Constantan® Spooled Wire

Constantan® wire (TCR ~0.00002 K?¹) — Type E/J/T thermocouple negative leg & strain gauge sensing element for precision resistance applications. **SKU:** 1000001069-group
Product Code: CU04-WR-000150

Material Properties for Alloys

Mechanical Properties

Element	Value
Hardness - Brinell	100-300
Elongation at break(%)	45
Modulus of elasticity(GPa)	162
Izod impact strength(J m?¹)	107
Tensile strength(MPa)	400-590

Electrical Properties

Element	Value
Electrical resistivity(µOhmcm)	52
Temperature coefficient(K?¹)	0.00002+/-

Thermal Properties

Element	Value
Maximum use temperature in air(C)	500
Melting point(C)	1225-1300
Thermal conductivity(W m?¹ K?¹)	19.5@23°C
Coefficient of thermal expansion(x10?? K?¹)	14.9@20-100°C

Physical Properties

Element	Value
Density(gcm?³)	8.9