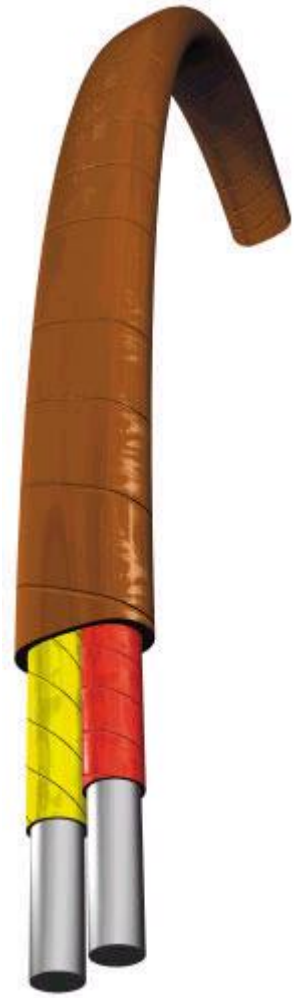
THERMOCOUPLE WIRE

PTFE Tape Insulated 500ºF (260ºC)



APPLICATIONS

- Aerospace
- Power Generation
- Laboratories
- Petrochemical Plants
- Cryogenic Applications
- FDA Approved ...Applications
- Composites
- Metal Overbraids

AVAILABLE OPTIONS

- Galvanized Half-Oval ...Armor
- Twisted/Shielded Pair
- Special Color Codes
- Calibration Test Reports

PRODUCT FEATURES

- Continuous use up ...to 500°F (260°C)
- Excellent Solvent Resistance
- Flame Retardant
- Passes IEEE 383 Flame Test
- Passes VW-1 Flame Test
- Will Not Melt
- Abrasion Resistant

PRODUCT SPECIFICATIONS

CONDUCTORS: Solid or stranded thermocouple wire per ASTM E230 & ANSI MC96.1

INSULATIONS: Two layers of fused fluoropolymer PTFE tape

CONSTRUCTION: Parallel conductors

JACKET: Two layers of fused fluoropolymer PTFE tape

OPERATING TEMPERATURE: -328°F (-200°C) to +500°F (+260°C) continuous

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)

ORDERING CODE

TF / TF ( ) – ( ) ( ) - ( )

Optinal Metal Coverings

- S =Stainless steel Braid
- CU =Tinned Copper Braid
- I =Inconel Braid
- X =Half-Oval Galvanized Steel

Wire Size AWG or Metric

Add (F) for Stranded Wire

Calibration Grade Designation Per Table 1

Conductor Size		Insulation Thickness		Jacket Thickness		Outer Diameter		Net Weight	
AWG	(MM)	inches	(MM)	inches	(MM)	inches	(MM)	LB/MF	(KG/KM)
14	(1.63)	.012	(.30)	.012	(.30)	.112 x .200	(2.8 x 5.1)	33	(49)
16	(1.29)	.012	(.30)	.012	(.30)	.099 x .174	(2.5 x 4.4)	23	(34)
16F*	(1.47)	.012	(.30)	.012	(.30)	.106 x .188	(2.7 x 4.8)	25	(37)
18	(1.02)	.012	(.30)	.012	(.30)	.088 x .152	(2.2 x 3.9)	15	(22)
20	(0.81)	.008	(.20)	.012	(.30)	.072 x .120	(1.8 x 3.0)	10	(15)
20F*	(0.97)	.008	(.20)	.012	(.30)	.078 x .132	(2.0 x 3.4)	11	(16)
22	(0.64)	.008	(.20)	.012	(.30)	.065 x .106	(1.7 x 2.7)	7.4	(11)
24	(0.51)	.008	(.20)	.012	(.30)	.060 x .096	(1.5 x 2.4)	5.2	(7.7)
24F*	(0.61)	.008	(.20)	.012	(.30)	.064 x .104	(1.6 x 2.6)	6.0	(8.9)
26	(0.41)	.008	(.20)	.012	(.30)	.056 x .088	(1.4 x 2.2)	4.3	(6.4)
28	(0.32)	.008	(.20)	.012	(.30)	.053 x .082	(1.3 x 2.1)	3.2	(4.8)
30	(0.25)	.008	(.20)	.012	(.30)	.050 x .076	(1.3 x 1.9)	2.8	(4.2)

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 32°F (0°C)		
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 0°C (32°F). If material is required to meet tolerances below 0°C (32°F), 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 100°C (212°F). Above 100°C (212°F), PCLW30-6 alloy should be used as the positive extension wire.