

G.AL® C210 DYNAMIC

Alloy's Characteristics	
Alloy	EN AW 5083
Type of Alloy	non heat treatable
Temper	O3
Surface	6-sides sawn, < 15 µm

Mechanical Properties ¹⁾		Typical values
Yield strength R _{p0,2}	[MPa]	115 - 130
Ultimate tensile strength R _m	[MPa]	250 - 280
Elongation A	[%]	18 - 25
Hardness HBW	[2,5/62,5]	75 - 80

Physical Properties ¹⁾		Typical values
Density	[g/cm ³]	2,66
Module of elasticity	[GPa]	70
Electrical conductivity	[m/Ω · mm ²]	16 - 18
Coefficient of thermal expansion	[K ⁻¹ · 10 ⁻⁶]	23,3
Thermal conductivity	[W/m · K]	110 - 130
Specific heat capacity	[J/kg · K]	900

Processing Characteristics ²⁾	
Dimensional stability	1
Machinability	1 - 2
Weldability (Gas / TIG / MIG / Resistance / EB)	4 / 2 / 2 / 2 / 1
Corrosion resistance (seawater / weather/ stress cracking)	1 / 1 / 3
Use at temperatures (max °C long/short terms) ³⁾	180 / 280
Anodising (technical / decorative / hard-) ⁴⁾	2 / 4 / 2
Polishability	2
Etching	3 - 4
Contact with food (according to EN 602)	yes

Tolerances			
Thickness in [mm]	Flatness [mm] ⁵⁾	Thickness [mm]	Width & Length [mm]
≤ 150		-0/ + 2,5	DIN ISO 2768-1m
> 150		-0/ +5	-0 / + 5

Standard Stock Sizes
Other dimension upon request

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- 1) Typical values at room temperature.
- 2) Ratings evaluation rating from 1 (very good) to 6 (inapplicable).
- 3) Without loss of strength after cooling down.
- 4) Technical anodising only - no warranty towards optical demands.
- 5) Surface flatness for whole plates is measured with a special, 1 meter long, digital flatness ruler.

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