

THERMOCOUPLE WIRE

Thermocouple Grade

A thermocouple is made by the joining together of two dissimilar metal conductors. When the temperature changes at the joint between the two conductors, a voltage is generated. By transmitting that voltage to a special meter, those temperature changes may be monitored and, if desired, recorded. This process is most useful in process instrumentation where temperature monitoring is essential.

ISA STANDARDS							
WIRE TYPE	CONDUCTOR TYPE		COLOR CODE			CALIBRATION TEMPERATURE	STD. LIMITS OF ERROR
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	JACKET		
THERMOCOUPLE GRADE							
J	Iron	Constantan	White	Red	Brown	0° to 530°F	±4°F
						530° to 1400°F	±3/4%
K	Chromel	Alumel	Yellow	Red	Brown	0° to 530°F	±4°F
						530° to 2300°F	±3/4%
T	Copper	Constantan	Blue	Red	Brown	-150° to -75°F	±2%
						-75° to 200°F	±1 1/2°F
						200° to 700°F	±3/4%
E	Chromel	Constantan	Purple	Red	Brown	0° to 600°F	±3°F
						530° to 1400°F	±1/2%

CABLE USA PART NUMBER	ISA TYPE	SIZE AWG	STRANDING	NOMINAL INSUL. THICKNESS (INCHES)	NOMINAL JACKET THICKNESS (INCHES)	NOMINAL O.D. (INCHES)	WEIGHT (LBS. PER MFT)
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200°C Thermocouple Grade FEP

2 Conductor

FEP insulation and jacket. Conductors laid parallel. Unshielded.

222002CJ.FEP	J	20	SOLID	.010	.015	.082X.134	15.9
222002CK.FEP	K	20	SOLID	.010	.015	.082X.134	14.6
222002CT.FEP	T	20	SOLID	.010	.015	.082X.134	15.9
222002CE.FEP	E	20	SOLID	.010	.015	.082x.134	15.9

Also available in stranded conductors. Other conductor sizes available. Consult factory.

260°C Thermocouple Grade PFA

2 Conductor

PFA insulation and jacket. Conductors laid parallel. Unshielded.

222002CJ.PFA	J	20	SOLID	.010	.015	.082X.134	15.9
222002CK.PFA	K	20	SOLID	.010	.015	.082X.134	14.6
222002CT.PFA	T	20	SOLID	.010	.015	.082X.134	15.9
222002CE.PFA	E	20	SOLID	.010	.015	.082x.134	15.9

Also available in stranded conductors. Other conductor sizes available. Consult factory.

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THERMOCOUPLE WIRE Extension Grade

A thermocouple is made by the joining together of two dissimilar metal conductors. When the temperature changes at the joint between the two conductors, a voltage is generated. By transmitting that voltage to a special meter, those temperature changes may be monitored and, if desired, recorded. This process is most useful in process instrumentation where temperature monitoring is essential.

ISA STANDARDS							
WIRE TYPE	CONDUCTOR TYPE		COLOR CODE			CALIBRATION TEMPERATURE	STD. LIMITS OF ERROR
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	JACKET		
EXTENSION GRADE							
JX	Iron	Constantan	White	Red	Black	400°F	±4°F
KX	Chromel	Alumel	Yellow	Red	Yellow	400°F	±4°F
TX	Copper	Constantan	Blue	Red	Blue	200°F	±1 1/2°F
EX	Chromel	Constantan	Purple	Red	Purple	400°F	±3°F

CABLE USA PART NUMBER	ISA TYPE	SIZE AWG	STRANDING	NOMINAL INSUL. THICKNESS (INCHES)	NOMINAL JACKET THICKNESS (INCHES)	NOMINAL O.D. (INCHES)	WEIGHT (LBS. PER MFT)
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Extension Grade FEP

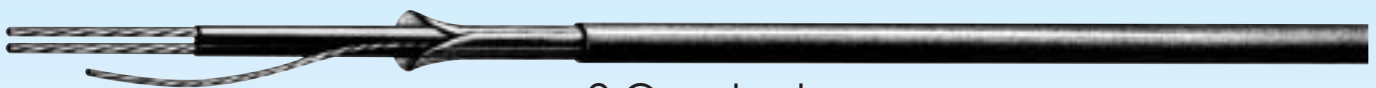


2 Conductor

FEP insulation and jacket. Conductors laid parallel. Unshielded. Many other types & sizes available - consult factory.

222002CU.JX	JX	20	7x28	.010	.015	.088X.146	17.8
221602CU.JX	JX	16	SOLID	.010	.015	.101X.172	28.1
222002CU.KX	KX	20	SOLID	.010	.015	.082X.134	15.9
221602CU.KX	KX	16	SOLID	.010	.015	.101X.172	28.1
222002CU.TX	TX	20	SOLID	.010	.015	.082X.134	15.9
221602CU.TX	TX	16	SOLID	.010	.015	.101X.172	28.1

Extension Grade FEP



2 Conductor

FEP insulation and jacket. Conductors twisted. Additional types, sizes and multi-pair configurations available - consult factory. Foil shielded with drain wire.

222002CF.JX	JX	20	7x28	.010	.015	.152	20.6
221602CF.JX	JX	16	7x24	.010	.015	.192	34.3
222002CF.KX	KX	20	7x28	.010	.015	.152	20.6
221602CF.KX	KX	16	7x24	.010	.015	.192	34.3
222002CF.TX	TX	20	7x28	.010	.015	.152	20.6
221602CF.TX	EX	16	7x24	.010	.015	.152	20.6