

# AISI 410 Stainless Steel Rod

**Formula:** Fe/Cr12.5

**Diameter:** 9.5mm

**Length:** 1000mm

**UOM Code:** 771-640-72

**SKU:** 1000107288-group

**Product Code:** FE26-RD-000120

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Hardness - Brinell	140-175
Elongation at break( % )	38
Modulus of elasticity( GPa )	190-210
Izod impact strength( J m <sup>2</sup> )	10-136
Tensile strength( MPa )	480-1500

### Electrical Properties

Element	Value
Electrical resistivity( $\mu\text{Ohmcm}$ )	56-72

### Thermal Properties

Element	Value
Maximum use temperature in air( C )	750
Melting point( C )	1480-1530
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	18-24@23°C
Coefficient of thermal expansion( $\times 10^{-6}$ K <sup>-1</sup> )	10-12@20-100°C

### Physical Properties

Element	Value
Density( gcm <sup>3</sup> )	7.73