

Data sheet

EN AW - 4032 based on DIN EN 573

AlSi12,5MgCuNi

Chemical composition: (ref.values/mass %)

Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	other elements
11,0 – 13,5	1,0	0,50 – 1,30	-	0,8 – 1,3	0,10	0,5 – 1,3	0,25	single 0,05; total 0,15

Mechanical properties: (ref.values DIN EN 586-2)

Cross-sectional dimension in mm ²	Temper (DIN EN 515)	Yield strength		Tensile strength		Elongation at break		Hardness HBW 2,5/62,5 Guide value
		$R_{p\ 0,2}$ (MPa)		R_m (MPa)		A (%)		
		T ¹⁾	L ²⁾	T	L	T	L	
≤ 100	T 6	240	340	280	380	2	5	115

T¹⁾ Transverse direction to the grain flow / L²⁾ Parallel to the grain flow // These are the minimum values according to the standard.

The following information applies to the above alloy

- Additional features:**

Weldability: **Corrosion resistance**

Gas: 3 Seawater: 5
TIG: 3 Weather: 2
MIG: 3

- Delivery forms:**

Die forging or open die forging.

- Special material properties:**

Wrought alloy which achieves very good running characteristics at low and high temperatures.

- Application:**

Race pistons, engine components and chassis parts.

Notes:

- Cross-sectional dimensions: For larger cross-sections as specified above, the mechanical properties are basically to be determined per each component.
- Source specifications for flexural fatigue strength (www.alu-schlüssel.de).
- Corrosion+welding: Aluminium material data sheet. (evaluation scale: 1= excellent; 2= good; 3=acceptable; 4=inadequate; 5=not recommended; 6= unsuitable)
- All standards in the currently valid version.