

Alloy Designation

ALUMINIUM Quality according to DIN EN 573-3	PREMIUM EN AW-6060
Chem. Designation according to DIN EN 573-3	EN AW-ALMgSi
Abbreviation according to DIN 1712-3	ALMgSi0.5
Material No. / Werkstoff-Nr. according to DIN 1712-3	3.3206

Specification



Round aluminium [RA]
pressed
L: 500 mm
L: 1,000 mm

Chemical composition EN AW 6060 (reference values as weight percent)

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
0.3 – 0.6	0.1 – 0.3	0 – 0.1	0 – 0.1	0.35 – 0.6	0 – 0.05	0 – 0.15	0 – 0.1

Mecanical properties (ambient temperatur / thickness dependent)

Tensile strength R_m	approx. 215 - 260 [N/mm ²]
Yield strength $R_{p0.2}$	140 - 160 [MPa]
Elongation A_{50}	6 - 8 [%]
Hardness (delivery condition)	max. 80 [HB]

Physical properties (ambient temperatur / characteristic values)

Density	2.70 [g/cm ³]
Modulus of elasticity	69.5 [GPa]
Electrical conductivity	34-38 [m/Ω · mm ²]
Thermal expansion coefficient	24.0 [K ⁻¹ · 10 ⁻⁶]
Thermal conductivity	200 - 220 [W/m · K]
Thermal conductivity	898 [J/kg · K]

Technical properties

The alloy EN AW 6060 is a widely used alloy in the extrusion sector. The corrosion resistance, with respect to seawater and normal environment, is very good. Further, it is easily weldable and has excellent properties for anodising, especially in the decorative area.

Applications

Windows and doors, metal construction, air conditioning technology, exhibition construction, interior design, textile industry, household articles, screws, decoration, architecture, pipelines and profiles.

