






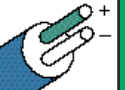






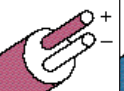






















ANSI and IEC Colour Codes[†] for Thermocouples, Wire and Connectors

All OMEGA[®] Thermocouple Wire, Probes and Connectors are available with either ANSI or IEC Colour Codes. In this Handbook, model numbers in the To Order tables reflect the IEC Colour-Coded Product. Please see omega.co.uk or contact sales for instructions on how to order ANSI Colour-Coded products.

Connectors			Connectors							
ANSI Code	ANSI MC 96.1 Colour Coding		Alloy Combination		Comments Environment Bare Wire	Maximum T/C Grade Temp Range	EMF (mV) Over Max Temp Range	IEC 584-3 Colour Coding		IEC Code
	Thermocouple Grade	Extension Grade	+ Lead	- Lead				Thermocouple Grade	Intrinsically Safe	
J			IRON Fe (magnetic)	CONSTANTAN COPPER- NICKEL Cu-Ni	Reducing, Vacuum, Inert. Limited Use in Oxidising at High Temperatures. Not Recommended for Low Temperatures.	-210 to 1200°C -346 to 2193°F	-8.095 to 69.553			J
K			CHROME [®] GA NICKEL- CHROMIUM Ni-Cr	ALOME [®] GA NICKEL- ALUMINIUM Ni-Al (magnetic)	Clean Oxidising and Inert. Limited Use in Vacuum or Reducing. Wide Temperature Range, Most Popular Calibration	-270 to 1372°C -454 to 2501°F	-6.458 to 54.886			K
T			COPPER Cu	CONSTANTAN COPPER- NICKEL Cu-Ni	Mild Oxidising, Reducing Vacuum or Inert. Good Where Moisture Is Present. Low Temperature & Cryogenic Applications	-270 to 400°C -454 to 752°F	-6.258 to 20.872			T
E			CHROME [®] GA NICKEL- CHROMIUM Ni-Cr	CONSTANTAN COPPER- NICKEL Cu-Ni	Oxidising or Inert. Limited Use in Vacuum or Reducing. Highest EMF Change Per Degree	-270 to 1000°C -454 to 1832°F	-9.835 to 76.373			E
N			OMEGA-P [®] NICROSIL Ni-Cr-Si	OMEGA-N [®] NISIL Ni-Si-Mg	Alternative to Type K. More Stable at High Temps	-270 to 1300°C -450 to 2372°F	-4.345 to 47.513			N
R	NONE ESTABLISHED		PLATINUM- 13% RHODIUM Pt-13% Rh	PLATINUM Pt	Oxidising or Inert. Do Not Insert in Metal Tubes. Beware of Contamination. High Temperature	-50 to 1768°C -58 to 3214°F	-0.226 to 21.101			R
S	NONE ESTABLISHED		PLATINUM- 10% RHODIUM Pt-10% Rh	PLATINUM Pt	Oxidising or Inert. Do Not Insert in Metal Tubes. Beware of Contamination. High Temperature	-50 to 1768°C -58 to 3214°F	-0.236 to 18.693			S
U	NONE ESTABLISHED		COPPER Cu	COPPER-LOW NICKEL Cu-Ni	Extension Grade Connecting Wire for R & S Thermocouples. Also Known as RX & SX Extension Wire.					U
B	NONE ESTABLISHED		PLATINUM- 30% RHODIUM Pt-30% Rh	PLATINUM- 6% RHODIUM Pt-6% Rh	Oxidising or Inert. Do Not Insert in Metal Tubes. Beware of Contamination. High Temp. Common Use in Glass Industry	0 to 1820°C 32 to 3308°F	0 to 13.820			B
G* (W)	NONE ESTABLISHED		TUNGSTEN W	TUNGSTEN- 26% RHENIUM W-26% Re	Vacuum, Inert, Hydrogen. Beware of Embrittlement. Not Practical Below 399°C (750°F). Not for Oxidising Atmosphere	0 to 2320°C 32 to 4208°F	0 to 38.564	NO STANDARD USE ANSI COLOUR CODE		G (W)
C* (W5)	NONE ESTABLISHED		TUNGSTEN- 5% RHENIUM W-5% Re	TUNGSTEN- 26% RHENIUM W-26% Re	Vacuum, Inert, Hydrogen. Beware of Embrittlement. Not Practical Below 399°C (750°F). Not for Oxidising Atmosphere	0 to 2320°C 32 to 4208°F	0 to 37.066	NO STANDARD USE ANSI COLOUR CODE		C (W5)
D* (W3)	NONE ESTABLISHED		TUNGSTEN- 3% RHENIUM W-3% Re	TUNGSTEN- 25% RHENIUM W-25% Re	Vacuum, Inert, Hydrogen. Beware of Embrittlement. Not Practical Below 399°C (750°F)-Not for Oxidising Atmosphere	0 to 2320°C 32 to 4208°F	0 to 39.506	NO STANDARD USE ANSI COLOUR CODE		D (W3)

* Not official symbol or standard designation

[†] JIS colour code also available. Contact Sales for details.