

Data sheet CC333G CuAl10Ni5Fe5 Alumeco A/S		Internal alloy name: CC333G Nominal composition: CuAl10Ni5Fe5 DIN-Werkstoff no.: - Alloy type: Aluminium Bronze Revision date: 12-01-2021									
Main usage <ul style="list-style-type: none"> • Marine • Seawater acid • Any applications where extreme corrosion resistance is required • Valve parts • Pump parts • Tools 	Main properties <ul style="list-style-type: none"> • High Strength • Very good atmospheric corrosion resistance 	Important norms and literature EN 1982 - Copper and copper alloy ingots and castings									
Chemical composition (%) DIN/EN 1982											
Al	Cu	Fe^a	Mn	Ni^a	Bi	Cr	Mg	Pb	Si	Sn	Zn
8,5 — 10,5	76,0 — 83,0	4,0 — 5,5	Max. 3,0	4,0 — 6,0	Max. 0,01	Max. 0,05	Max. 0,05	Max. 0,03	Max. 0,1	Max. 0,1	Max. 0,50
<small>a) For permanent mould castings, the minimum iron content of ingots and castings shall be 3,0% and the minimum nickel content shall be 3,7%</small>											
Mechanical properties DIN/EN 1982											
Casting process and designation	Tensile Strength R_m N/mm²		0,2% proof strength Rp_{0,2} N/mm²		Elongation A %		Brinell Hardness** HBW				
	Min.		Min.		Min.		Min.				
Continuous GC	650		280		13		150				
Centrifugal GZ	650		280		13		150				
<small>** Information values only</small>											
Physical properties											
Density (20 °C)	Solidification range	Electrical conductivity	Thermal conductivity	Thermal expansion (20-300 °C)	Annealing temperature	E - modulus					
g cm ⁻³	°C	%IACS	W m ⁻¹ K ⁻¹	µm m ⁻¹ K ⁻¹	°C	N mm ⁻²					
7,6	1050-1080	7,5	38	17	-	124,000					
Properties and information											
Fabrication Properties						Joining Methods					
Hot Formability		Not Recommended				Soldering		Good			
Cold Formability		Not Recommended				Brazing		Fair			
						Oxy-acetylene welding		Good			
						Gas-shielded arc welding		Good			