

# International Thermocouple Color Codes - Thermocouple and Extension Grade Wires



THERMO-COUPLE TYPE	U.S. & CANADIAN (ANSI/MC96.1, ANSI/ASTM E230)		International	International	Czech British	Netherlands German	Japanese	French		
	ALLOY COMBINATION	THERMOCOUPLE GRADE	EXTENSION GRADE	PLUG & JACK	IEC 584-3	IEC 584-3 Intrinsically Safe	BS 1843	DIN 43710	JIS C 1610	NFC 42-324
T	Copper	Brown Blue + Red -	+ Blue Blue - Red Red	Blue ●	Brown Brown + White -	Blue Brown + White -	Blue White + Blue -	Brown Red + Brown -	Brown Red + White -	Blue Yellow + Blue -
	Constantan (Copper-Nickel)									
J	Iron (magnetic)	Brown White + Red -	+ White Black - Red Red	Black ●	Black Black + White -	Blue Black + White -	Black Yellow + Blue -	Blue Red + Blue -	Yellow Red + White -	Black Yellow + Black -
	Constantan (Copper-Nickel)									
E	Nickel - Chromium	Brown Purple + Red -	+ Purple Purple - Red Red	Purple ●	Purple Purple + White -	Blue Purple + White -	Brown Brown + Blue -	Black Red + Black -	Purple Red + White -	Purple Yellow + Purple -
	Constantan (Copper-Nickel)									
K	Nickel - Chromium	Brown Yellow + Red -	+ Yellow Yellow - Red Red	Yellow ●	Green Green + White -	Blue Green + White -	Red Brown + Blue -	Green Red + Green -	Blue Red + White -	Yellow Yellow + Purple -
	Nickel - Aluminium (magnetic)									
N	Nicrosil (Nickel-Chromium-Silicon)	Brown Orange + Red -	+ Orange Orange - Red Red	Orange ●	Pink Pink + White -	Blue Pink + White -	Orange Orange + Blue -	No Standard (Use American Color Codes)	No Standard (Use American Color Codes)	No Standard (Use American Color Codes)
	Nisil (Nickel-Silicon-Magnesium)									
S	Platinum Rhodium -10%	None Established	+ Black Green - Red Red	Green ●	Orange Orange + White -	Blue Orange + White -	Green White + Blue -	White Red + White -	Black Red + White -	Green Yellow + Green -
	Platinum									
R	Platinum Rhodium -13%	None Established	+ Black Green - Red Red	Green ●	Orange Orange + White -	Blue Orange + White -	Green White + Blue -	White Red + White -	Black Red + White -	Green Yellow + Green -
	Platinum									
B	Platinum Rhodium - 30%	None Established	+ Gray Gray - Red Red	White (Uncompensated) ○	Gray Gray + White -		No Standard (Use Copper Wire)	Gray Red + Gray -	Gray Red + Gray -	No Standard (Use Copper Wire)
	Platinum Rhodium - 6%		(Compensated Cable)					(Compensated Cable)	(Compensated Cable)	
C	Tungsten Rhenium - 5%	None Established	+ Green Red - Red Red	Red ●				No Standard (Use American Color Codes)	No Standard (Use American Color Codes)	No Standard (Use American Color Codes)
	Tungsten Rhenium - 26%									