

Thermocouple Wire Polyimide Film Insulation & Jacket

600°F 316°C Continuous, 800°F 427°C Single Reading



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:** Fused Polyimide Tape
3. **Overall Jacket:** Fused Polyimide Tape

APPLICATIONS AND FEATURES:

Widely used in petrochemical facilities, the aerospace industry and also in electrical generating facilities. Also provides stability in low temperature applications. Excellent flame retardance and chemical resistance. Excellent resistance to acids, solvents, radiation and abrasion. Good resistance to moisture.

Stainless Steel, Inconel metal, or Tin Plated Copper overbraid is available on request. Type E, J, K, T and other Types available on request.

SPECIFICATIONS:

- ASTM E230 Temperature-Electromotive Force (emf) Tables for Standardized Thermocouples
- ANSI MC 96.1 Temperature Measurement Thermocouples



Table 1 – Weights and Measurements

Stock Number	Cond. Size	Cond. Number	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
C4K_00	24	2	6	6	0.080 x 0.130	4	316 / 427	Type E, J, K, T
C4K_10	22	2	6	6	0.085 x 0.141	6	316 / 427	Type E, J, K, T
C4K_20	20	2	6	6	0.092 x 0.154	9	316 / 427	Type E, J, K, T
C4K_30	18	2	6	6	0.100 x 0.170	14	316 / 427	Type E, J, K, T
C4K_40	16	2	6	6	0.111 x 0.192	20	316 / 427	Type E, J, K, T
C4K_05	24(7)	2	6	6	0.084 x 0.138	4	316 / 427	Type E, J, K, T
C4K_25	20(7)	2	6	6	0.096 x 0.162	9	316 / 427	Type E, J, K, T
C4K_45	16(7)	2	6	6	0.119 x 0.208	20	316 / 427	Type E, J, K, T

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

Conductor insulation and overall jacket are color coded per ANSI MC 96.1 and ASTM E230.

International color codes available on request.

Available in standard and special limits of error per ANSI MC 96.1, ASTM E230 and IEC 584.

Table 2 – Weights and Measurements (Metric)

Stock Number	Cond. Size	Cond. Number	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
C4K_00	24	2	0.15	0.15	2.03 x 3.30	6	316 / 427	Type E, J, K, T
C4K_10	22	2	0.15	0.15	2.16 x 3.58	9	316 / 427	Type E, J, K, T
C4K_20	20	2	0.15	0.15	2.34 x 3.91	13	316 / 427	Type E, J, K, T
C4K_30	18	2	0.15	0.15	2.54 x 4.32	21	316 / 427	Type E, J, K, T
C4K_40	16	2	0.15	0.15	2.82 x 4.88	30	316 / 427	Type E, J, K, T
C4K_05	24(7)	2	0.15	0.15	2.13 x 3.51	6	316 / 427	Type E, J, K, T
C4K_25	20(7)	2	0.15	0.15	2.44 x 4.11	13	316 / 427	Type E, J, K, T
C4K_45	16(7)	2	0.15	0.15	3.02 x 5.28	30	316 / 427	Type E, J, K, T

