








































Thermocouple Selection Guide

Thermocouple Extension Type	 ANSI	 BS	 DIN	 NFC	 JIS	 IEC
JX + IRON - CONSTANTAN®						
KX + CHROMEL® - ALUMEL®						
TX + COPPER - CONSTANTAN®						
EX + CHROMEL® - CONSTANTAN®						
NX + NICROSIL® - NISIL®			* SEE BELOW	* SEE BELOW	* SEE BELOW	
5X + COPPER - ALLOY II						

Calibration	Country Code	Color Code	Positive Wire	Magnetic Wire	Temperature Range	Accuracy
J	USA	Red & White	White	White	Thermocouple grade wire, -346 to 1,400F (-210 to 760C) Extension wire, 32 to 392F (0 to 200C)	Standard: +/- 2.2C or +/- .75% Special Limits of Error: +/- 1.1C or 0.4%
K	USA	Red & Yellow	Yellow	Red	Thermocouple grade wire, -454 to 2300F (-270 to 1260C) Extension wire, 32 to 392F (0 to 200C)	Standard: +/- 2.2C or +/- .75% Special Limits of Error: +/- 1.1C or 0.4%
J	Japan	Red & White	Red	Red		
K	Japan	Red & White	Red	White		

Calibration	Material	Temperature Rating	Accuracy
Type-T	Copper/ Constantan	Thermocouple grade wire, -454 to 700F (-270 to 370C) Extension wire, 32 to 392F (0 to 200C)	Standard: +/- 1.0C or +/- .75% Special Limits of Error: +/- 0.5C or 0.4%
Type-N	Nicrosil / Nisil	Thermocouple grade wire, -454 to 2300F (-270 to 392C) Extension wire, 32 to 392F (0 to 200C)	Standard: +/- 2.2C or +/- .75% Special Limits of Error: +/- 1.1C or 0.4%
Type-E	Nickel-Chromium/ Constantan	Thermocouple grade wire, -454 to 1600F (-270 to 870C) Extension wire, 32 to 392F (0 to 200C)	Standard: +/- 1.7C or +/- 0.5% Special Limits of Error: +/- 1.0C or 0.4%
Type-B	Platinum Rhodium -30% / Platinum Rhodium -6%	Thermocouple grade wire, 32 to 3100F (0 to 1700C) Extension wire, 32 to 212F (0 to 100C)	Standard: +/- 0.5% Special Limits of Error: +/- 0.25%
Type-R	Platinum Rhodium -13% / Platinum	Thermocouple grade wire, -58 to 2700F (-50 to 1480C) Extension wire, 32 to 392F (0 to 200C)	Standard: +/- 1.5C or +/- .25% Special Limits of Error: +/- 0.6C or 0.1%
Type-S	Platinum Rhodium - 10% / Platinum	Thermocouple grade wire, -58 to 2700F (-50 to 1480C) Extension wire, 32 to 392F (0 to 200C)	Standard: +/- 1.5C or +/- .25% Special Limits of Error: +/- 0.6C or 0.1%