

Overall Shield PVC Insulated Multi pair THERMOCOUPLE EXTENSION CABLES



In an industrial environment of induced voltage and electrical noise, PVC Insulated twisted overall shielded thermocouple pairs is an ideal selection. Twisted pairs & aluminum Mylar shield provides protection against cross talk, static & magnetic noise in thermocouple circuits.

APPLICATIONS	PRODUCT FEATURES
<ul style="list-style-type: none"> • <i>Utilities & Industrial Plants</i> • <i>Construction of New plants</i> • <i>Petrochemicals & Oil Refineries</i> • <i>Testing Rig Set Up</i> • <i>Thermocouple Circuits</i> 	<ul style="list-style-type: none"> • <i>Temp. Range: 90 °C & Rated 300 V</i> • <i>Flame Retardant</i> • <i>Moisture, Chemical & Solvent Resistant</i> • <i>Excellent Die Electric Strength</i> • <i>100% shield contact for noise reduction</i>

PRODUCT SPECIFICATIONS

Conductor	<i>Solid or stranded thermocouple extension grade wires from 12 AWG to 22 AWG (2.44mm to 0.63mm) as per ASTM E 230 & ANSI 96.1</i>
Core Insulation	<i>Flame Retardant PVC with nominal thickness of 0.40mm</i>
No. of Pair	<i>2, 4, 6, 8, 16, 20, 24, 36 and more</i>
Communication Wire	<i>22 AWG – 7 strands Tinned Copper wire Orange color PVC Insulated (4 Pair & larger)</i>
Pair Laying	<i>Shielded Pairs with communication wire are laid suitably and binded with polyester tape</i>
Cable Shield	<i>0.05 mm Aluminum Mylar /polyester tape, 25% overlap</i>
Drain Wire	<i>22 AWG - 7 strands of Annealed Tinned Copper Wire.</i>
Outer Sheath	<i>Flame Retardant PVC</i>
Color Coding	<i>Confirms to ANSI MC 96.1 (International Color Code Available)</i>

- *PVC, HR PVC, FRLS, LSOH, LSZH, HPER etc. Insulation & Outer Jacket as per clients specifications*
- *Optional Color coding: IEC 60584 – 3, BS 1843, DIN 13711, JIS C 1610 – 1981, NFC 42334 as per requirement*

ELECTRICAL CHARACTERISTICS

IR @ 20°C, 500V, C/C	<i>> 100 mΩ/Km</i>
IR @ 20°C, 500V, C/S	<i>> 50 mΩ/Km</i>
HV - Test, C/C	<i>1.2 Kv, 1.0 Min.</i>
HV - Test, C/S	<i>1. Kv, 1.0 Min.</i>



ELTEC CABLES & INSTRUMENTS

16, Bhaktinagar Station Plot, Rajkot-360 002. INDIA.

Tel. : +91 281 2480400 URL : www.thermocouplewire.co.in

E-mail : eltecinc@gmail.com | sales@thermocouplewire.co.in



EMPOWERING PROCESS MANAGEMENT



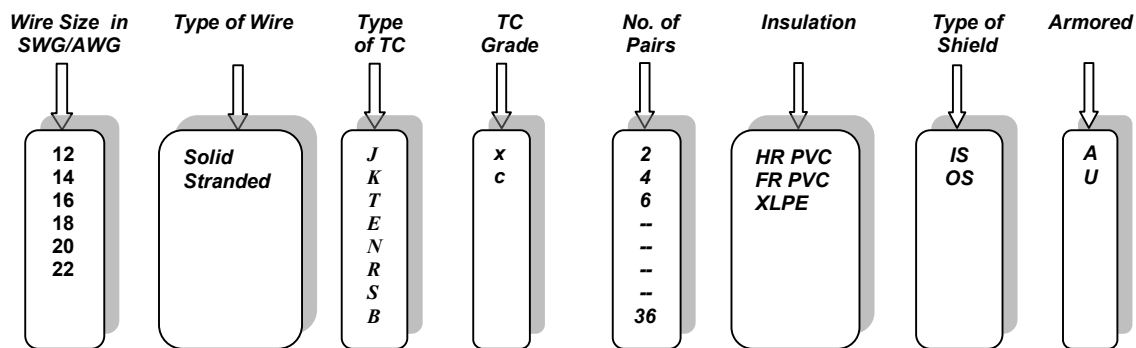
TYPE OF TC	Metal Alloy +ve leg	Metal Alloy -ve leg	Measuring Temp. Range	Thermal Tolerance
J	Fe	Cu Ni	0 °C to 750 °C	Standard Tolerance as per ASTM E 230 - ANSI MC 96.1
K	Ni Cr	Ni Al	0 °C to 1000 °C	Standard Tolerance as per ASTM E 230 - ANSI MC 96.1
T	Cu	Cu Ni	0 °C to 350 °C	Standard Tolerance as per ASTM E 230 - ANSI MC 96.1
E	Ni Cr	Cu Ni	0 °C to 800 °C	Standard Tolerance as per ASTM E 230 - ANSI MC 96.1
N	Ni Cr Si	Ni Si	0 °C to 1000 °C	Standard Tolerance as per ASTM E 230 - ANSI MC 96.1
R or S	Cu	Cu Ni	0 °C to 1600 °C	N.A.
B	Cu	Cu	600 °C to 1700 °C	N.A. Only for Transition above 100 °C

- Initial Calibration tolerance as per IEC 584 & ANSI MC 96.1 up to 200 °C
- Thermocouple wires are normally supplied to meet tolerance above 0 °C. If material is reqd. to meet tolerance below 0 °C, the purchaser should clarify the same in Purchase Order. Special selection of material is reqd.
- Copper & Copper Nickel alloys can be used for R & S Type Extension Wire.
- Copper Vs Copper can be used for B Type Extension Wire for transition below 100 °C

Initial Calibration Tolerances as per ASTM E230 and ANSI MC96.1 for EXTENSION GRADE WIRES
Tolerance-Reference Junction 0 °C (32°F)

Thermocouple Designation	Temperature Range °C (°F)	Standard Grade Limits °C (°F) whichever is greater	Special Grade Limits °C (°F) Whichever is greater
Jx	0 (32) to 200 (400)	±2.2 (4.0)	-----
Kx or Kc	0 (32) to 200 (400)	±2.2 (4.0)	-----
Tx	0 (32) to 100 (212)	±1.0 (1.8)	-----
Nx or Nc	0 (32) to 200 (400)	±2.2 (4.0)	-----
Ex	0 (32) to 200 (400)	±1.7 (3.1)	-----
Sc or Rc	0 (32) to 200 (400)	±5.0 (9.0)	-----
Bc	0 (32) to 100 (212)	±4.2 (7.6)	-----

ORDERING CODE:



Example: 16 AWG SOLID Kx 4P FR PVC OS U - 16 AWG SOLID K TYPE EXTENSION GRADE FR PVC INSULATED & SHEATHED INDIVIDUAL & OVER ALL SHIELD UNARMORD THERMOCOUPLE CABLE



ELTEC CABLES & INSTRUMENTS

16, Bhaktinagar Station Plot, Rajkot-360 002. INDIA.

Tel. : +91 281 2480400 URL : www.thermocouplewire.co.in

E-mail : eltecin@gmail.com | sales@thermocouplewire.co.in