

REFERENCE DATA THERMOCOUPLE WIRE

LIMITS OF ERROR FOR THERMOCOUPLE WIRE							
THERMOCOUPLE TYPE		°C.			°F.		
WIRE ALLOYS	ANSI TYPE SYMBOL	TEMPERATURE RANGE	STANDARD LIMITS	SPECIAL LIMITS	TEMPERATURE RANGE	STANDARD LIMITS	SPECIAL LIMITS
Copper (+) vs. Constantan (-)	T	-200° to -65°	±1.5%	±8%	-330° to -85°	±1.5%	±8%
		-65° to +130°	±1°	±5°	-85° to +270°	±1.8%	±9°
		+130° to +350°	±.75%	±.4%	+270° to +660°	±.75%	±.4%
Iron (+) vs. Constantan (-)	J	0° to +285°	±2.2°	±1.1°	+32° to +545°	±4°	±2°
		+285° to +750°	±.75%	±.4%	+545° to +1400°	±.75%	±.4%
Chromel™ (+) vs. Constantan (-)	E	-200° to -170°	±1%	±1°	-330° to -270°	±1%	±1.8°
		-170° to +250°	±1.7°	±1°	-270° to +480°	±3°	±1.8°
		+250° to +340°	±1.7°	±.4%	+480° to +640°	±3°	±.4%
		+340° to +900°	±.5%	±.4%	+640° to +1600°	±.5%	±.4%
Chromel™ (+) vs. Alumel™ (-)	K	-200° to -110°	±2%		-330° to -165°	±2%	
		-110° to 0°	±2.2°		-165° to +32°	±4°	
		0° to +285°	±2.2°	±1.1°	+32° to +545°	±4°	±2°
		+285° to +1250°	±.75%	±.4%	+545° to +2300°	±.75%	±.4%
Nicrosil (+) vs. Nisil (-)	N†	0° to +285°	±2.2°	±1.1°	+32° to +545°	±4°	±2°
		+285° to +1250°	±.75%	±.4%	+545° to 2300°	±.75%	±.4%
Platinum -10% Rhodium (+) vs. Platinum (-)	S	0° to +600°	±1.5°	±.6°	+32° to +1110°	±2.7°	±1.1°
		+600° to +1450°	±.25%	±.1%	+1110° to 2650°	±.25%	±.1%
Platinum -13% Rhodium (+) vs. Platinum (-)	R	0° to +600°	±1.5°	±.6°	+32° to +1110°	±2.7°	±1.1°
		+600° to +1450°	±.25%	±.1%	+1110° to +2650°	±.25%	±.1%
Platinum -30% Rhodium (+) vs. Platinum -6% Rhodium (-)	B	+870° to +1700°	±.5%		+1600° to +3100°	±.5%	
Tungsten (+) vs. Tungsten -26% Rhenium (-)	WR†	+400° to +2300°	±1%		+800° to +4200°	±1%	
Tungsten -3% Rhenium (+) vs. Tungsten -25% Rhenium (-)	W3†	+400° to +2300°	±1%		+800° to +4200°	±1%	
Tungsten -5% Rhenium (+) vs. Tungsten -26% Rhenium (-)	W5†	+400° to +2300°	±1%		+800° to +4200°	±1%	

*Magnetic
 **TradeMark, Hoskins Mfg. Co.
 †NOT ANSI Type Symbol

NOTE — Per cent limits apply directly to temperatures in °C units, but for °F equivalents are applied to the number of °F above or below the ice point (+32°F).
 [i.e., Limit (°F) = (Temp. °F - 32°F) × Percentage]

