

# Aluminum/Magnesium/Silicon Alloy Spooled Wire (Al99/Mg 0.5/Si 0.5)

**Formula:** Al99/Mg 0.5/Si 0.5

**Product Shape:** Spooled

**Diameter:** 0.25mm

**Length:** 100m

**Temper:** As Drawn

**UOM Code:** 513-816-89

**SKU:** 1000021483-group

**Product Code:** AL18-WR-000150

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Elongation at break( % )	16
Modulus of elasticity( GPa )	69.5
Tensile strength( MPa )	90-300

### Electrical Properties

Element	Value
Electrical resistivity( $\mu\text{Ohmcm}$ )	3.2
Temperature coefficient( $\text{K}^{-1}$ )	-

### Thermal Properties

Element	Value
Melting point( C )	655
Specific heat( $\text{J K}^{-1} \text{kg}^{-1}$ )	960@23°C
Thermal conductivity( $\text{W m}^{-1} \text{K}^{-1}$ )	209@23°C
Coefficient of thermal expansion( $\times 10^{-6} \text{K}^{-1}$ )	23.4@20-100°C

### Physical Properties

Element	Value
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Density( gcm<sup>3</sup> ) 2.7