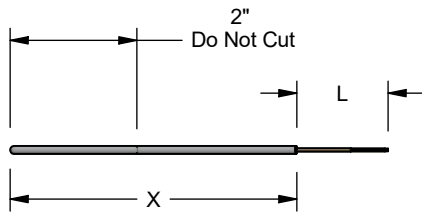


CUT-TO-LENGTH THERMOCOUPLE

Reotemp Cut-To-Length Thermocouples can be cut in the field to any length needed using a standard tube cutter. Many customers keep a stock of cut-to-length thermocouples on hand for quick replacement. Accessories such as spring loaded bushing kits, heads, terminal blocks, and transmitters can be found on our accessories on page 48.



Made in USA



FEATURES / BENEFITS

- For on-the-spot Replacements
- Order Your Max Length and Keep on the Shelf
- Simply Cut Shorter for Your Other Lengths
- Use Standard Tube Cutter
- Spring Loaded Bushing Kits, Heads and Terminal Blocks Available on Page 48

BUILD YOUR CUT-TO-LENGTH: Choose options to build a part number. For example: **T3JG18SL6**

T3	J	G	18	S	L6
SENSOR TYPE	THERMOCOUPLE TYPE	GROUNDING	ELEMENT LENGTH "X"	ALLOY	LEAD LENGTH "L"
T3 = Cut-to-Length Thermocouple	J = Type J K = Type K E = Type E T = Type T JJ = Dual Type J KK = Dual Type K EE = Dual Type E TT = Dual Type T	G = Grounded U = Ungrounded UU = Ungrounded Uncommon	18 = 18" (Standard) 24 = 24" 36 = 36"	F = 304 Stainless Steel S = 316 Stainless Steel	L6 = 6" (Standard) L12 = 12"
<div style="border: 1px dashed gray; width: 100px; height: 30px; margin: 0 auto;"></div> <p>OPTIONS</p>					

Wire Insulation (Standard is Fiberglass Solid, Max. Temp 900°F)
F2 = Fiberglass, Stranded (Max. Temp. 900°F)
T1 = Teflon, Solid (Max Temp. 400°F)
T2 = Teflon, Stranded (Max. Temp. 400°F)

Stem Diameter
D18 = 0.188
D37 = 0.375

Wire Gauge
G4 = 24 Gauge

For additional options see page 147.

For thermowells see pages 140-146.

REFERENCE INFORMATION

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

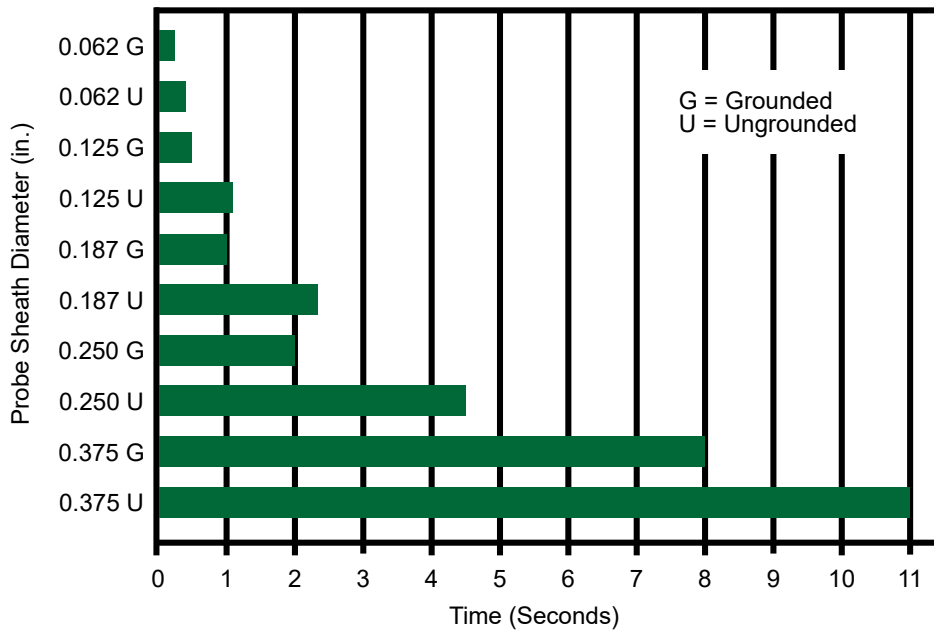
REFERENCE INFORMATION

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 ACCESSORIES

THERMOCOUPLES



Connection Heads

Ordering information: Add the head code from page 48 to the end of this part number: **TCX-006-?**
Example: **TCX-006-E** for a type E head.



Transmitters (in-head)

Ordering information: Use the stand alone part number from page 108.
For calibration software use part number: **TCXT4-SSCBLPR**



Terminal Blocks

Description	Part #
2 Pole	TCX001T2
4 Pole	TCX001T4
6 Pole	TCX001T6



Plugs & Jacks (ANSI Color Coded)

Description	Pins	Max Temp.	Part #
Standard Size Male Plug	Round	350°F	TCX?PLUG
Standard Size Female Jack	Round	350°F	TCX?JACK
Mini Size Male Plug	Flat	350°F	TCX?PLUGMINI
Mini Size Female Jack	Flat	350°F	TCX?JACKMINI

Ordering information: Insert the thermocouple type for the question mark in the part number. Example **TCXKPLUG** for a type K standard size male plug. Add the code **-HT** at the end of any part number to switch to a high temperature version rated to 800°F.



Spring Loaded Kits

Description	Part #
For 1/4" Diameter	TCX-BSL22
For 3/16" Diameter	TCX-BSL22-188
For 1/4" Diameter with Oil Seal	TCX-ASL22
For 3/16" Diameter with Oil Seal	TCX-ASL22-188

Clamp Sets for Plugs

Description	Part #
For Standard Size	TCX-STDCLA
For Mini Size	TCX-MINICLA



Compression Fittings

TCX-BTCF

1/2

X1/4



MALE NPT

STEM DIAMETER

OPTIONS

1/2 = 1/2" MNPT
1/4 = 1/4" MNPT
1/8 = 1/8" MNPT

X1/4 = For 0.250" Dimension
X3/16 = For 0.188" Dimension
X3/8 = For 0.375" Dimension
X1/8 = For 0.125" Dimension

-TF = Teflon Ferrule Reusable



THERMOCOUPLE & RTD OPTIONS

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