

Platinum Resistance Thermometer Detectors

PCB Flat Film Detectors (100 Ohm)



- PCB Mounting with solder pads
- Pt100 to IEC751
- Thin film construction
- Resists vibration & shock
- Temperature range -50 to 150°C

Width (mm)	Length (mm)	Class	Part Number
1.6	3.2	B	XE-4480-001

Pt100 Wire Wound Detectors

100 Ohm Wire Wound Detectors



- Pt100 Single Element
- Wirewound construction for optimum performance and stability
- Temperature range -200 to 650°C
- Class B or A to IEC 60751
- 1/10DIN relative to IEC 60751 (1/10 of Class B)

Width (mm)	Length (mm)	Class	Part Number
0.9	15	B	XE-4705-001
1.5	8	B	XE-4708-001
1.5	15	B	XE-4710-001
1.5	25	B	XE-4712-001
2.8	15	B	XE-4716-001
2.8	25	B	XE-4717-001
0.9	15	A	XE-4735-001
1.5	8	A	XE-4738-001
1.5	15	A	XE-4740-001
1.5	25	A	XE-4742-001
2.8	15	A	XE-4746-001
2.8	25	A	XE-4747-001
0.9	15	1/10 DIN	XE-4785-001
1.5	8	1/10 DIN	XE-4788-001
1.5	15	1/10 DIN	XE-4790-001
1.5	25	1/10 DIN	XE-4792-001
2.8	15	1/10 DIN	XE-4796-001
2.8	25	1/10 DIN	XE-4797-001

100 Ohm Dual Element Wire Wound Detectors



- Dual element Pt100
- Wirewound construction for optimum performance and stability
- Temperature range -200 to 650°C
- Class B or A to IEC 60751
- 1/10DIN relative to IEC 60751 (1/10 of Class B)

Dia. (mm)	Length (mm)	Class	Part Number
1.5	15	B Duplex	XE-4810-001
2.8	25	B Duplex	XE-4817-001
1.5	15	A Duplex	XE-4840-001
2.8	15	A Duplex	XE-4846-001
2.8	25	A Duplex	XE-4847-001

SuperFast Thermapen for Food Temperature Checking



Blue – Raw Fish



Green – Salad/fruit products



Red – Raw Meat



White – Bakery/dairy products

- Large, bright display
- Reaches temperature in just four seconds
- Over 50 % faster response than traditional probes
- Temperature range of -49.9 to 299.9°C
- Accuracy $\pm 0.4^\circ\text{C}$
- Supplied with traceable certificate of calibration
- Foldaway probe for safe storage
- Water resistant case

The SuperFast Thermapen thermometer incorporates a large digital display with a precise read-out of temperature over the range of -49.9 to 299.9°C with a 0.1°C resolution and an accuracy of $\pm 0.4^\circ\text{C}$.

The Thermapen incorporates a reduced tip, stainless steel, food penetration probe $\varnothing 3.3 \times 115$ mm, that conveniently folds back through 180 degrees into the side of the instrument when not in use.

The casing is washable and includes 'Biomaster' additive that reduces bacterial growth and the ergonomic rubber seal minimises the risk of the ingress of water, dust or food.

Specification

- Range: -49.9 to 299.9°C
- Resolution: 0.1 °C or 1 °C - user selectable
- Accuracy: $\pm 0.4^\circ\text{C}$ (-49.9 to 199.9°C) otherwise $\pm 1^\circ\text{C}$
- Battery: 2 x 3 volt CR2032 lithium coin cell
- Battery life: 1500 hours
- Sensor: type K thermocouple
- Display: 14.3 mm LCD
- Dimensions: 19 x 47 x 153 mm
- Weight: 97 g

Description	Part Number
Superfast Thermapen - White	XE-3950-001
Superfast Thermapen - Red	XE-3951-001
Superfast Thermapen - Blue	XE-3952-001
Superfast Thermapen - Black	XE-3953-001
Superfast Thermapen - Green	XE-3954-001
Silicone Boot	XE-3960-001
Silicone Boot, Glow In The Dark	XE-3961-001
Thermapen Wallet	XE-3962-001
Zip Pouch	XE-3963-001
Wall Bracket	XE-3964-001

ThermoPop® Thermometer in vivid colours



The ThermoPop is a pocket-sized, waterproof (IP66) thermometer which incorporates a fast response $\varnothing 3 \times 114$ mm stainless steel penetration probe with reduced tip.

The unit incorporates a unique (patent pending) 360° rotating display. Simply push a button to rotate the display in 90° increments, enabling the user to read the temperature in any position ie. left hand, right hand, vertical or horizontal.

The ThermoPop indicates temperature over the range of -50 to 300°C with a 1°C/°F resolution. Each unit is supplied with a probe cover with integral pocket clip.

Features

- Case material: ABS plastic
- Display type: LCD with backlight
- Probe/sensor style: integral probe
- Power source: battery powered
- Power saving: auto-off
- Measurement scale: Celsius/Fahrenheit
- Recommended use: commercial & domestic

Specification

- Range: -50 to 300°C
- Resolution: 1 °C / °F (switchable)
- Accuracy: $\pm 1^\circ\text{C}$ (-20 to 120°C)
- Battery: 3 volt CR2032
- Battery life: 5000 hours
- Display: 9mm LCD
- Dimensions: 20 x 45 x 178 mm
- Weight: 30 g

Description	Colour	Part Number
ThermoPop Thermometer	White	XE-3945-001
ThermoPop Thermometer	Yellow	XE-3946-001
ThermoPop Thermometer	Green	XE-3947-001
ThermoPop Thermometer	Red	XE-3948-001
ThermoPop Thermometer	Blue	XE-3949-001

A full range of miniature & standard thermocouple connectors and accessories are also manufactured and stocked in the Bognor Regis plant.





Temperature Calibration UKAS

Our associated temperature laboratory provides a comprehensive resource for thermal and electronic calibrations of thermocouple and PRT probes and instruments over the range -50 to 1200 °C.

Probes, dry-block calibrators and digital thermometers can be calibrated individually or in combination as required and UKAS certification is provided.

Calibration uncertainties are applicable to all components under test and these are indicated on a printout provided with the UKAS certificate.

Calibration can also be carried out to certain other national standards; contact our sales department for more information.

ITS-90 The International Temperature Scale of 1990

The basis of all temperature measurement and calibration is the ITS-90 standard which approximates the true thermodynamic scale by specifying various fixed temperature points along the scale. These include the triple point of water and various melting points defined by the Laws of Physics and are universally repeatable.

The Labfacility Temperature Handbook

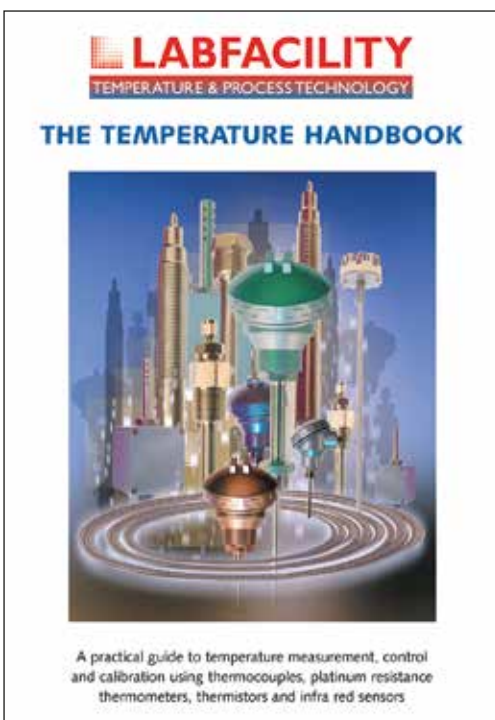
The Labfacility Temperature Handbook is a comprehensive text for users of thermocouples, PRTs and thermistors and associated instrumentation. Detailed enough for engineers it is also suitable for technicians and students. Written with a practical bias, the handbook contains considerable reference data and basic theory and is therefore of great value as a training aid for those entering the field of temperature measurement and control.

The current revised thermocouple and Pt100 tables based on ITS90 are featured and the new IEC colour codes for thermocouple insulations are included in full colour in addition to the former ANSI, DIN and BS codes.

The handbook includes detailed temperature sensor selection guidance, sensor theory and practice and comprehensive applications guidance. Practical aspects treated in depth include thermocouple installation and application, alternative thermocouple types and construction, accuracy and response and interconnection configurations; thermistors; sheath materials and thermowells for the different sensors and temperature calibration.

Additional chapters describe temperature control, transmitters and instrumentation. The 40 page reference section carries comprehensive data on thermocouple and platinum resistance thermometry, thermocouple and PRT tables, general thermometry data and other reference information including °C/°F conversion tables, fixed points and specification standards.

An installation problem solving guide, comprehensive 9 page glossary of terms and “Frequently Asked Questions” add to the practical value of the text for laboratory and industrial users. The book is available now directly from Labfacility or as a download from www.labfacility.com





Probe Installation Fittings

Labfacility manufactures a wide range of components and fittings for sensor installation. These include pot seals for mineral insulated thermocouples, bayonet caps and adaptors and closed end protection tubes. Additional components include compression glands, melt bolts, thermowells and a wide range of terminal heads.

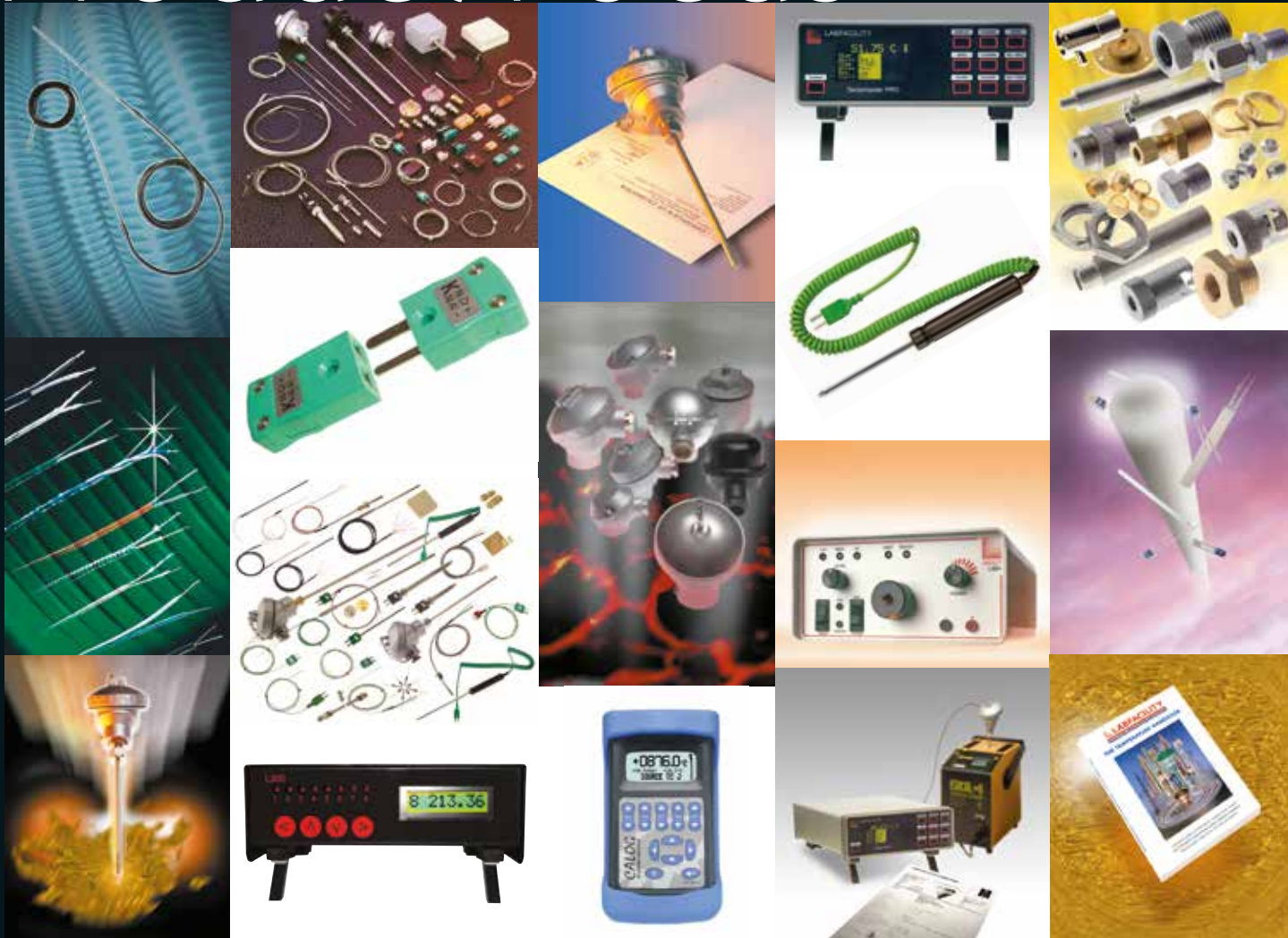
- Compression fittings in brass & stainless steel
- Olives & locknuts in brass & stainless steel
- Plugs, nipples and reducers in brass & stainless steel
- Bayonet caps, Adaptors & flanges in brass & stainless steel
- Pot seals, stainless steel, plain & threaded
- Thermopockets & swaged tips
- Connector inserts
- Nozzles & nozzle tips
- Running (captive) nuts
- PTFE ferrules (olives)
- Melt bolts
- Collars



Manufactured and stocked in the Bognor Regis Division for immediate despatch.



Product Focus



Europe's largest Range of Temperature Sensors

- Industrial & laboratory thermocouple & PRT probes in configurations to suit any application, ranges from -200°C to 1700°C
- Custom design versions available
- Transmitter-in-head options
- Pt100 elements & thermistors
- Probe fittings & accessories
- Hand held probes

The Best in Thermocouple Connectors

- Full range of thermocouple connectors – high quality plugs and sockets in IEC 584, ANSI, JIS, and other versions
- Comprehensive range of fittings and accessories including mounting panels

Wide Range of High Quality Thermocouple & PRT Cables

- Extension and compensating cables – a wide range of insulation types and configurations in IEC 584 and BS 1843 colours including PFA, PTFE, PVC and fibreglass

Market Leading Temperature & Process Instrumentation

- Precision digital thermometers
- Multi function digital thermometers
- Calibrators
- Multi-way switches
- Transmitters
- Controllers & Indicators
- Loggers and Scanners
- Digital test Meters

Equipment & Component Parts For Sensor Manufacturers

- Compact thermocouple welder and microwelder
- MI cables, stainless steel sheaths, pots and fittings
- Terminal heads & blocks

Versatile Dry Block Calibrators

- Accurate, stable portable calibrators for -10°C to 1200°C to suit industrial & scientific temperature sensors

And our indispensable Temperature Handbook...

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 TEMPERATURE & PROCESS TECHNOLOGY

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COLOUR CODES: THERMOCOUPLE CONNECTORS, EXTENSION AND COMPENSATING WIRES AND CABLES

INSULATION COLOUR CODES Extension & Compensating Leads

TYPE	CONDUCTORS +/-	FORMER STANDARD				IEC 60584-3(2007) BS EN60584-3(2008)	CABLE CODE
		BRITISH BS1843: 1952	AMERICAN ANSI/MC 96.1	GERMAN DIN 43713 / 43714	JAPANESE JIS C 1610		
EX	NICKEL CHROMIUM/CONSTANTAN (Nickel Chromium/Copper Nickel, Chromel/Constantan, T1/Advance, NiCr/Constantan)						EX
J	IRON*/CONSTANTAN (Iron/Copper Nickel, Fe/Konst Iron/Advance, Fe/Constantan I/C)						JX
K	NICKEL CHROMIUM/NICKEL ALUMINIUM* (NC/NA, Chromel/ Alumel, C/A, T1/T2, NiCr/Ni, NiCr/ NiAL)						KX
N	NICROSIL/NISIL						NX NC
T	COPPER/CONSTANTAN (Copper/Copper Nickel, Cu/Con, Copper/Advance)						TX
Vx	COPPER/CONSTANTAN (LOW NICKEL) (Cu/Constantan) Compensating for K (Cu/Constantan)						KCB
U	COPPER/COPPER NICKEL Compensating for Platinum 10% or 13% Rhodium/Platinum (Codes S& R respectively) (Copper/Cupronic Cu/CuNi, Copper/No. 11 Alloy)						RCA SCA
* Magnetic, () Alternative & Trade Name		FOR THERMOCOUPLE CONNECTORS body colours are similar to outer sheath colours				FOR THERMOCOUPLE CONNECTORS body colours are similar to outer sheath colours	

The British Standard Colour Code for Thermocouple Cables, BS1843: 1952 is superseded by BS4937 PART 30 1993 (=IEC 584-3 1989) Additional identification as to whether a thermocouple cable type is extension or compensating is indicated in the example which follows; however, please note that a letter A or B after the C for Compensating refers to the Cable Temperature Range in accordance with the table of Tolerance Values set out with this standard.
K - X - 1 = K EXTENSION CLASS 1 K - CA - 2 = K COMPENSATION CLASS 2

All technical information published in this brochure is for guidance and not necessarily definitive. All dimensions stated are nominal. Product availability & specifications may be subject to change. E & OE

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