



Type "CX" Thermocouple Extension Wire Insulated

(Alloy 405 vs. Alloy 426) ANSI Color Code: Positive – Orange, Negative – Red, Overall – Orange/Black Tracer

Insulation	Gage	Code	Solid/Stranded	Normal Size	Insulation Temp. Rating
Glass Braided Duplex-Parallel Braided Jacket	24	CX-24-GG40	Solid	.050 x .090	482C (900F)

THERMOCOUPLE AND THERMOCOUPLE EXTENSION WIRE COLOR CODES

R	S	B	C	
(+) Platinum 13% Rhodium (-) Platinum	(+) Platinum 10% Rhodium (-) Platinum	(+) Platinum 30% Rhodium (-) Platinum 6% Rhodium	(+) Tungsten 5% Rhenium (-) Tungsten 26% Rhenium	Thermocouple wire Letter Designator Alloy Combination & Polarity
NOT AVAILABLE INSULATED	NOT AVAILABLE INSULATED	NOT AVAILABLE INSULATED	NOT AVAILABLE INSULATED	Insulated Thermocouple Wire Color Code Note: Some insulations cannot be color coded
2650°F (1450°C)	2650°F (1450°C)	3100°F (1700°C)	4200°F (2300°C) (for vacuum or inert atmospheres)	Bare Wire Temperature Range Note: Smaller wire sizes have shorter T/C life at higher temperatures
32°F (0°C)	32°F (0°C)	1600°F (870°C)	800°F (400°C)	

MARLIN THERMOCOUPLE WIRE

RX	SX	BX	CX	
(+) Copper (-) Copper Alloy II	(+) Copper (-) Copper Alloy II	(+) Copper Alloy 630 (-) Copper	(+) Copper Alloy 405 (-) Copper Alloy 426	T/C Extension wire Letter Designator Alloy Combination & Polarity
BLACK (+) RED (-) GREEN	BLACK (+) RED (-) GREEN	GREY (+) RED (-) GREY	WHITE/RED (+) RED (-) WHITE/RED	Insulated T/C Extension wire Color Code
400°F (200°C)	400°F (200°C)	400°F (200°C)	1600°F (870°C)	Bare Extension Wire Temperature Range
75°F (25°C)	75°F (25°C)	32°F (0°C)	32°F (0°C)	

MARLIN T/C EXTENSION WIRE

Insulation Temperature Range		
	PVC	221°F (105°C)
	Silicone Rubber	500°F (260°C)
	FEP Teflon	400°F (204°C)
	PFA Teflon	500°F (260°C)
	TFE Teflon (tape)	500°F (260°C)
	Kapton (tape)	600°F (316°C)
	Glass (braid)	900°F (482°C)
	*High-Temp. Glass	1300°F (704°C)
	*Refrasil®	1600°F (871°C)
	*Ceramic (braid)	2400°F (1315°C)
	*(Not available color coded)	



THERMOCOUPLE AND THERMOCOUPLE EXTENSION WIRE GENERAL

Example: J-20-GG40
Type J, T/C Grade, Standard Tolerance, Solid, 20 GA., Glass/Glass Insulation, Parallel, No Overbraid

CONDUCTOR: T/C Type/
Grade - T/C or Extension
Tolerance
Solid or Standard

WIRE GA.:

INSULATION: CONDUCTOR OVERALL

CONSTRUCTION:

PROTECTIVE OVERBRAID

J - 20 - G G 4 0

↑

CODE
T
J
E
K
N
TX
JX
EX
NX
RX
SX
BX
CX

↑

CODE
14
16
18
20
24
30
36
40

↑

INSULATION	CODE	CODE
NONE	—	O
PVC	P	P
Silicone Rubber	L	L
Extruded Teflon FEP	E	E
Extruded Teflon PFA	F	F
Taped Teflon TFE	T	T
Kapton	K	K
Synthetic Fiber	S	S
Wrapped Glass	W	—
Glass Braid	G	G
Hi-Temp Glass	H	H
Refrasil	R	R
Ceramic	C	C

↑

CODE	OVERBRAID
0	NONE
1	SS
2	INCONEL

NOTES:

K - TYPE K
Standard Tolerance
T/C Grade,
Solid Conductors

KK - Special Tolerance

KX - Extension Grade

KF - Stranded Conductors
(Flexible)

For Single Conductor
KPF - Type K - Positive leg
Standard Tolerance
T/C Grade
Stranded Conductor

KNF - TYPE K - Negative leg

“—” designates not available.

CONSTRUCTION	CODE
Insulated Single	1
Insulated Duplex - Ripcord	3
Insulated Duplex - Paralleled with Overall Jacket	4
Insulated Duplex - Twisted	7
Insulated Duplex - Twisted with Overall Jacket	8
Insulated Duplex - Twisted with Mylar backed Al. Shield and Overall Jacket	9