

Alloy 825 Rod

Formula: Ni_{39.5}/Fe₃₂/Cr₂₂/Mo₃/Cu₂/Ti

Diameter: 12mm

Length: 500mm

Temper: Annealed

UOM Code: 307-686-66

SKU: 1000130644-group

Product Code: NL06-RD-000120

Material Properties for Alloys

Mechanical Properties

Element	Value
Hardness - Brinell	100-200
Elongation at break(%)	45
Modulus of elasticity(GPa)	196
Tensile strength(MPa)	550-585

Magnetic Properties

Element	Value
Initial permeability	1.005
Curie temperature(C)	-196

Electrical Properties

Element	Value
Electrical resistivity(μOhmcm)	131
Temperature coefficient(K^{-1})	-

Thermal Properties

Element	Value
Melting point(C)	2500
Specific heat($\text{J K}^{-1} \text{kg}^{-1}$)	440@23°C
Thermal conductivity($\text{W m}^{-1} \text{K}^{-1}$)	11.1@23°C

Element	Value
Coefficient of thermal expansion($\times 10^{-6} \text{ K}^{-1}$)	14.1@20-200

Physical Properties

Element	Value
Density(gcm^{-3})	8.14