Phoenix Thermal Supply

The following Chart will help with proper wiring. Thermocouple Sensors are color coded for polarity.

You can also use this chart for proper selection based on temperature. Different calibrations of thermocouples have different conductor materials that perform better at different ranges.

TYPE (Letter)	Conductor Material	POLARITY	Initial Calibration Tolerances (* Whichever is greater) Standard Special		U.S.A.	FRANCE	U.K.	GERMANY	JAPAN	<u>IEC</u>	Application Range
	Iron	+	±4.0 F or	±2.0 F or	+	+	+	+	+	+	32 to 1400° F
3	Constantan	-	±.75%*	±.4%*							0 to 760° C
<u></u>	Chromel	+	±4.0 F or ±.75%*	±2.0 F or ±.4%*		—	<u> </u>	<u> </u>			32 to 2300° F 0 to 1260° C
<u></u>	Alumel	-									
-	Copper	+	±1.8 F or ±1.5%*	±0.9 F or ±.8%*	<u> </u>	<u>-</u> 2				<u> </u>	32 to 700° F 0 to 370° C
•	Constantan	-									
	Chromel	+	±3.0 F or ±.5%*	±1.8 F or ±.4%*	<u> </u>	<u> </u>	<u> </u>		<u>-</u>	<u> </u>	32 to 1600° F 0 to 870° C
	Constantan	-									
N	Nicrosil	+	±4.0 F or ±.75%*	±2.0 F or ±.4%*	<u></u>	Not Established	<u> </u>	Not Established	Not Established	<u> </u>	32 to 2300° F 0 to 1260° C
	NISIL	-									
R	Platinum 13% Rhodium	+	±2.7 F or ±.25%*	±1.1 F or ±.1%*	+	+ (<u> </u>	+	1	+	- (c	32 to 2700° F
	Platinum						<u>- 3</u>				0 to 1480° C
S	Platinum 10% Rhodium	+	±2.7 F or ±.25%*	±1.1 F or ±.1%*	<u> </u>	<u>-8</u>	<u> </u>	<u> </u>	-	<u></u>	32 to 2700° F
	Platinum	-									0 to 1480° C
В	Platinum 30% Rhodium Platinum 6% Rhodium	+	.5%	.25%	<u> </u>	Not Established	Not Established	<u> </u>		Not Established	1600 to 3100° F 870 to 1700° C

^{**}Our engineers are factory trained on all applications and will help with any questions that you have**

