

- Types E, J, K, N, T, U and Vx
- Wide range of insulations & configurations
- Colour coded to IEC 584-3
- Alternative colours to BS1843, ANSI, DIN, JIS available
- Large stockholding

EXTENSION v COMPENSATING CABLE

Extension cable is designated X (e.g. KX for type K); compensating cable has a C designation (e.g. KC for Vx, type K) and consists of Vx and U types. Extension cable has a temperature vs e.m.f. relationship to an appropriate standard over the complete temperature range. It can, therefore, be used for producing a thermocouple junction and for joining thermocouples to their measuring instruments. It is limited in temperature only by the rating of its insulation.

Compensating cable is of different composition to extension cable but has a similar temperature v e.m.f. relationship over a limited range, and **should only be used for joining thermocouples to their measuring instruments.** It can only be used in limited ambient temperature, generally not higher than 80°C.

SELECTING YOUR CABLES

Guide to Cable Insulation and Coverings

Which insulation Material?	usable temperature range	Application Notes
PVC	-10°C to 105°C	Good general purpose insulation for "light" environments. Waterproof and very flexible.
PFA (extruded)	-75°C to 250°C	Resistant to oils, acids other adverse agents and fluids. Good mechanical strength and flexibility. PTFE better for steam/elevated pressure environments
PTFE (taped & wrapped)	-75°C to 250/300°C	Resistant to oils, acids other adverse agents and fluids. Good mechanical strength and flexibility.
Glassfibre (varnished)	-60°C to 350/400°C	Good temperature range but will not prevent ingress of fluids. Fairly flexible but does not provide good mechanical protection.
High temperature glass fibre	-60°C to 700°C	Will withstand temperature up to 700°C but will not prevent ingress of fluids. Fairly flexible, not good protection against physical disturbance.
Ceramic Fibre	0 to 1000°C	Will withstand high temperature, up to 1000°C. Will not protect against fluids or physical disturbance.
Glassfibre (varnished) stainless steel overbraid	-60°C to 350/400°C	Good resistance to physical disturbance and high temperature (up to 400°C). Will not prevent ingress of fluids.

Screened or unscreened?

With long cable runs, the cable may need to be screened and earthed at one end (at the instrument) to minimise noise pick-up (interference) on the measuring circuit. Alternative types of screened cable construction are available and these include the use of copper or mylar screening. Twisted pair configurations are offered and these can incorporate screening as required.

Single or multi-strand?

The choice is mainly determined by the application (e.g. termination considerations and internal diameter of associated sheath). Generally, single strand wires are used for hot junctions, and multi-strand or thicker single strand for extensions of the thermocouple. The greater the effective conductor diameter, the lower the value of thermocouple loop resistance, an important consideration with long cable runs.

All the above information is detailed in the Labfacility Temperature Handbook, available on request via our website.

PVC INSULATED, FLAT PAIR

Types J,K,T,N,Vx,E & U



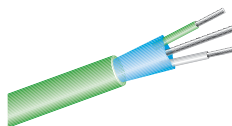
- Single pair of solid or stranded conductors
- PVC insulated
- Laid flat side by side & PVC sheathed
- Tolerance class 2
- Insulation Rating -10°C to 105°C
- IEC colour coded

T/C Type	Size (mm)	IEC PART No.
Type J	7/0.2	WJ-200
Type J	13/0.2	-
Type K	7/0.2	WK-150
Type K	13/0.2	WK-151
Type K	23/0.2	WK-152
Type T	7/0.2	WT-200
Type T	13/0.2	WT-201
Type T	23/0.2	-
Type N	7/0.2	WN-100
Type N	13/0.2	-
Type N	23/0.2	-
Type Vx	7/0.2	WV-100
Type Vx	13/0.2	WV-101
Type Vx	23/0.2	WV-103
Type U	7/0.2	WU-099
Type U	13/0.2	WU-100

Lengths of 10, 25, 50 & 100m

PVC INSULATED, MYLAR SCREENED

Types J,K,T,N & Vx



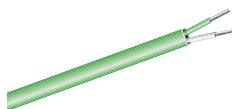
- Single pair of stranded conductors
- PVC insulated
- Screened with Mylar Tape and bare copper drain wire
- Overall PVC sheath
- Tolerance class 2
- Insulation Rating -10°C to 105°C
- IEC Colour coded

T/C Type	Size (mm)	IEC PART No.
Type J	7/0.2	WJ-241
Type K	7/0.2	WK-359
Type T	7/0.2	WT-202
Type N	7/0.2	WN-160
Type Vx	7/0.2	WV-102

Lengths of 10, 25, 50 & 100m

PFA/PTFE INSULATED, FLAT PAIR

Types J,K,T & N



- Single pair of solid or stranded conductors
- PFA or PTFE insulated
- Laid flat side by side
- PFA or PTFE Overall sheathed
- Tolerance Class 1
- Insulation Rating -75°C to 260°C
- IEC Colour coded

PTFE

T/C Type	Size (mm)	IEC PART No.
Type J	7/0.2	WJ-260
Type K	1/0.315	WK-300
Type K	7/0.2	WK-302
Type T	1/0.315	WT-328
Type T	1/0.508	WT-145
Type T	7/0.2	WT-330

Lengths of 25 & 100m

PFA

T/C Type	Size (mm)	IEC PART No.
Type J	7/0.2	WJ-248
Type K	7/0.2	XS-751
Type T	7/0.2	WT-305
Type N	7/0.2	WN-121

Lengths of 25 & 100m