

INSULATED THERMOCOUPLE WIRE



● These are the thermocouple wires insulated with some kinds of insulation materials such as vinyl, teflon, glass wool, polyester, and so on. We have a variety of insulated thermocouples in our stock.

● The unit is 100 m.

● In JIS standard, + pole is insulated with red and - pole is insulated with white.

● Outer insulation's colors are the same as the colors of compensation wires in JIS.

● In case of ASTM standard, the colors indicating types of thermocouples is used for + pole insulations, and red color is used for - pole insulations.



● Please refer to Standards' colors guide

Types of Measuring Junctions







Exposed Type (Code: E)	Mold Type (Code: M)	Sheet Couple Type (Code: S)
<p>Measuring Junction</p>	<p>Molded Measuring Junction</p>	<p>Insulation Film Soldering</p>
<p>This is the most popular type of Insulated Thermocouples.</p>	<p>This model is applied for chemical-solution and erosion environment.</p>	<p>This type has excellent performance for measuring surface temperature on pipes and temperature in narrow space.</p>

SPECIFICATION

Type of insulation	Applicable Temp.	Type of T/C	Color of Insulation	Code	Apperance	Wire O/D (mm)	Insulation O/D (mm)
Vinyl	-20~+90°C	K	Blue	TC-K-G		0.1	1×1.5
		J	Yellow	TC-J-G		0.2	1.2×1.8
		E	Purple	TC-E-G		0.32	2×3
		T	Brown	TC-T-G		0.65	3×4.2
GlassWool	+20~+200°C	K	Blue	TC-K-H		0.1	1.2×1.8
		J	Yellow	TC-J-H		0.2	1.2×1.8
		E	Purple	TC-E-H		0.32	1.2×1.8
		T	Brown	TC-T-H		0.65	1.5×2.3
Teflon	-200~+200°C	K	Blue	TC-K-F		0.1	0.7×1.2
		J	Yellow	TC-J-F		0.2	1.0×1.5
		E	Purple	TC-E-F		0.32	1.2×1.8

		T	Brown	TC-T-F		0.65	1.2×2.5
Glass Wool Outer shield	+20~+200°C	K		TC-K-HSOS		7/0.32	2.9×4.6
		J		TC-J-HSOS			
Polyester	-20~+120°C	K		TC-K-P		0.1	0.11
		T		TC-T-P		0.2	0.21
							0.32

ASTM Standard Insulated Thermocouple

Type of insulation	Normal Applicable Temp (°C)		Type of T/C	Color of Insulation	記号	Code	Wire O/D (mm)	Insulation O.D (mm)
	Wire	Insulation						
Glass Wool	500	480	K	Brown/ Yellow	TC-K-HA		0.32	1.0×1.8
	600						0.5	1.2×1.8
	700						0.8	1.3×2.2
High Temp Glass Wool	600	700	K	Brown	TC-K-HH		0.5	2.1×3.6
Silica Fiber	900	870	N	White	TC-N-SF		0.8	2.5×3.9
	700		K		TC-K-SF			
Ceramic Fiber	900	1200	N	White	TC-N-CF		0.8	2.5×3.9
	700		K		TC-K-CF			
Kapton	600	300	K	Brown	TC-K-KP		0.5	1.1
Cotton	300	90	J	Black	TC-J-CO		0.25	1.8

Note: In ASTM standard, the inner insulations' colors are opposite to JIS standard; red is for - pole.

UL Certified Insulated Thermocouple (UL FILE No116321)

The insulated thermocouples are passed UL tests and certified by the standard. The insulation colors are the ASTM standard colors.

SPECIFICATION: Type of insulation: Teflon temperature resistibility: 204°C

Code	Insulation Color (Outer/ Inner)	Wire Diameter	Insulation O/D	Resistance Value (Ω/m)
J20-1-507-UL	Black/	0.8	3.7×5.2	1.2
	+pole: Black			
	- pole: Red			
K20-1-507-UL	Yellow/	0.8	3.7×5.2	1.2
	+ pole: Yellow			
	- pole: Red			
T20-1-507-UL	Brow/	0.8	3.7×5.2	1
	+ pole: Brown			
	- pole: Red			
E20-1-507-UL	Purple/	0.8	3.7×5.2	2.4
	+ pole: Purple			
	- pole: Red			