

# Aluminum/Magnesium/Silicon Alloy Wire (Al98/Mg 1/Si 0.6)

**Formula:** Al98/Mg 1/Si 0.6

**Diameter:** 1mm

**Length:** 50m

**Temper:** As Drawn

**UOM Code:** 005-292-53

**SKU:** 1000000692-group

**Product Code:** AL03-WR-000170

## Material Properties for Alloys

### Mechanical Properties

Element	Value
Hardness - Brinell	10-100
Elongation at break( % )	20
Modulus of elasticity( GPa )	70
Izod impact strength( J m <sup>2</sup> )	27-34
Shear strength( MPa )	160-200
Tensile strength( MPa )	150-430

### Electrical Properties

Element	Value
Electrical resistivity( $\mu\text{Ohmcm}$ )	3.4-3.8
Temperature coefficient( K <sup>-1</sup> )	0.003

### Physical Properties

Element	Value
Density( gcm <sup>3</sup> )	2.69

### Thermal Properties

Element	Value
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Specific heat( J K <sup>-1</sup> kg <sup>-1</sup> )	904@23°C
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	180-193@23°C
Coefficient of thermal expansion( x10 <sup>-6</sup> K <sup>-1</sup> )	23@20-100°C