

# Inconel® 625 Rod

**Formula:** Ni61/Cr22/Mo 9/Fe 5

**Diameter:** 12mm

**Length:** 50mm

**Temper:** Annealed

**UOM Code:** 049-538-32

**SKU:** 1000007016-group

**Product Code:** NI04-RD-000110

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Hardness - Brinell	175-240
Elongation at break( % )	40
Modulus of elasticity( GPa )	147-210
Tensile strength( MPa )	950

### Magnetic Properties

Element	Value
Initial permeability	1.0006
Curie temperature( C )	-196

### Electrical Properties

Element	Value
Electrical resistivity( $\mu\text{Ohmcm}$ )	129
Temperature coefficient( $\text{K}^{-1}$ )	-

### Thermal Properties

Element	Value
Melting point( C )	1290-1350
Specific heat( $\text{J K}^{-1} \text{kg}^{-1}$ )	410@23°C
Thermal conductivity( $\text{W m}^{-1} \text{K}^{-1}$ )	9.8@23°C

<b>Element</b>	<b>Value</b>
Coefficient of thermal expansion( $\times 10^{-6} \text{ K}^{-1}$ )	12.8@20-100°C

## **Physical Properties**

<b>Element</b>	<b>Value</b>
Density( $\text{gcm}^{-3}$ )	8.44