

## Alloy Designation

ALUMINIUM Quality according to DIN EN 573-3	PREMIUM EN AW-2011
Chem. Designation according to DIN EN 573-3	EN AW-AlCu6BiPb
Abbreviation according to DIN 1712-3	AlCuBiPb
Material No. / Werkstoff-Nr. according to DIN 1712-3	3.1655

## Specification



**Precision round aluminium [PRA]**  
drawn  
L: 1,000 mm  
L: 500 mm

## Chemical composition EN AW 2011 (reference values as weight percent)

Si	Fe	Cu	Bi	Zn	Pb
0 - 0.4	0 - 0.7	5.0 - 6.0	0.2 - 0.6	0 - 0.3	0.2 - 0.6

## Mecanical properties (ambient temperatur / thickness dependent)

Tensile strength $R_m$	ca. 370 - 410 [N/mm <sup>2</sup> ]
Yield strength $R_{p0.2}$	210 - 250 [MPa]
Elongation $A_{50}$	6 - 8 [%]
Hardness (delivery condition)	max. 120 [HB]

## Physical properties (ambient temperatur / characteristic values)

Density	2.82 [g/cm <sup>3</sup> ]
Modulus of elasticity	72.5 [GPa]
Electrical conductivity	24 - 32 [m/Ω · mm <sup>2</sup> ]
Thermal expansion coefficient	23.0 [K <sup>-1</sup> · 10 <sup>-6</sup> ]
Thermal conductivity	170 - 220 [W/m · K]
Specific thermal capacity	864 [J/kg · K]

## Technical properties

The alloy EN AW 2011 is an enhancement of the EN AW 2007. It is especially suitable for high cutting speeds due to the very short chip-break. This material can also be heat treated.

## Applications

Drilling-, turning- and milling properties (free cutting alloy), mechanical engineering, aviation and aerospace, defence technology.

