

THERMOCOUPLE STEM ASSEMBLY WITH TRANSITION

Reotemp Thermocouple Stem Assemblies with Transitions come with a variety of extension cables and adjustable fittings to function in many different applications. Transitions are perfect for scenarios where cables are being laid over a long distance. The armored cable helps protect and insulate thermocouple wire where the hookup or transmitter is farther away from the stem.



Made in USA



BUILD YOUR STEM ASSEMBLY: Choose options to build a part number. For example: **AM25J1SG12-LJ2A36T2SA6-TS**

STYLE		STEM OPTION STYLES (OPTIONAL)	
A	Plain Stem (Lead Assembly) Length: X	H	Spring Loaded Bushing Length: X
B	Welded SS Bushing Length: X	P	1/2" NPT Nipple w/ Bayonet Length: X
R	Bayonet Cap w/ Spring Length: X	S	Load Spring Only Length: X
4T	5" Nominal Spring Loaded N-U-N 316SS Length: X		
<i>Leave blank for no stem option.</i>			
T*	1/4" NPT Sliding Compression Fitting Loose On Plain 316SS Stem Length: X, Fitting: 1.5"	U*	1/2" NPT Sliding Compression Fitting Loose On Plain 316SS Stem Length: X, Fitting: 1.8"
V*	1/8" Compression Fitting Loose on Plain 316SS Stem Length: X, Fitting: 1.3"	W	Weld Pad, 1"x1"x1/8" Length: X

*These fittings decrease usable stem length by the length of the fitting as pictured above. Add the fitting size to the required stem length or your stem may be short.

M	25	J	1	S	G	12
METAL SHEATHED	SHEATH DIAMETER	THERMOCOUPLE TYPE	TYPE OF SHEATH MATERIAL	NUMBER OF ELEMENTS	TYPE OF JUNCTION	STEM LENGTH "X"
M = Metal Sheathed Thermocouple	06 = 0.062 in. 12 = 0.125 in. 18 = 0.188 in. 25 = 0.250 in. 37 = 0.375 in.	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	1 = 316 Stainless Steel 2 = 310 Stainless Steel 3 = 304 Stainless Steel 5 = Inconel 600	S = Single Element Assembly D = Dual Element Assembly	G = Grounded U = Ungrounded E = Exposed UU = Ungrounded Uncommon	?? = Stem Length in Inches

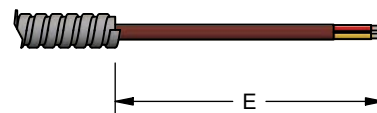
THERMOCOUPLE STEM ASSEMBLY WITH TRANSITION

THERMOCOUPLES

-L	J	2	A	36												
LEAD WIRE	THERMOCOUPLE TYPE	NUMBER OF LEADS	TRANSITION TYPE		LEAD OR ARMOR LENGTH "B"											
-L = Lead Wire	J = Type J K = Type K E = Type E T = Type T <i>For thermocouple accuracy information see page 5.</i> <i>For thermocouple temperature operating ranges see page 6.</i>	2 = Single Thermocouple 4 = Duplex Thermocouple	<table border="1"> <tr> <td style="text-align: center;">P</td> <td></td> <td style="text-align: center;">Plain Transition</td> </tr> <tr> <td style="text-align: center;">S</td> <td></td> <td style="text-align: center;">Spring Transition</td> </tr> <tr> <td style="text-align: center;">A</td> <td></td> <td style="text-align: center;">Armor Transition</td> </tr> <tr> <td style="text-align: center;">L</td> <td></td> <td style="text-align: center;">Same Size Transition</td> </tr> </table>	P		Plain Transition	S		Spring Transition	A		Armor Transition	L		Same Size Transition	?? = Insert "B" Length in Inches (See diaphragm to left or below.)
P		Plain Transition														
S		Spring Transition														
A		Armor Transition														
L		Same Size Transition														



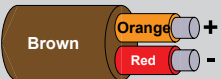


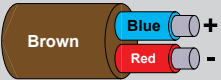
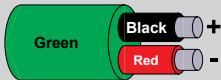

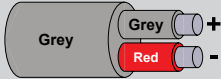
T2	S	A	6	-TS
INSULATION /CONDUCTOR	WIRE TERMINATION	WIRE PROTECTION (OPTIONAL)	WIRE EXTENSION "E" (OPTIONAL)	OPTIONS
T1 = Teflon, Solid F1 = Fiberglass, Solid T2 = Teflon, Stranded F2 = Fiberglass, Stranded (J&K Only) P1 = PVC, Solid	P = Plain Leads (Not Stripped) S = Stripped Leads L = Spade Lugs T = Terminal Pins F = Standard Male Plug C = Mini Male Plug R = Cord Grip 1/2" NPT	<i>Omit if No Armor</i> A = Stainless Steel Armor P = PVC Coated Stainless Steel Armor T = Teflon Coated Stainless Steel Armor O = Stainless Steel Overbraid	?? = "E" Length in Inches, Wire Extension Beyond Armor, Required if Armor or Overbraid is Chosen	-TS = Stainless Tag -R1 = One Point Calibration Certification (Reotemp Chooses Point) -R3 = Three Point Calibration Certification (Reotemp Chooses Points)
				<i>For additional options see page 151.</i> <i>For thermowells see pages 144-150.</i>

Spade Lugs	L	
Standard Male Plug	F	
Cord Grip 1/2" NPT	R	



Wire Extension Beyond Armor or Overbraid

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.

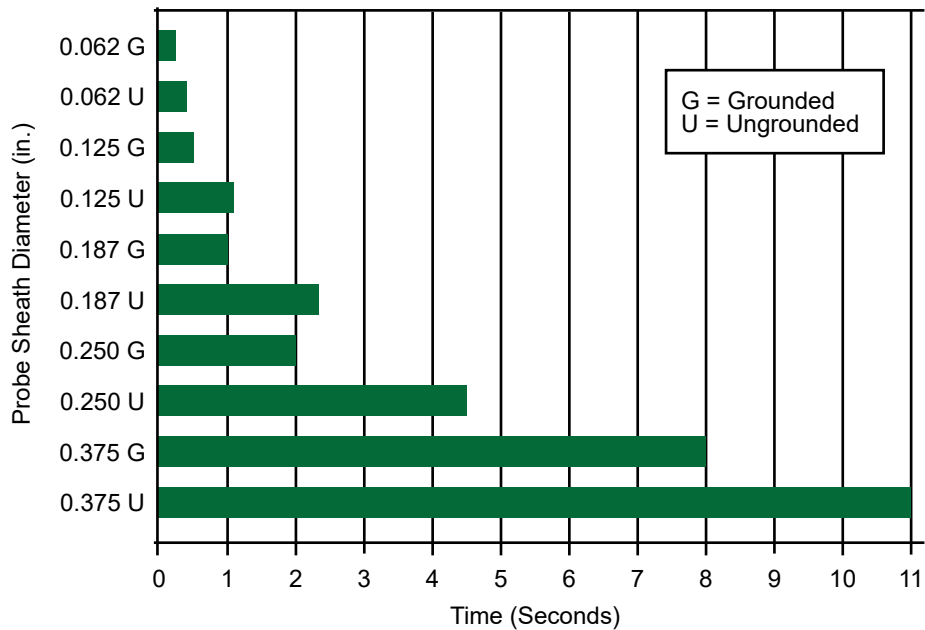
REFERENCE INFORMATION

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
Std. Fiberglass	900°F
High Temp Fiberglass	1,300°F
Ceramic Fiberglass	2,200°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.				