Invar® Rod

Invar rod is a controlled-expansion iron–nickel alloy providing extremely low thermal expansion, high strength, and machinability for aerospace and precision instrumentation. **SKU:** 1000000818-group
Product Code: FE02-RD-000153

Material Properties for Alloys

Mechanical Properties

Element	Value
Hardness - Brinell	160
Elongation at break(%)	45
Modulus of elasticity(GPa)	140-150
Tensile strength(MPa)	450-590

Electrical Properties

Element	Value
Electrical resistivity(µOhmcm)	75-85

Magnetic Properties

Element	Value
Curie temperature(C)	279

Thermal Properties

Element	Value
Melting point(C)	1427
Specific heat(J K?¹ kg?¹)	515@23°C
Thermal conductivity(W m?¹ K?¹)	13@23°C
Coefficient of thermal expansion(x10?? K?¹)	1.7-2@20-90°C

Physical Properties

Element	Value
Density(gcm?³)	8