BULK THERMOCOUPLE WIRE

Reotemp bulk thermocouple wire is offered in both thermocouple grades and extension grades with multiple insulation options.

HOW TO ORDER THERMOCOUPLE GRADE WIRE: Choose options to build a part number. For example: K20CF1-100

K | **20** | **CF1** | ☐ | **-100**

THERMOCOUPLE TYPE	WIRE GAUGE	INSULATION TYPE			WIRE OVERBRAID (OPTIONAL)	WIRE LENGTH
J = Type J **K** = Type K	**20** = 20 Gauge **24** = 24 Gauge	**Code**	Description	Max. Temp.	**SSO** = Stainless Steel Wire Overbraid	**-??** = Wire Length in Feet
		F1	Fiberglass Solid Wire	900°F		
		T1	Teflon Solid Wire	400°F		
		F2	Fiberglass Stranded Wire	900°F		
		T2	Teflon Stranded Wire	400°F		
		HTF1	High Temp Fiberglass	1300°F		
K = Type K	**20** = 20 Gauge	**CF1**	Ceramic Fiberglass	2200°F		
E = Type E **T** = Type T	**20** = 20 Gauge **24** = 24 Gauge	**T1**	Teflon Solid Wire	400°F		
		F1	Fiberglass Solid Wire	900°F		

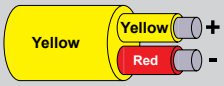
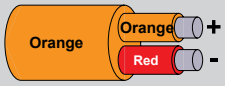
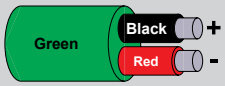
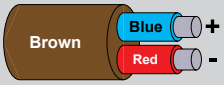
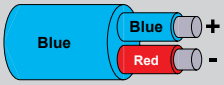
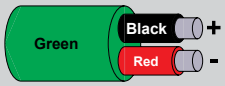
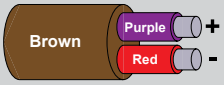
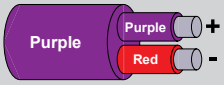
HOW TO ORDER EXTENSION GRADE WIRE: Choose options to build a part number. For example: JX20P1-100

JX | **20** | **P1** | ☐ | ☐ | **-100**

THERMOCOUPLE TYPE	WIRE GAUGE	INSULATION TYPE			MYLAR SHIELD (OPTIONAL)	WIRE OVERBRAID (OPTIONAL)	WIRE LENGTH
JX = Type J Extension Grade **KX** = Type K Extension Grade **EX** = Type E Extension Grade **TX** = Type T Extension Grade	**20** = 20 Gauge **16** = 16 Gauge	**Code**	Description	Max. Temp.	**D** = Mylar Shield and Drain Wire	**SSO** = Stainless Steel Wire Overbraid	**-??** = Wire Length in Feet
		P1	PVC Solid Wire	220°F			
RX = Type R Extension Grade **SX** = Type S Extension Grade **BX** = Type B Extension Grade	**20** = 20 Gauge	**F1**	Fiberglass Solid Wire	900°F			

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	None Established		Green
T			Blue	R	None Established		Green
E			Purple	B	None Established		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.

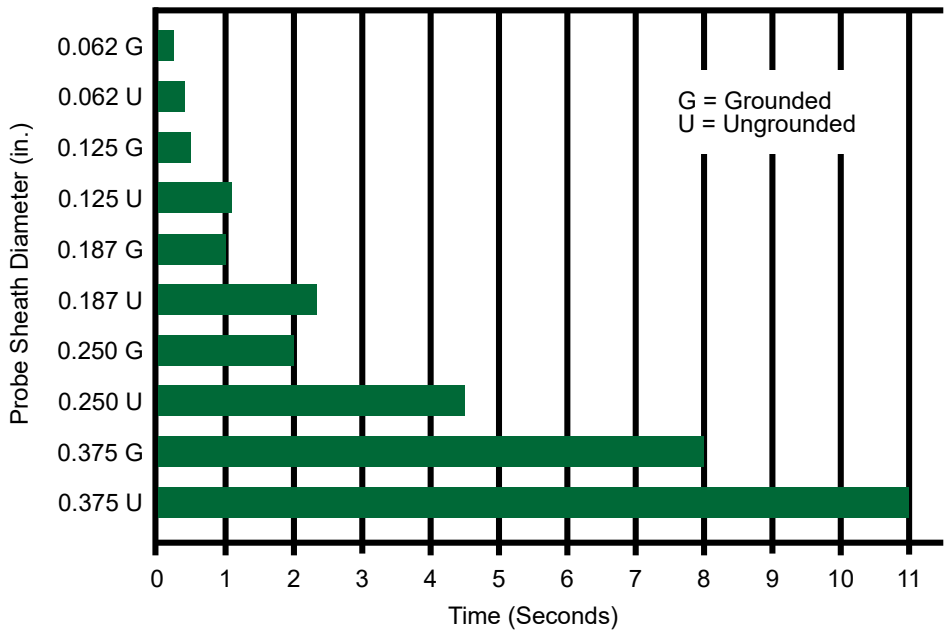
REFERENCE INFORMATION

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