



HEAVY CERAMIC FIBER Insulated Thermocouple Wire Max. Temp. up to 1000 °C



CERAMIC FIBER INSULATION is ideal for EXTREME TEMPERATURE APPLICATION. Ceramic Fiber is braided on thermocouple conductors. It gives better flexibility even at elevated temperature and superior resistance to abrasion.

APPLICATIONS	PRODUCT FEATURES
Metal Production	Continuous use up to 1000 °C
Furnaces & Ovens	Single exposure up to 1250 °C
Braided Thermocouple Replacement	Good Thermal Durability & Strength
Heat Treatment	Flame Retardant
Brick And Tile kiln	Superior Abrasion Resistance
Steel & Aluminum	Better flexibility

PRODUCT SPECIFICTIONS:		
Conductor	Solid or stranded thermocouple grade wires from 12 AWG to 24 AWG (2.44mm to 0.52mm)	
Core Insulation	Braided Ceramic Fiber	
Construction	Parallel Conductors	
No. of Pair	1	
Outer Sheath	Braided Ceramic Fiber	
SS JACKET	Outside SS Metal braid	
Color Coding	Supplied white without tracers	

- Optional High Temperature Impregnation
- Other sizes in SWG and also different construction in other stranded sizes are available on request
- Optional construction of twisted conductors.
- Duplex construction are also available
- Optional color tracers for positive & negative polarity

TYPE OF TC	Metal Alloy + ve leg	Metal Alloy - ve leg	Thermal Tolerance
К	Ni Cr	Ni Al	ASTM E 230 – ANSI MC 96.1 & IEC EN 60584-2
E	Ni Cr	Cu Ni	ASTM E 230 – ANSI MC 96.1 & IEC EN 60584 - 2
N	Ni Cr Si	Ni Si	ASTM E 230 – ANSI MC 96.1 & IEC EN 60584 - 2

- 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.
- Initial calibration & Tolerance suggested, its requirement should be discussed well in advance before placing the order.



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TYPE OF CABLE	Wire Size AWG	Type of Wire	Туре К	Type N	Type E
Individual Core &	7 * 32	Stranded	Kt-7*32 CC	Nt-7*32CC	Et-7*32CC
Overall Jacket of BRAIDED	24	Solid	Kt-24 CC		
CERAMIC FIBER	22	Solid	Kt-22 CC		
	20	Solid	Kt-20 CC		
	18	Solid	Kt-18 CC		
	16	Solid	Kt-16 CC		
	14	Solid	Kt-14 CC		
	12	Solid	Kt-12 CC		
Individual Core & Overall Jacket of BRAIDED	7 * 32	Stranded	Kt-7*32 CCS	Nt-7*36CCS	Et-7*36CCS
	24	Solid	Kt-24 CCS		
CERAMIC FIBER	22	Solid	Kt-22 CC S		
with Outside SS Metal Over Braid	20	Solid	Kt-20 CCS		
	18	Solid	Kt-18 CCS		
	16	Solid	Kt-16 CCS		
	14	Solid	Kt-14 CCS		
	12	Solid	Kt-12 CCS		

- CC INSULATION & JACKET OF CERAMIC FIBER BRAID
 CCS INSULATION & JACKET OF CERAMIC FIBER BRAID with Outside SS METAL BRAID
- Duplex construction are suffix with D i.e. KtD ____

Initial Calibration Tolerances as per ASTM E230 and ANSI MC96.1

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
Thermocouple Grad	de Wires		
J	0 (32) to 750 (1382)	±2.2 (4.0) or ±0.75%	±1.1 (2.0) or 0.4%
К	0 (32) to 1250 (2282) -200 (-328) to 0 (32)	±2.2 (4.0) or ±0.75% ±2.2 (4.0) or ±2%	±1.1 (2.0) or 0.4%
Т	0 (32) to 350 (662) -200 (-328) to 0 (32)	±1.0 (1.8) or ±0.75% ±1.0 (1.8) or ±1.5%	±0.5 (1.0) or 0.4%
E	0 (32) to 900 (1652) -200 (-328) to 0 (32)	±1.7 (3.0) or ±0.5% ±1.7 (3.0) or ±1%	±1.0 (1.8) or 0.4%
N	0 (32) to 1300 (2372) -270(-454) to 0 (32)	±2.2 (4.0) or ±0.75% ±2.2 (4.0) or ±2%	±1.1 (2.0) or 0.4%



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