

	United States Color Codes ANSI MC96.1 1982		IEC 60584-3 Color Coding		Redundant national color coding for insulation of thermocouple cables			
	Thermocouple Grade	Extension Grade	Thermocouple Grade	Intrinsically Safe	British to BS1843	German to DIN 13711	French to NFC 42324	Japanese to JIS C 1610-1981
Type K Thermocouple	KK 	KX 						
Type T Thermocouple	TT 	TX 						
Type J Thermocouple	JJ 	JX 						
Type N Thermocouple	NN 	NX 						
Type E Thermocouple	EE 	EX 						
Type S Thermocouple	None Established	SX 						
Type R Thermocouple	None Established	RX 						
Type B Thermocouple	None Established	BX 						

Thermocouple Type	Alloy Combination	Operating Range	Class 1 Tolerance	Class 2 Tolerance
K	+ve Nickel Chromium (NiCr) -ve Nickel Aluminium (NiAl) (also called Chromel/Alumel)	0 to 1100°C Continuous -180 to 1300°C Intermittent	±1.5°C in range -40 to 375°C 0.004. t in range 375 to 1000°C	±2.5°C in range -40 to 333°C 0.0075. t in range 333 to 1200°C
J	+ve Iron (Fe) -ve Constantan (CuNi)	0 to 750°C Continuous -180 to 800°C Intermittent	±1.5°C in range -40 to 375°C 0.004. t in range 375 to 750°C	±2.5°C in range -40 to 333°C 0.0075. t in range 333 to 750°C
T	+ve Copper (Cu) -ve Constantan (CuNi)	-185 to 300°C Continuous -250 to 400°C Intermittent	±0.5°C in range -40 to 125°C 0.004. t in range 125 to 350°C	±1.0°C in range -40 to 133°C 0.0075. t in range 133 to 350°C
N	+ve Nicrosil -ve Nisil	0 to 1100°C Continuous -270 to 1300°C Intermittent	±1.5°C in range -40 to 375°C 0.004. t in range 375 to 1000°C	±2.5°C in range -40 to 333°C 0.0075. t in range 333 to 1200°C
E	+ve Nickel Chromium (NiCr) -ve Constantan	0 to 800°C Continuous -40 to 900°C Intermittent	±1.5°C in range -40 to 375°C 0.004. t in range 375 to 800°C	±2.5°C in range -40 to 333°C 0.0075. t in range 333 to 900°C
KCA/KCB Compensating for Type K	+ve Nickel Chromium -ve Constantan	0 to 100°C (Measuring Junction to 900°C)	N/A	±2.5°C
RCA/SCA Compensating for Type R and S	+ve Copper -ve Copper Nickel	0 to 100°C (Measuring Junction to 1000°C)	N/A	RCA ±2.5°C RCB ±5.0°C