

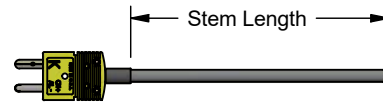
Thermocouples

THERMOCOUPLE STEM ASSEMBLY WITH PLUG CONNECTION

Reotemp Thermocouple Stem Assemblies with Plug Connections allow for quick connection and disconnection. Standard plugs (round pins) and mini plugs (flat pins) are available.



Made in USA



THERMOCOUPLES

BUILD YOUR STEM ASSEMBLY: Choose options to build a part number. For example: **FTM25K1SG6-TS**

STYLE	PLUG OPTIONS (OPTIONAL)	STEM OPTIONS (OPTIONAL)
<p>F</p> <p>Standard Male Plug</p>	<p>T</p> <p>1/4" NPT Sliding Compression Fitting Loose On Plain 316SS Stem</p>	<p>Leave blank for no stem option.</p>
<p>C</p> <p>Mini Male Plug*</p>	<p>Leave blank for no plug option.</p>	<p>U</p> <p>1/2" NPT Sliding Compression Fitting Loose On Plain 316SS Stem</p>
<p>D</p> <p>Mini Female Jack*</p>	<p>BR</p> <p>Compression Bracket for Plug</p>	<p>V</p> <p>1/8" Compression Fitting Loose on Plain 316SS Stem</p>
<p>F</p> <p>Standard Male Plug</p>	<p>MC</p> <p>Mating Connection For Plug or Jack</p>	<p>W</p> <p>Weld Pad, 1"x1"x1/8"</p>
<p>G</p> <p>Standard Female Jack</p>	<p>HT</p> <p>High Temperature Plug</p>	<p>Note: Compression fitting lengths will decrease overall stem length.</p>

*Not available with 1/4" or 3/8" Stem.

M	25	K	1	S	G	6	-TS
METAL SHEATHED	SHEATH DIAMETER	THERMOCOUPLE TYPE	TYPE OF SHEATH MATERIAL	NUMBER OF ELEMENTS	TYPE OF JUNCTION	STEM LENGTH "X"	OPTIONS
<p>M = Metal Sheathed Thermocouple</p>	<p>06 = 0.062 in. 12 = 0.125 in. 18 = 0.188 in. 25 = 0.250 in.[†] 37 = 0.375 in.[†]</p> <p>[†]Not available with option C or D style mini connectors.</p>	<p>J = Type J K = Type K E = Type E T = Type T JS = Type J Special Limits of Error KS = Type K Special Limits of Error ES = Type E Special Limits of Error TS = Type T Special Limits of Error</p>	<p>1 = 316 Stainless Steel 2 = 310 Stainless Steel 3 = 304 Stainless Steel 5 = Inconel 600</p>	<p>S = Single Element D = Dual Element (Not available with options C or D style mini connectors.)</p>	<p>G = Grounded U = Ungrounded UU = Ungrounded Uncommon E = Exposed</p>	<p>?? = Stem Length in Inches</p>	<p>-TS = Stainless Steel Tag (1-10 Characters) -R1 = 1pt. Calibration Certification -R3 = 3pt. Calibration Certification</p>

For additional options see page 147.

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.

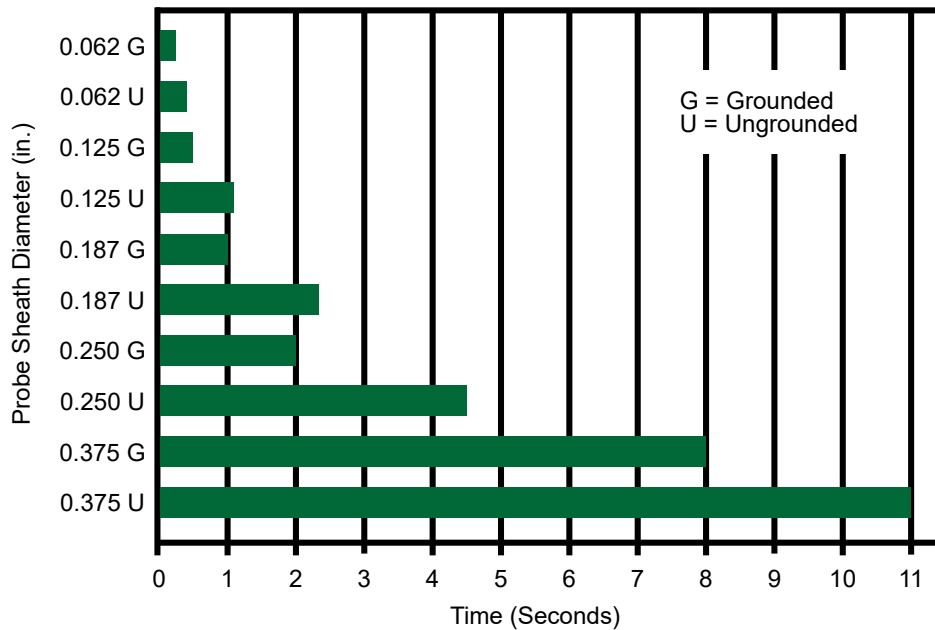
REFERENCE INFORMATION

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 & 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.