

Data sheet CC483K CuSn12 Alumeco A/S				Internal alloy name: CC483K Nominal composition: CuSn12 DIN-Werkstoff no.: - Alloy type: Tin Bronze Revision date: 12-01-2021							
Main usage <ul style="list-style-type: none"> • Bearings & bushings • Pump parts/component • Piston rings • Valves and parts • Fittings • Gears 		Main properties <ul style="list-style-type: none"> • Good wear resistance • Good corrosion resistance 		Important norms and literature EN 1982 - Copper and copper alloy ingots and castings							
Chemical composition (%) DIN/EN 1982											
Cu	Ni	P	Pb	Sn	Al	Fe	Mn	S	Sb	Si	Zn
85,0 – 88,5 ^a	Max. 2,0	Max. 0,60	Max. 0,7	11,0 ^a – 13,0	Max. 0,01	Max. 0,2	Max. 0,2	Max. 0,05	Max. 0,15	Max. 0,01	Max. 0,5
<small>a) For continuous castings and centrifugal castings, the minimum tin content for ingots shall be 10,7% and for castings 10,5% and the maximum copper content for ingots and castings shall be 89,0%</small>											
Mechanical properties DIN/EN 1982											
Casting process and designation		Tensile Strength R_m N/mm²		0,2% proof strength R_{p0,2} N/mm²		Elongation A %		Brinell Hardness HBW			
		Min.		Min.		Min.		Min.			
Continuous GC		300		150		6		90			
Centrifugal GZ		280		150		5		90			
Physical properties											
Density (20 °C)		Solidification range		Electrical conductivity		Thermal conductivity		Thermal expansion (20-300 °C)		Annealing temperature	
g cm⁻³		°C		%IACS		W m⁻¹ K⁻¹		µm m⁻¹ K⁻¹		°C	
8,8		831-999		10		68		19		-	
Properties and information											
Fabrication Properties						Joining Methods					
Hot Formability			Not Recommended			Soldering			Excellent		
Cold Formability			Not Recommended			Brazing			Good		
						Oxy-acetylene welding			Fair		
						Gas-shielded arc welding			Fair		