## **Thermocouple Extension Wire**



## Thermocouple Extension Wire Color Code & Specifications (United States, Canada & Mexico)

	ANSI	Positive	Negative		Initial Calibration Tolerances	
ANSI Code	Color Code	(+) Lead	(-) Lead	Temperature Range	Standard	Special
JX	<u></u> = ±	Iron	Constantan (45% Nickel, 55% Copper)	32-392°F (0-200°C)	±2.2°C	±1.1°C
KX	±	Chromel <sup>®</sup> (90% Nickel, 10% Chromium)	Alumel (95% Nickel, 2% Aluminum, 2% Manganese, 1% Silicon)	32-392°F (0-200°C)	±2.2°C	±1.1°C
EX	±	Chromel <sup>®</sup> (90% Nickel, 10% Chromium)	Constantan (45% Nickel, 55% Copper)	32-392°F (0-200°C)	±1.7°C	±1.1°C
TX	<u></u> ±	Copper	Constantan (45% Nickel, 55% Copper)	32 to 212°F (0-100°C)	±1.0°C	±0.5°C
NX	±	Nicrosil (84.6% Nickel, 4% Chromium, 1.4 % Silicon)	Nisil (95.6% Nickel, 4.4 % Silicon)	32-392°F (0-200°C)	±2.2°C	±1.1°C
Compensating Extension Wire Type						
RX*	±	Copper	Copper Alloy	32-392°F (0-200°C)	±9°F (±5°C)	N/A
SX*	±	Copper	Copper Alloy	32-392°F (0-200°C)	±9°F (±5°C)	N/A
BX†*	±	Copper	Copper	32 to 212°F (0-100°C)	+0°F -6.7°F (+0°C (-3.7°C)	N/A

<sup>\*</sup> Due to the non-linearity of the types R, S, and B temperature-emf curves, the error introduced into a thermocouple system by the compensating wire will be variable when expressed in degrees. The degree C tolerances are based on the following measuring junction temperatures.

Type Wire Measuring Junction Temperature

SX Greater than 1598°F (870°C)

BX Greater than 1832°F (1000°C)

†Copper versus copper compensating extension wire, usable to 100°C (212°F) with maximum deviations as indicated, but with no significant deviation over 0°C to 50°C (32°F to 122°F) range.