

# Nickel/Iron Alloy Foil (Light Tight) (Ni80/Fe20)

**Formula:** Ni80/Fe20

**Temper:** As Rolled

**Thickness:** 1mm

**Length 1:** 25mm

**Length 2:** 25mm

**UOM Code:** 196-239-55

**SKU:** 1000078332-group

**Product Code:** NI29-FL-000100

## Material Properties for Alloys

### Magnetic Properties

Element	Value
Initial permeability	30000
Maximum permeability	400000
Coercivity (Hc)( A m <sup>-1</sup> )	0.02
Curie temperature( C )	460
Saturation flux density( T )	0.77

### Mechanical Properties

Element	Value
Elongation at break( % )	38
Tensile strength( MPa )	930

### Electrical Properties

Element	Value
Electrical resistivity( $\mu\text{Ohmcm}$ )	62
Temperature coefficient( K <sup>-1</sup> )	-

### Thermal Properties

Element	Value
Melting point( C )	1445

<b>Element</b>	<b>Value</b>
Thermal conductivity( $W m^{-1} K^{-1}$ )	34.6@23°C
Coefficient of thermal expansion( $\times 10^{-6} K^{-1}$ )	12.9@20-100°C