

# Polyimide Glass Sealing Alloy Insulated Wire (Fe54/Ni29/Co17)

**Formula:** Fe54/Ni29/Co17

**Conductor Diameter:** 0.03mm

**Insulation:** Polyimide

**Insulation Thickness:** 0.0025mm

**Length:** 20m

**UOM Code:** 132-006-68

**SKU:** 1000038565-group

**Product Code:** FE04-SW-000110

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Elongation at break( % )	30
Modulus of elasticity( GPa )	207
Tensile strength( MPa )	510-520

### Electrical Properties

Element	Value
Electrical resistivity( $\mu\text{Ohmcm}$ )	48.9
Temperature coefficient( $\text{K}^{-1}$ )	0.0037

### Magnetic Properties

Element	Value
Curie temperature( C )	435

### Thermal Properties

Element	Value
Melting point( C )	1450
Specific heat( $\text{J K}^{-1} \text{kg}^{-1}$ )	439@23°C
Thermal conductivity( $\text{W m}^{-1} \text{K}^{-1}$ )	17.3@23°C

<b>Element</b>	<b>Value</b>
Coefficient of thermal expansion( $\times 10^{-6} \text{ K}^{-1}$ )	4.81@20-200°C

## **Physical Properties**

<b>Element</b>	<b>Value</b>
Density( $\text{gcm}^{-3}$ )	8.36-8.5