Technical data: alfer® - Aluminium Profiles

Material	EN AW - 6060
Abbreviation	AlMgSi0,5
Composition	Al (Aluminium) Rest % Si (Silisium) 0,3 - 0,6 % Fe (Iron) 0,1 - 0,3 % Cu (Copper) 0,1 % Mn (Manganese) 0,1 % Mg (Magnesium) 0,35 - 0,6 % Cr (Chromium) 0,05% Zn (Zinc) 0,15 % Ti (Titanium) 0,10 % other elements Ni (Nickel), Ga (Gallium),V (Vanadium) in total 0,15 %
Material number	3.3206
Application area	Material can be used for decorative parts or parts with light to medium duty Not for car and aeroplane parts
Condition	heat-cured
Spec. gravity (density)	2,7 kg/dm³
Average coefficient of linear expansion between 20° and 100° C	23,70
Heat conductivity at 20°	2,20
Elec. conductivity at 20°	33,50
Elec. resistance (Ohm)	3,00
Hardness	F 22 (Brinell hardness 70 HB)
Tensile strength (N/mm²)	215 (Newton / square millimeter)
Tensile yield strength (N/mm²)	160 (Newton / square millimeter)
Elongation at break (A)	min. 12 %
Melting temperature	ca. 659°
Soft annealing temperature	350 - 400°
ISO abbreviation	Al-MgSi (Alu-Magnesium Silisium)
Internationales alloy registration (AA) no.	6060

The material AlMgSi0.5 has anodizing quality, is easy to weld and has a satisfactory resistance to chemical and weathering influences.

Aluminium can be welded well using inert gas (argon) in the MIG or WIG process. Aluminium can also be soldered with a suitable solder and flux material. Aluminium can be stuck together with aluminium very well. The 2 component special adhesive Araldite, which is available in hardware stores, is recommended for this purpose.

October 2009

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Summary of DIN/EN norms

Alloying	EN AW - 6060-T66 formerly AlMgSi0.5 F22
chemical composition: **Norm**	EN 573-3 The alloy composition for the profiles is regulated in this norm.
technical supply conditions: **Norm**	EN 755-1 This norm regulates things like the content of enquiries, offers, quality control etc.
mechanical properties: **Norm**	EN 755-2 The thresholds for all mechanical properties of aluminium profiles are set out in this norm.
Dimensions and tolerances: **Norm**	EN 755-3 Round bars EN 755-4 Square bars EN 755-5 Rectangular bars EN 755-6 Hexagonal bars EN 755-7 Seamless tubes EN 755-8 Extruded tubes (with chamber tool) EN 755-9 Profiles The thresholds for all dimensions and tolerances of aluminium profiles are set out in these norms.
Anodized products: **Norm**	DIN 17611 Minimum coating thicknesses, pre-treatment etc. of anodized aluminium profiles are described here.

October 2009