

THERMOCOUPLE WIRE

Nylon Insulated 250°F (121°C)

APPLICATIONS

- Temperature Sensors
- Testing Laboratories
- Heating and Air Conditioning
- General Industry

AVAILABLE OPTIONS

- Metal Overbraids
- Galvanized Half-Oval Armor
- Twisted/Shielded Pair
- Multi-Pair Cables
- Special Color Codes
- Calibration Test Reports

PRODUCT FEATURES

- Continuous use up to 250°F (121°C)
- Excellent Abrasion Resistance
- Good Chemical and Solvent Resistance
- Excellent Dielectric Strength
- Small Compact Size



PRODUCT SPECIFICATIONS:

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

CONDUCTORS: Nylon polyamide resin

CONDUCTORS: Parallel conductors

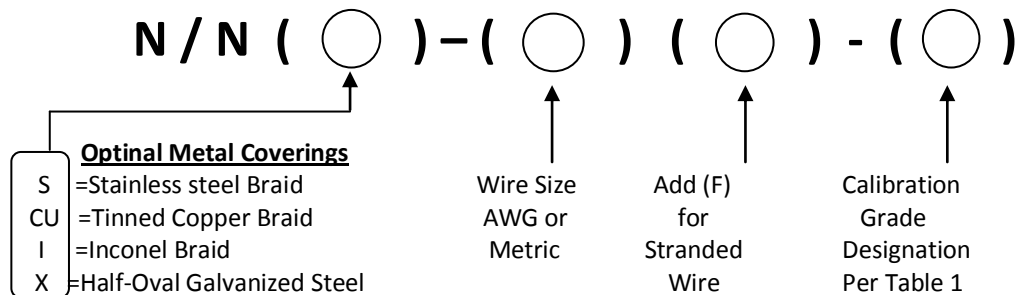
JACKET Nylon polyamide resin

OPERATING TEMPERATURE: -85F (-65C) to +250F (+121C) 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



Conductor Size		Insulation Thickness		Jacket Thickness		Outer Diameter		Net Weight	
AWG	(MM)	inches	(MM)	inches	(MM)	inches	(MM)	LB/MF	(KG/KM)
12	(2.05)	.008	(.20)	.008	(.20)	.113 x .210	(2.9 x 5.3)	43	(64)
14	(1.63)	.006	(.15)	.008	(.20)	.092 x .168	(2.3 x 4.3)	29	(43)
14F*	(1.80)	.006	(.15)	.008	(.20)	.100 x .184	(2.5 x 4.7)	31	(46)
16	(1.29)	.006	(.15)	.008	(.20)	.079 x .142	(2.0 x 3.6)	18	(27)
16F*	(1.47)	.006	(.15)	.008	(.20)	.086 x .156	(2.2 x 4.0)	21	(31)
18	(1.02)	.006	(.15)	.008	(.20)	.068 x .120	(1.7 x 3.0)	12	(18)
18F*	(1.22)	.006	(.15)	.008	(.20)	.074 x .132	(1.9 x 3.4)	13	(19)
20	(0.81)	.005	(.13)	.008	(.20)	.058 x .100	(1.5 x 2.5)	7.8	(12)
20F*	(0.97)	.005	(.13)	.008	(.20)	.062 x .108	(1.6 x 2.7)	8.9	(13)
22	(0.64)	.005	(.13)	.006	(.15)	.048 x .084	(1.2 x 2.1)	5.0	(7.4)
24	(0.51)	.005	(.13)	.006	(.15)	.042 x .072	(1.1 x 1.8)	3.3	(4.9)
24F*	(0.61)	.005	(.13)	.006	(.15)	.046 x .080	(1.2 x 2.0)	3.7	(5.5)

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 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.