

3003 H18 Aluminum Sheet

Properties

General

Property	Temperature	Value	Comment
Density	23.0 °C	2.72 - 2.73 g/cm³	Typical for Wrought 3000 Series Aluminium

Mechanical

Property	Temperature	Value	Comment
Elastic modulus	23.0 °C	69.5 - 70 GPa	Typical for Wrought 3000 Series Aluminium
Plane-Strain Fracture Toughness	23.0 °C	22 - 35 MPa·√m	Typical for Wrought 3000 Series Aluminium
Poisson's ratio	23.0 °C	0.33 [-]	Typical for Wrought 3000 Series Aluminium
Shear modulus	23.0 °C	25 - 26 GPa	Typical for Wrought 3000 Series Aluminium
Tensile strength	23.0 °C	180 MPa	
Yield strength Rp0.2	23.0 °C	160 MPa	

Thermal

Property	Temperature	Value	Comment
	23.0 °C	2.2E-5 - 2.4E-5 1/K	Typical for Wrought 3000

Coefficient of
thermal
expansion

Series Aluminium

Melting point

[629 - 654 °C](#)

Typical for Wrought 3000
Series Aluminium

Specific heat
capacity

23.0 °C

[893 - 920 J/\(kg·K\)](#)

Typical for Wrought 3000
Series Aluminium

Thermal
conductivity

23.0 °C

[154 - 193 W/\(m·K\)](#)

Typical for Wrought 3000
Series Aluminium

Electrical

Property	Temperature	Value	Comment
Electrical conductivity	23.0 °C	2.30E+7 - 2.90E+7 S/m	Typical for Wrought 3000 Series Aluminium
Electrical resistivity	23.0 °C	3.4E-8 - 4.2E-8 Ω·m	Typical for Wrought 3000 Series Aluminium

Chemical properties

Property	Value
Copper	0.05 - 0.2 %
Iron	0.7 %
Manganese	1 - 1.5 %
Silicon	0.6 %
Zinc	0.1 %

Technological properties

Property	
Workability	Good workability.