

Polyurethane Constantan® Thermocouple Insulated Wire

Formula: Cu55/Ni45

Conductor Diameter: 0.07mm

Insulation: Polyurethane

Insulation Thickness: 0.01mm

Length: 20m

Product Shape: Thermocouple (May Be Used As One Component)

UOM Code: 062-765-17

SKU: 1000008784-group

Product Code: CU04-SW-000130

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 ²)	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($\times 10^{-6}$ K ⁻¹)	14.9@20-100°C

Physical Properties

Element	Value
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Density(gcm ³)	8.9
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