

# Constantan® Disk

**Formula:** Cu55/Ni45

**Temper:** As Rolled

**Thickness:** 0.05mm

**Diameter:** 4mm

**UOM Code:** 018-197-84

**SKU:** 1000002199-group

**Product Code:** CU04-FL-000140

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Hardness - Brinell	100-300
Elongation at break( % )	45
Modulus of elasticity( GPa )	162
Izod impact strength( J m <sup>2</sup> )	107
Tensile strength( MPa )	400-590

### Electrical Properties

Element	Value
Electrical resistivity( μOhmcm )	52
Temperature coefficient( K <sup>-1</sup> )	0.00002+/-

### Thermal Properties

Element	Value
Maximum use temperature in air( C )	500
Melting point( C )	1225-1300
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	19.5@23°C
Coefficient of thermal expansion( x10 <sup>-6</sup> K <sup>-1</sup> )	14.9@20-100°C

### Physical Properties

Element	Value
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Density( gcm<sup>3</sup> ) 8.9