THERMOCOUPLE WIRE
Fiberglass Insulated 1300°F (704°C)

Applications
- Heat Treatment
- Component Testing
- Steel and Aluminum Industry
- Metals Production
- Furnace Surveys
- Temperature Sensors

Available Options
- Reduced Itch Tuffbond™ Impregnation on Singles
- Stabilized Type K & Type E Conductors
- Fused PTFE Tape Moisture Barrier
- Twisted/Shielded Pair
- Metal Coverings
- Tighter than Special Limit Accuracy Tolerances
- Special Color Codes
- Calibration Test Reports

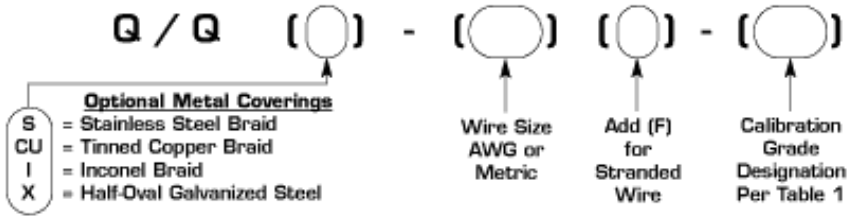
Product Features
- Continuous use up to 1300F (704C)
- Single Exposure up to 1600F (871C)
- Good Moisture, Chemical and Abrasion Resistance
- High Temperature Stability

Product Specifications

Conductors:	Solid or stranded thermocouple wire per ASTM E230 & ANSI MC96.1
Insulation:	Braided fiberglass with high temperature impregnation*
Construction:	Parallel conductors
Jacket:	Braided fiberglass with high temperature impregnation*
Operating Temperature:	+1300F (+704C) continuous +1600F (+871C) single exposure
Limits of Error:	Conforms to ASTM E230, IEC 584 and ANSI MC 96.1
Color Code:	Conforms to ASTM E230 and ANSI MC 96.1 (International Color Codes Available)

*Impregnation maintained to +400F (+200C)

Ordering Code



Conductor Size		Insulation Thickness		Jacket Thickness		Outer Diameter		Net Weight	
AWG	(MM)	inches	(MM)	inches	(MM)	inches	(MM)	LB/MF	(KG/KM)
12	(2.06)	.013	(.33)	.013	(.33)	.133 x .240	(3.4 x 6.1)	44	(65)
14	(1.63)	.013	(.33)	.013	(.33)	.116 x .206	(2.9 x 5.2)	31	(46)
16	(1.29)	.013	(.33)	.013	(.33)	.103 x .180	(2.6 x 4.6)	22	(33)
16F*	(1.47)	.013	(.33)	.013	(.33)	.110 x .194	(2.8 x 4.9)	23	(34)
18	(1.02)	.013	(.33)	.013	(.33)	.092 x .158	(2.3 x 4.0)	15	(22)
18F*	(1.22)	.013	(.33)	.013	(.33)	.100 x .174	(2.5 x 4.4)	16	(24)
20	(0.81)	.013	(.33)	.013	(.33)	.084 x .142	(2.1 x 3.6)	11	(16)
20F*	(0.97)	.013	(.33)	.013	(.33)	.088 x .150	(2.2 x 3.8)	12	(18)
22	(0.64)	.009	(.23)	.013	(.33)	.069 x .112	(1.8 x 2.8)	7.2	(11)
22F*	(0.76)	.009	(.23)	.013	(.33)	.074 x .122	(1.9 x 3.1)	7.8	(12)
24	(0.51)	.009	(.23)	.013	(.33)	.064 x .102	(1.6 x 2.6)	5.8	(8.6)
24F*	(0.61)	.009	(.23)	.013	(.33)	.068 x .110	(1.7 x 2.8)	6.2	(9.2)

MANY ITEMS AVAILABLE FROM STOCK WITHIN 24 HOURS

The products referenced above represent the most popular constructions. Other constructions can be manufactured to meet individual specification and application requirements. Contact factory for additional information.

Table 1

Initial Calibration Tolerances Per ASTM E230 and ANSI MC96.1

			Tolerance-Reference Junction 32F (0C)		
Thermocouple Type	Temperature Range F (C)	Grade Designation	Standard Grade Limits F (C) whichever is greater	Grade Designation	Special Grade Limits F (C) whichever is greater
Thermocouple Wire					
T	32 (0) to 700 (370)	T	±1.8 (1) or ±0.75%	TT	±0.9 (0.5) or 0.4%
J	32 (0) to 1400 (760)	J	±4 (2.2) or ±0.75%	JJ	±2 (1.1) or 0.4%
E	32 (0) to 1600 (870)	E	±3.1 (1.7) or ±0.50%	EE	±1.8 (1) or 0.4%
K or N	32 (0) to 2300 (1260)	K or N	±4 (2.2) or ±0.75%	KK or NN	±2 (1.1) or 0.4%
T*	-328 (-200) to 32 (0)	T	±1.8 (1) or ±1.5%	TT	±0.9 (0.5) or 0.8%**
E*	-328 (-200) to 32 (0)	E	±3.1 (1.7) or ±1%	EE	±1.8 (1) or 0.5%**
K*	-328 (-200) to 32 (0)	K	±4 (2.2) or ±2%	KK	**
Extension Wire					
TX	32 (0) to 212 (100)	TX	±1.8 (1)	TTX	±0.9 (0.5)
JX	32 (0) to 400 (200)	JX	±4 (2.2)	JJX	±2 (1.1)
EX	32 (0) to 400 (200)	EX	±3.1 (1.7)	EEX	±1.8 (1)
KX or NX	32 (0) to 400 (200)	KX or NX	±4 (2.2)	KKX or NNX	±2 (1.1)
RX or SX	32 (0) to 400 (200)	RX or SX	±9 (5)		
BX	32 (0) to 212 (100)	BX***	±7.6 (4.2)		
BX	32 (0) to 400 (200)	BX ALLOY***	±6.7 (3.7)		

* Thermocouple material is normally supplied to meet tolerances above 0C (32F). If material is required to meet tolerances below 0C (32F), the purchase order must so state. Special selection of material is required.

** Suggested initial calibration tolerance. Requirements should be discussed between purchaser and supplier.

*** Copper vs. copper can be used as an extension for Type B thermocouples if the transition is below 100C (212F). Above 100C (212F), PCLW30-6 alloy should be used as the positive extension wire.

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Information Request

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