

# Manganin® Spooled Wire

**Formula:** Cu86/Mn12/Ni 2

**Product Shape:** Spooled

**Diameter:** 1.2mm

**Length:** 50m

**Temper:** Annealed

**UOM Code:** 008-696-21

**SKU:** 1000001211-group

**Product Code:** CU06-WR-000165

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Elongation at break( % )	50
Modulus of elasticity( GPa )	124-159
Izod impact strength( J m <sup>21</sup> )	107
Tensile strength( MPa )	300-600

### Electrical Properties

Element	Value
Electrical resistivity( μOhmcm )	43-48
Temperature coefficient( K <sup>21</sup> )	0.00001

### Thermal Properties

Element	Value
Maximum use temperature in air( C )	300
Melting point( C )	960
Thermal conductivity( W m <sup>21</sup> K <sup>21</sup> )	22@23°C
Coefficient of thermal expansion( x10 <sup>22</sup> K <sup>21</sup> )	14-19@20-100°C

### Physical Properties

Element	Value
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Density( gcm<sup>3</sup> ) 8.4