

# Polyesterimide-Insulated AISI 302 Stainless Steel Wire

**Formula:** Fe/Cr18/Ni 8

**Conductor Diameter:** 0.025mm

**Insulation:** Polyesterimide

**Insulation Thickness:** 0.002mm

**Length:** 0.1m

**UOM Code:** 679-679-35

**SKU:** 1000099421-group

**Product Code:** FE20-SW-000111

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Hardness - Brinell	160-190
Elongation at break( % )	60
Modulus of elasticity( GPa )	190-210
Izod impact strength( J m <sup>2</sup> )	20-136
Tensile strength( MPa )	510-1100

### Electrical Properties

Element	Value
Electrical resistivity( $\mu\text{Ohmcm}$ )	70-72

### Thermal Properties

Element	Value
Melting point( C )	1400-1420
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	16.3@23°C
Coefficient of thermal expansion( $\times 10^{-6}$ K <sup>-1</sup> )	15-18@20-100°C

### Physical Properties

Element	Value
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Density( gcm<sup>3</sup> ) 7.92