

Thermocouple and Compensating Wire

X = Extension Grade
C = Compensating Grade

Color code and limits of error for thermocouple and compensating wire as per ANSI MC 96.1 - 1975

Type	Conductor		Color Code			Temperature Range	Limits of error	
	Positive	Negative	Sheath	Positive	Negative		Standard	Special
TX	Copper	Constantan	Blue	Blue	Red	-60 to +100°C	± 1.0°C	± 0.5°C
JX	Iron	Constantan	Black	White	Red	0 to +200°C	± 2.2°C	± 1.1°C
EX	Chromel	Constantan	Purple	Purple	Red	0 to +200°C	± 1.7°C	--
KX	Chromel	Alumel	Yellow	Yellow	Red	0 to +200°C	± 2.2°C	--
WX*	Iron	Cu/Nickel	White	Green	Red	+24 to +200°C	± 3.33°C	--
VX**	Copper	Constantan	Red	Brown	Red	+24 to +200°C	± 3.33°C	--
SX	Copper	Cu/Ni alloy	Green	Black	Red	0 to +200°C	± .057mV	--
BX	Copper	Cu/Ni alloy	Grey	Grey	Red	0 to +50°C & +50...+200°C	3.7°C	--

- The compensating cable WX for K thermocouple included in previous ASA C 96.1 964 rules, has been excluded from ANSI MC 96.1 1975 rules.
- The compensating cable VX for K thermocouples included in previous ISA RP1, has been excluded from up-to-date ASA and ANSI rules

Color code for thermocouple grade wires as per ANSI MC 96.1 - 1975

Type	Conductor		Jacket	Color Code		Temperature Range
	Positive	Negative		Positive	Negative	
T	Copper	Constantan	White	Blue	Red	(-)200 to 0°C & 0 to (+)370°C
J	Iron	Constantan	Black	White	Red	0...+760°C
E	Chromel	Constantan	Purple	Purple	Red	(-)200 to 0°C & 0 to (+)870°C
K	Chromel	Alumel	Yellow	Yellow	Red	0 to (+)1260°C