

# 5754 H26 Aluminum Strip

## General

Property	Temperature	Value
Density	20.0 °C	<a href="#">2.66 - 2.68 g/cm<sup>3</sup></a>
	23.0 °C	<a href="#">2.66 g/cm<sup>3</sup></a>

## Mechanical

Property	Temperature	Value	Comment
Bending angle 90°	23.0 °C	<a href="#">1.5 - 3.5 °/t</a>	
Elastic modulus	-270.0 °C	<a href="#">70 GPa</a>	
	20.0 °C	<a href="#">70 - 70.5 GPa</a>	
	23.0 °C	<a href="#">70.5 GPa</a>	
	50.0 °C	<a href="#">69 GPa</a>	
	100.0 °C	<a href="#">68 GPa</a>	
	150.0 °C	<a href="#">66 GPa</a>	
	200.0 °C	<a href="#">63 GPa</a>	
	250.0 °C	<a href="#">57 GPa</a>	
	300.0 °C	<a href="#">50 GPa</a>	
Elongation	20.0 °C	<a href="#">4 %</a>	
Elongation A100	23.0 °C	<a href="#">4 %</a>	
Elongation A50	20.0 °C	<a href="#">4 - 6 %</a>	

	23.0 °C	<a href="#">4 - 6 %</a>	
<b>Elongation A50, transverse</b>	20.0 °C	<a href="#">4 - 6 %</a>	
<b>Hardness, Brinell</b>	20.0 °C	<a href="#">78 [-]</a>	
	23.0 °C	<a href="#">78 [-]</a>	
<b>Plane-Strain Fracture Toughnes</b>	23.0 °C	<a href="#">22 - 35 MPa·√m</a>	Typical for Wrought 5000 Series Aluminium
<b>Poisson's ratio</b>	20.0 °C	<a href="#">0.33 [-]</a>	
<b>Shear modulus</b>	20.0 °C	<a href="#">26.5 - 27 GPa</a>	
	23.0 °C	<a href="#">26.5 GPa</a>	
<b>Tensile strength</b>	20.0 °C	<a href="#">255 - 305 MPa</a>	
	23.0 °C	<a href="#">255 - 305 MPa</a>	
<b>Tensile strength, transverse</b>	20.0 °C	<a href="#">265 - 305 MPa</a>	
<b>Yield strength Rp0.2</b>	20.0 °C	<a href="#">190 - 225 MPa</a>	
	23.0 °C	<a href="#">190 - 225 MPa</a>	
<b>Yield strength Rp0.2, transverse</b>	20.0 °C	<a href="#">190 MPa</a>	

## Thermal

Property	Temperature	Value	Comment
<b>Coefficient of thermal expansion</b>	20.0 °C	<a href="#">2.39E-5 1/K</a>	
	100.0 °C	<a href="#">2.39E-5 1/K</a>	

Max service temperature		<a href="#">150 °C</a>	Typical for Wrought 5000 Series Aluminium
Melting point		<a href="#">610 - 640 °C</a>	
Specific heat capacity	20.0 °C	<a href="#">897 - 963 J/(kg·K)</a>	
Thermal conductivity	20.0 °C	<a href="#">132 - 160 W/(m·K)</a>	
	23.0 °C	<a href="#">140 - 160 W/(m·K)</a>	

## Electrical

Property	Temperature	Value
Electrical conductivity	20.0 °C	<a href="#">2.00E+7 - 2.30E+7 S/m</a>
	23.0 °C	<a href="#">2.00E+7 - 2.30E+7 S/m</a>
Electrical resistivity	20.0 °C	<a href="#">4.3E-8 - 5.3E-8 Ω·m</a>
	23.0 °C	<a href="#">4.35E-8 - 5E-8 Ω·m</a>

## Chemical properties

Property	Value
Chromium	<a href="#">0.3 %</a>
Copper	<a href="#">0.1 %</a>
Iron	<a href="#">0.4 %</a>
Magnesium	<a href="#">2.6 - 3.6 %</a>
Manganese	<a href="#">0.5 %</a>
Other	Mn + Cr = 0.1 - 0.6, each 0.05, total 0.15, Rest Al
Silicon	<a href="#">0.4 %</a>

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Titanium [0.15 %](#)

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Zinc [0.2 %](#)

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## Technological properties

### Property

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**Anodizing** decorative: gut (EQ: sehr gut), Protective: very good

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**Brazing** hard brazing (with flux/ without flux): poor / sufficient, friction soldering: acceptable, soft brazing with flux: poor

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**Corrosion properties** Seawater: very good to good, weathering: very good

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**Workability** Bending / Spinning (cold): good / acceptable, Impact extrusion (cold): sufficient, Deep drawing / upsetting (Condition) good (O) / good (H12)

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