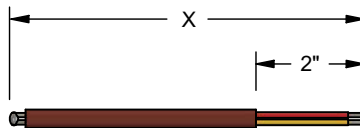


## PLAIN WIRE THERMOCOUPLE WITH BEADED JUNCTION



Made in USA



**BUILD YOUR PLAIN WIRE THERMOCOUPLE:** Choose options to build a part number. For example: **WK60T120S**

MODEL	THERMOCOUPLE TYPE	WIRE LENGTH "X"	INSULATION TYPE	WIRE GAUGE															
<b>W</b>	<b>K</b>	<b>60</b>	<b>T1</b>	<b>20</b>															
<p><b>W</b> = Plain Thermocouple Wire with Beaded Junction</p>	<p><b>J</b> = Type J <b>K</b> = Type K <b>E</b> = Type E <b>T</b> = Type T</p> <p><i>For thermocouple accuracy information see page 5.</i></p> <p><i>For thermocouple temperature operating ranges see page 6.</i></p>	<p>?? = Length in Inches</p>	<table border="1"> <thead> <tr> <th>Code</th> <th>Insulation</th> <th>Max Temp</th> </tr> </thead> <tbody> <tr> <td><b>F1</b></td> <td>Fiberglass, Solid Wire</td> <td>900°F</td> </tr> <tr> <td><b>T1</b></td> <td>Teflon, Solid Wire</td> <td>400°F</td> </tr> <tr> <td><b>F2</b></td> <td>Fiberglass, Stranded Wire (J &amp; K Only)</td> <td>900°F</td> </tr> <tr> <td><b>T2</b></td> <td>Teflon, Stranded Wire (J &amp; K Only)</td> <td>400°F</td> </tr> </tbody> </table>	Code	Insulation	Max Temp	<b>F1</b>	Fiberglass, Solid Wire	900°F	<b>T1</b>	Teflon, Solid Wire	400°F	<b>F2</b>	Fiberglass, Stranded Wire (J & K Only)	900°F	<b>T2</b>	Teflon, Stranded Wire (J & K Only)	400°F	<p><b>20</b> = 20 Gauge</p>
Code	Insulation	Max Temp																	
<b>F1</b>	Fiberglass, Solid Wire	900°F																	
<b>T1</b>	Teflon, Solid Wire	400°F																	
<b>F2</b>	Fiberglass, Stranded Wire (J & K Only)	900°F																	
<b>T2</b>	Teflon, Stranded Wire (J & K Only)	400°F																	
<b>S</b>																			
<b>WIRE TERMINATION</b>	<b>OPTIONS</b>																		

Code	Insulation
<b>S</b>	<p>Stripped Leads</p>
<b>C</b>	<p>Mini Male Plug</p>
<b>F</b>	<p>Standard Male Plug</p>
<b>L</b>	<p>Spade Lugs</p>
<b>T</b>	<p>Terminal Pins</p>

**Wire Protection**

- A** = Stainless Steel Armor
- P** = PVC Coated Stainless Steel Armor
- T** = Teflon Coated Stainless Steel Armor
- O** = Stainless Steel Overbraid (Omit if no Armor)

**Tip**

**W(??)** = Washer Welded to Tip for Surface Mount with Screw. Put screw size in parentheses. Ex: W(1/4").

*For additional options see page 147.*

THERMOCOUPLES

## REFERENCE INFORMATION

THERMOCOUPLE WIRE COLOR CODES (U.S.A. ANSI)					
Thermocouple Grade	Extension Grade	Plug/Jack	Thermocouple Grade	Extension Grade	Plug/Jack
<b>K</b>		Yellow	<b>N</b>		Orange
<b>J</b>		Black	<b>S</b>		Green
<b>T</b>		Blue	<b>R</b>		Green
<b>E</b>		Purple	<b>B</b>		White

### THERMOCOUPLE & RTD ACCURACIES

	Type K	Type J	Type T	Type E	Type N	Type S	Type R	Type B	RTD Class B	RTD Class A
-328°F	*	-	*	*	-	-	-	-	± 2.34°F	± 2.34°F
-148°F	*	-	*	*	-	-	-	-	± 1.44°F	± 1.44°F
32°F	± 3.96°F	± 3.96°F	± 1.8°F	± 3.06°F	± 3.96°F	± 2.7°F	± 2.7°F	-	± 0.54°F	± 0.27°F
392°F	± 3.96°F	± 3.96°F	± 2.7°F	± 3.06°F	± 3.96°F	± 2.7°F	± 2.7°F	-	± 2.34°F	± 0.99°F
752°F	± 5.4°F	± 5.4°F	-	± 3.6°F	± 5.4°F	± 2.7°F	± 2.7°F	-	± 4.14°F	± 4.14°F
1112°F	± 8.1°F	± 8.1°F	-	± 5.4°F	± 8.1°F	± 2.7°F	± 2.7°F	-	± 5.94°F	± 5.94°F
1472°F	± 10.8°F	-	-	± 7.2°F	± 10.8°F	± 3.6°F	± 3.6°F	-	-	-
1832°F	± 13.5°F	-	-	-	± 13.5°F	± 4.5°F	± 4.5°F	± 9°F	-	-
2192°F	± 16.2°F	-	-	-	± 16.2°F	± 5.4°F	± 5.4°F	± 10.8°F	-	-
2552°F	-	-	-	-	-	± 6.3°F	± 6.3°F	± 12.6°F	-	-
2912°F	-	-	-	-	-	-	-	± 14.4°F	-	-

Note: The accuracies in the above table are estimates given at fixed points, they do not apply to temperature ranges and are intended only as examples to give a general idea of what can be expected. Consult Reotemp if a specific accuracy is required or to confirm accuracies at any points not listed in the above table.

\*Thermocouples are normally supplied to meet the tolerances specified in the table for temperatures above 32°F. The same materials, however, may not fall within the tolerances for temperatures below 32°F. If materials are required to meet the tolerances stated for temperatures below 32°F, contact Reotemp sales.

Looking for better accuracy?



Reotemp offers **RTDs** up to 5x more accurate than Class B RTDs with the Hi-Accuracy™ option.

**Thermocouples** up to 2x more accurate with the Special Limits of Error option.

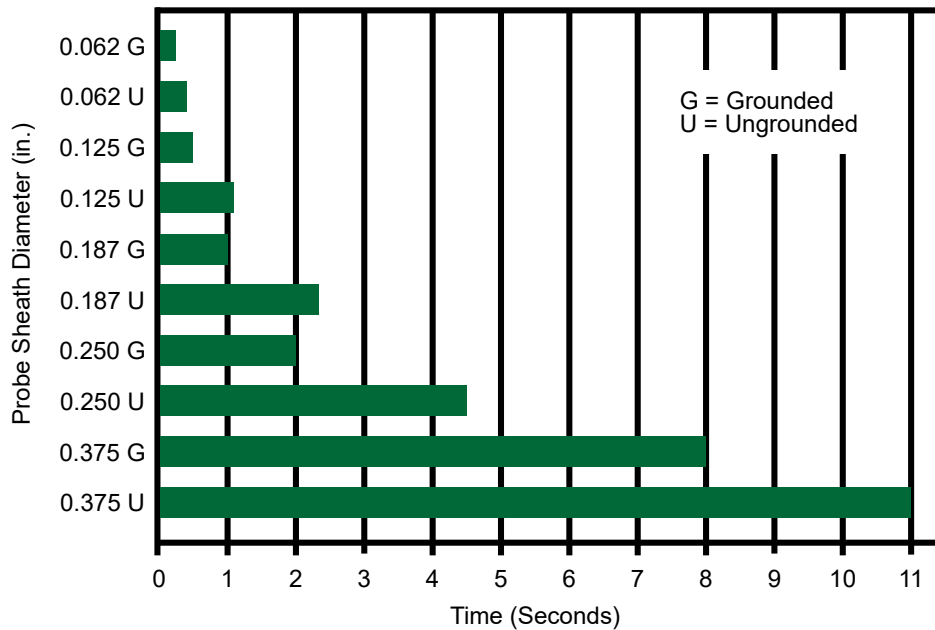
## REFERENCE INFORMATION

### THERMOCOUPLE TEMPERATURE OPERATING RANGES

Type	Minimum Temp. °F	Maximum Temp. °F
K	-328	2300
J	32	1400
T	-328	700
E	-328	1600
N	32	2300
S	32	2700
R	32	2700
B	1600	3100

### THERMOCOUPLE TYPICAL RESPONSE TIMES

63.2% Temperature Change in an Agitated Water Bath



### TEMP. LIMITS OF WIRE JACKETS

Jacket	Temp. Limit
PVC	221°F
Teflon	400°F
Fiberglass	900°F

## THERMOCOUPLE & RTD OPTIONS

		Thermocouple	RTD	Digital Thermometers	Handheld Digital
<b>CERTIFICATION OPTIONS</b>					
<b>-R1</b>	1 Point Calibration Certification, Reotemp Chooses	✓	✓	✓	✓
<b>-R3</b>	3 Point Calibration Certification, Reotemp Chooses	✓	✓	✓	✓
<b>-C1</b>	1 Point Calibration Certification, Customer Chooses	✓	✓	✓	✓
<b>-C3</b>	3 Point Calibration Certification, Customer Chooses	✓	✓	✓	✓
<b>-CC</b>	Certificate of Conformance	✓	✓	✓	✓
<b>-CS</b>	NIST Calibration Sticker (No Logged Points)	✓	✓	✓	✓
<b>OTHER OPTIONS</b>					
<b>-VB</b>	Hi-Vibration	N/A	✓	✓	✓
<b>-AC</b>	Hi-Accuracy	N/A	✓	N/A	N/A
<b>-PS</b>	Pointed Stem	✓	✓	✓	✓
<b>-TF</b>	Teflon Coating	✓	✓	✓	✓
<b>-SS</b>	316 SS stem	N/A	STD	✓	✓
<b>-NL</b>	No Logo	✓	✓	✓	✓
<b>-HT</b>	Heat Transfer Compound (2 oz)	✓	✓	✓	N/A
<b>-GL</b>	Plain Glass Lens	N/A	N/A	✓	✓
<b>-CL</b>	Custom Logo Dial	N/A	N/A	✓	✓
<b>-BP</b>	Replacement Battery Pack	N/A	N/A	✓	✓
<b>-WD</b>	White Dial	N/A	N/A	✓	✓
<b>-AS</b>	Allows to Fit 1-1/4-18 Industrial Thermowell	✓	✓	✓	N/A
<b>TAG OPTION</b>					
<b>-TS</b>	Stainless Steel Tag (1-10 Characters)			✓	
<b>-TM</b>	Stainless Steel Tag (11-80 Characters)			✓	
<b>-TP</b>	Paper Tag			✓	

✓	Indicates that the option is available with this model.
N/A	Indicates the option is not available with this model.
STD	Indicates standard options with no additional cost.