

Datasheet: EN AW 6101B Rods, Bars & Profiles - Aluminium Alumeco ApS 10-04-2025				Internal alloy name: 6101B Chemical Symbol: AW-ALMgSi(B) International alloy name: EN AW-6101B UNS: A96101 DIN-Werkstoff no.: 3.3207 Alloy type: High conductivity alloy				
Main usage: • Electrical busbar • Heatsinks/exchangers • Conductors/connectors			Important norms and literature: General Standards: EN 573-3:2013: Aluminium and aluminium alloys – Chemical composition and form of wrought products – Part 3: Chemical composition and form of products. Product standards: EN 755-2:2016: Aluminium and aluminium alloys – Extruded rod/bar, tube and profiles – Part 2: Mechanical properties. Geometric Tolerance: EN 755-3: Aluminium and aluminium alloys – Extruded rod/bar, tube and profiles – Part 3: Round bars, tolerances on dimensions and form EN 755-4: Aluminium and aluminium alloys – Extruded rod/bar, tube and profiles – Part 4: Square bars, tolerances on dimensions and form EN 755-9: Aluminium and aluminium alloys – Extruded rod/bar, tube and profiles – Part 9: Profiles, tolerances on dimensions and form					
Main properties: • Relative high conductivity • Great corrosion resistance • Good machinability								
Chemical composition in %: EN 573-3:2013								
Al	Si	Fe	Cu	Mn	Mg	Zn	Others Max.	
							Each	Total
Remainder	0,30 – 0,6	0,10 – 0,30	Max. 0,05	Max. 0,05	0,35 – 0,6	Max. 0,10	0,03	0,10
Mechanical properties: EN 755-2:2016								
Temper	Dimensions Width mm			Tensile Stress R _m MPa	Proof Stress R _{p0,2} MPa	Elongation % Min.		Hardness* HBW
	Diameter	Width across- flats	Wall thickness			A	A _{50 mm}	
T6	-	≤ 15	≤ 15	Min. 215	Min. 160	8	6	70
T7	-	≤ 15	≤ 15	Min. 170	Min. 120	12	10	60
* Information values only;								
Physical properties:								
Density g/cm ³	Solidification range °C	Electrical conductivity %IACS	Thermal conductivity W/m K	Thermal expansion (µm m ⁻¹ K ⁻¹)	Annealing temperature °C	E - modulus (N / mm ²)		
2,69	585 – 650	T6: ≥ 52 T7: ≥ 55	218	23,5	350	70.000		
Properties and information's (3 high/good; 2 Middle; 1 Poor/bad)								
Resistance: Corrosion index, general: 3 Marine Atm. Corr index: 2 Hot workability: Extrusion: 3 Forging: 3 Cold formability: Cold formability general: 2 Deep drawing: 1 Bending: 2			Weldability: TIG welding: 2 MIG welding: 2 Solderability: Brazability index: 2 Solderability index: 2 Machinability: Machinability index: 2			Anodizing: Decorative anodizing surface treatment: 2 Protective anodizing index: 3 Hard anodizing: 3 Color anodizing: 2		