



JMS-SE THERMOCOUPLE WIRE IDENTIFICATION TABLE

JMS-SE.COM
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ANSI CODE	CONDUCTOR COMBINATION		COLOR CODING		MAXIMUM USEFUL TEMPERATURE RANGE *		MAXIMUM THERMOCOUPLE GRADE TEMPERATURE	EMF (mV) OVER MAXIMUM TEMP RANGE	STANDARD LIMITS OF ERROR (ABOVE 0°C)	SPECIAL LIMITS OF ERROR (ABOVE 0°C)	INTERNATIONAL CODE IEC 584-3	ANSI CODE
	+ LEAD	- LEAD	THERMOCOUPLE GRADE	EXTENSION GRADE	THERMOCOUPLE GRADE	EXTENSION GRADE						
J	IRON Fe (magnetic)	CONSTANTAN COPPER-NICKEL Cu-Ni			32 to 1400°F 0 to 760°C	32 to 400°F 0 to 200°C	-346 to 2192°F -210 to 1200°C	-8.095 to 69.553	greater of 2.2°C or 0.75%	greater of 1.1°C or 0.4%		J
K	CHROMEL NICKEL-CHROMIUM Ni-Cr	ALUMEL NICKEL-ALUMINUM Ni-Al (magnetic)			32 to 2300°F 0 to 1260°C	32 to 400°F 0 to 200°C	-454 to 2500°F -270 to 1372°C	-6.458 to 54.886	greater of 2.2°C or 0.75%	greater of 1.1°C or 0.4%		K
T	COPPER Cu	CONSTANTAN COPPER-NICKEL Cu-Ni			32 to 700°F 0 to 370°C	-75 to 200°F -60 to 100°C	-454 to 752°F -270 to 400°C	-6.258 to 20.872	greater of 1.0°C or 0.75%	greater of 0.5°C or 0.4%		T
E	CHROMEL NICKEL-CHROMIUM Ni-Cr	CONSTANTAN COPPER-NICKEL Cu-Ni			32 to 1600°F 0 to 870°C	32 to 400°F 0 to 200°C	-454 to 1832°F -270 to 1000°C	-9.835 to 76.373	greater of 1.7°C or 0.5%	greater of 1.0°C or 0.4%		E
N	NICROSIL Ni-Cr-Si	NISIL Ni-Si-Mg			32 to 2300°F 0 to 1260°C	32 to 400°F 0 to 200°C	-454 to 2372°F -270 to 1300°C	-4.345 to 47.513	greater of 2.2°C or 0.75%	greater of 1.1°C or 0.4%		N
R	PLATINUM- 13% RHODIUM Pt-13% Rh	PLATINUM Pt	NONE ESTABLISHED		32 to 2700°F 0 to 1480°C	32 to 400°F 0 to 200°C	-58 to 3214°F -50 to 1768°C	-0.226 to 21.101	greater of 1.5°C or 0.25%	greater of 0.6°C or 0.1%		R
S	PLATINUM- 10% RHODIUM Pt-10% Rh	PLATINUM Pt	NONE ESTABLISHED		32 to 2700°F 0 to 1480°C	32 to 400°F 0 to 200°C	-58 to 3214°F -50 to 1768°C	-0.236 to 18.693	greater of 1.5°C or 0.25%	greater of 0.6°C or 0.1%		S
B	PLATINUM- 30% RHODIUM Pt-30% Rh	PLATINUM- 6% RHODIUM Pt-6% Rh	NONE ESTABLISHED		1600 to 3100°F 870 to 1700°C	32 to 200°F 0 to 100°C	32 to 3308°F 0 to 1820°C	0.000 to 13.820	0.50%	0.25%	NO STANDARD USE COPPER CONDUCTORS	B
C	TUNGSTEN- 5% RHENIUM W-5% Re	TUNGSTEN- 26% RHENIUM W-26% Re	NONE ESTABLISHED		32 to 4200°F 0 to 2315°C	32 to 400°F 0 to 200°C	32 to 4200°F 0 to 2315°C	0.000 to 37.070	greater of 4.4°C or 1.0%	N/A	NO STANDARD	C

*EXCEPT AS RESTRICTED BY CONDUCTOR SIZE AND INSULATION PER ASTM VOLUME 14.03 AND OTHER APPLICABLE STANDARDS