Thermocouple Wire EPR/CPE Multi Pair

Flexible Thermocouple Extension Cable, TC 600V 90°C



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Thermocouple wire per ANSI MC 96.1 & ASTM E230 (Solid or stranded available)
2. **Insulation:** Extruded EPR
3. **Twisted Pair:** Conductors twisted together with a drain wire and alum/mylar shield
4. **Overall Shielded:** Aluminum / mylar shield and drain wire is applied over the core
5. **Overall Jacket:** Extruded CPE

APPLICATIONS AND FEATURES:

For use as a 600 volt, multi pair thermocouple cable where flame retardance, moisture/chemical resistance, and sunlight resistance are critical. Cable can be installed in free air, in raceways or direct burial. The cable is also approved for damp or dry locations as well as Class 1 Division II industrial hazardous locations per NEC 501-4(b) for (UL) Type Tray Cables (TC). Per ASTM E20 & ANSI MC 96.1. Positive conductor is numbered.

UL Type TC. Excellent physical properties and electrical properties. Resistance to flame, crush, compression and cuts. Good chemical resistance and mechanical strength. Flexible.

SPECIFICATIONS:

- ASTM E230 Temperature-Electromotive Force (emf) Tables for Standardized Thermocouples
- UL 1277 Vertical Cable Tray Flame Tests (70,000 BTU/Hr)
- ICEA T-29-520 Flame Test (210,000 BTU/Hr)
- IEEE 383 Flame Test (70,000 btu)
- IEEE 1202/FT4 Flame Test (70,000 BTU/hr) 350kcmil and Larger
- ANSI MC 96.1 Temperature Measurement Thermocouples

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Table 1 – Weights and Measurements

Stock Number	Cond. Size	Number of Pairs	Insul. Thickness	Jacket Thickness	Approx. OD	Approx. Weight	Temp. Rating	Standard (UL or other)
	AWG/Kcmil	No.	mil	mil	inch	lb/1000ft	°C	Style/Type
C4E_20	20	1	31	45	0.270	39	90	Type TC
C4E_22	20	2	31	45	0.415	75	90	Type TC
C4E_24	20	4	31	45	0.480	120	90	Type TC
C4E_28	20	8	31	60	0.645	230	90	Type TC
C4E_30	20	12	31	60	0.760	320	90	Type TC
C4E_32	20	16	31	80	0.895	440	90	Type TC
C4E_34	20	24	31	80	1.055	650	90	Type TC
C4E_36	20	36	31	80	1.255	880	90	Type TC
C4E_40	16	1	31	45	0.310	48	90	Type TC
C4E_42	16	2	31	45	0.485	105	90	Type TC
C4E_44	16	4	31	60	0.600	195	90	Type TC
C4E_48	16	8	31	60	0.760	340	90	Type TC
C4E_50	16	12	31	80	0.940	515	90	Type TC
C4E_52	16	16	31	80	1.055	660	90	Type TC
C4E_54	16	24	31	80	1.250	940	90	Type TC
C4E_56	16	36	31	100	1.525	1400	90	Type TC

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
0=Type E // 1=Type J // 2=Type K // 3=Type T

Table 2 – Weights and Measurements (Metric)

Stock Number	Cond. Size	Number of Pairs	Insul. Thickness	Jacket Thickness	Approx. OD	Approx. Weight	Temp. Rating	Standard (UL or other)
	AWG/Kcmil	No.	mm	mm	mm	kg/km	°C	Style/Type
C4E_20	20	1	0.79	1.14	6.86	58	90	Type TC
C4E_22	20	2	0.79	1.14	10.54	112	90	Type TC
C4E_24	20	4	0.79	1.14	12.19	179	90	Type TC
C4E_28	20	8	0.79	1.52	16.38	342	90	Type TC
C4E_30	20	12	0.79	1.52	19.30	476	90	Type TC
C4E_32	20	16	0.79	2.03	22.73	655	90	Type TC
C4E_34	20	24	0.79	2.03	26.80	967	90	Type TC
C4E_36	20	36	0.79	2.03	31.88	1310	90	Type TC
C4E_40	16	1	0.79	1.14	7.87	71	90	Type TC
C4E_42	16	2	0.79	1.14	12.32	156	90	Type TC
C4E_44	16	4	0.79	1.52	15.24	290	90	Type TC
C4E_48	16	8	0.79	1.52	19.30	506	90	Type TC
C4E_50	16	12	0.79	2.03	23.88	766	90	Type TC
C4E_52	16	16	0.79	2.03	26.80	982	90	Type TC
C4E_54	16	24	0.79	2.03	31.75	1399	90	Type TC
C4E_56	16	36	0.79	2.54	38.73	2083	90	Type TC