

# THERMOCOUPLE WIRE PVC Insulated Rip Cord 221°F (105°C)

## Applications

- Temperature Sensors
- Testing
- Laboratories
- Transportation
- Heating and
- ...Air Conditioning
- Appliances
- Validation

## Available Options

- Tighter than Special Limit
- ...Accuracy Tolerances
- Special Color Codes
- Calibration Test Reports

## Product Features

- Continuous use up
- ...to 221F (105C)
- Flame Retardant
- Small Compact Size
- Individual Insulation
- ...Color Coded
- Economical Construction
- Flexible
- Rip Design for Easy
- ...Conductor Seperation



## Product Specifications

Conductors: Solid or stranded thermocouple wire per

ASTM E230 & ANSI MC96.1

Insulation: Flame retardant PVC

Construction: Parallel conductors bonded together

Operating Temperature: -15F (-26C) to +221F (+105C) continuous

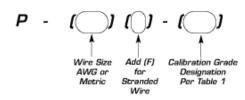
Limits of Error: Conforms to ASTM E230, IEC 584

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		Outer Di	Outer Diameter		Net Weight	
<b>AWG</b>	<u>(MM)</u>	inches	(MM)	<u>inches</u>	(MM)	LB/MF	(KG/KM)	
14	(1.63)	.012	(.30)	.088 x .176	$(2.2 \times 4.5)$	29	(43)	
14F*	(1.80)	.012	(.30)	.100 x .200	$(2.5 \times 5.1)$	32	(48)	
16	(1.29)	.012	(.30)	.075 x .150	$(1.9 \times 3.8)$	19	(28)	
16F*	(1.47)	.012	(.30)	.084 x .168	$(2.1 \times 4.2)$	22	(33)	
18	(1.02)	.012	(.30)	.064 x .128	$(1.6 \times 3.3)$	12	(18)	
18F*	(1.22)	.012	(.30)	.072 x .144	$(1.8 \times 3.7)$	14	(21)	
20	(0.81)	.010	(.25)	.052 x .104	$(1.3 \times 2.6)$	7.8	(12)	
20F*	(0.97)	.010	(.25)	.058 x .116	$(1.5 \times 2.9)$	8.4	(13)	
22	(0.64)	.010	(.25)	.045 x .090	$(1.1 \times 2.3)$	5.3	(7.9)	
24	(0.51)	.010	(.25)	.040 x .080	$(1.0 \times 2.0)$	3.5	(5.2)	
24F*	(0.61)	.010	(.25)	.044 x .088	$(1.1 \times 2.2)$	3.8	(5.7)	

#### 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)**

	Temperature Range	Grade	Standard Grade Limits F (C) whichever	Grade	Special Grade Limits F (C) whichever
Thermocouple Type	<u>F (C)</u>	<b>Designation</b>	<u>is greater</u>	<b>Designation</b>	<u>is greater</u>
Thermocouple Wire					
$T^-$	32 (0) to 700 (370)	T	$\pm 1.8$ (1) or $\pm 0.75\%$	TT	±0.9 (0.5) or 0.4%
J	32 (0) to 1400 (760)	J	$\pm 4$ (2.2) or $\pm 0.75\%$	JJ	$\pm 2 (1.1)$ or $0.4\%$
E	32 (0) to 1600 (870)	E	$\pm 3.1 (1.7)$ or $\pm 0.50\%$	EE	$\pm 1.8$ (1) or $0.4\%$
K or N	32 (0) to 2300 (1260)	K or N	$\pm 4$ (2.2) or $\pm 0.75\%$	KK or NN	$\pm 2 (1.1)$ or $0.4\%$
T*	-328 (-200) to 32 (0)	T	$\pm 1.8$ (1) or $\pm 1.5\%$	TT	±0.9 (0.5) or 0.8%**
E*	-328 (-200) to 32 (0)	E	$\pm 3.1 (1.7) \text{ or } \pm 1\%$	EE	±1.8 (1) or 0.5%**
K*	-328 (-200) to 32 (0)	K	$\pm 4 (2.2)$ or $\pm 2\%$	KK	**
Extension Wire					
TX	32 (0) to 212 (100)	TX	$\pm 1.8(1)$	TTX	$\pm 0.9 (0.5)$
JX	32 (0) to 400 (200)	JX	±4 (2.2)	JJX	$\pm 2(1.1)$
EX	32 (0) to 400 (200)	EX	$\pm 3.1 (1.7)$	EEX	$\pm 1.8(1)$
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***	$\pm 7.6 (4.2)$		
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.



# TE Wire & Cable LLC

107 North Fifth Street Saddle Brook, NJ 07663-6167 Toll Free: 888-483-9473 Tel: 201-845-9400 Fax: 201-291-1190

