

Standard ANSI/ASTM and Non-ANSI/ASTM Thermocouple Color Codes

T/C Type	POS NEG	GENERIC and TRADE NAMES	MAGNETIC		INSULATION			PLUG & JACK
			YES	NO	SINGLE CONDUCTOR	OVERALL T/C WIRE	OVER ALL EXT. GRADE WIRE	
B	BP BN	Platinum 30% Rhodium Platinum 6% Rhodium		X X	Gray Red		Gray	White (Uncompensated)
C*	CP CN	Tungsten 5% Rhenium Tungsten 26% Rhenium		X X	White/Red Trace Red		White/Red Trace	Brown
E	EP EN	Chromel Constantan		X X	Purple Red	Brown	Purple	Purple
J	JP JN	Iron Constantan	X		White Red	Brown	Black	Black
K	KP KN	Chromel Alumel	X	X	Yellow Red	Brown	Yellow	Yellow
M*	MP MN	Nickel 18% Molybdenum Nickel 0.8% Carbon		X X	N/A N/A		Note 1	Yellow
N*	NP NN	Nicrosil Nisil		X X	Orange	Brown	Orange	Orange
P*	PP PN	Platinel 5355 Platinel 7674		X X	N/A N/A		Note 2	Yellow/Black
R	RP RN	Platinum 13% Rhodium Platinum		X X	Black Red		Green	Green
S	SP SN	Platinum 10% Rhodium Platinum		X X	Black Red		Green	Green
T	TP TN	Copper Constantan		X X	Blue Red	Brown	Blue	Blue

* Non-ANSI/ASTM Symbol

Note 1 — Use of Type K extension grade wire is practical for temperatures under 121 °C [250 °F]. For Temperatures over 121 °C [250 °F], Type M wire should be used for the entire length of the assembly.
Use of Type K connectors is standard practice.

Note 2 — Use of Type K extension grade wire is strongly discouraged. Platinel extension grade wire should be used for the entire length of the assembly.
Use of Type K connectors is standard practice.