

Iron/Nickel Alloy Spooled Wire (Fe50/Ni50)

Formula: Fe50/Ni50

Product Shape: Spooled

Diameter: 1mm

Length: 1m

Temper: Annealed

UOM Code: 121-419-82

SKU: 1000032085-group

Product Code: FE07-WR-000160

Material Properties for Alloys

Mechanical Properties

Element	Value
Elongation at break(%)	35
Modulus of elasticity(GPa)	159
Tensile strength(MPa)	552

Electrical Properties

Element	Value
Electrical resistivity(μOhmcm)	44
Temperature coefficient(K^{-1})	-

Magnetic Properties

Element	Value
Curie temperature(C)	530

Thermal Properties

Element	Value
Melting point(C)	1400-1450
Specific heat($\text{J K}^{-1} \text{kg}^{-1}$)	502@23°C
Thermal conductivity($\text{W m}^{-1} \text{K}^{-1}$)	14@23°C
Coefficient of thermal expansion($\times 10^{-6} \text{K}^{-1}$)	9.9@25-450°C

Physical Properties

Element	Value
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Density(gcm ³)	8.39
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