

Data sheet CuZn39Pb3/CW614N Metalcenter Group		Internal alloy name: CW614N International alloy name: CuZn39Pb3 DIN-Werkstoff no.: 2.0401 Alloy type: Electrical conducting					
Main usage <ul style="list-style-type: none"> Sanitary-industry Swivel part Electro-technology Engine- and vehicle construction 		Main properties <ul style="list-style-type: none"> Very good free-cutting Main-chipping-alloy Very good hot forming 		Important norms and literature <ul style="list-style-type: none"> EN12164: Copper and copper alloys. Rod for free machining purposes EN12165: Copper and copper alloys. Wrought and unwrought forging stock EN12167: Copper and copper alloys. Wire for general purposes 			
Chemical composition (%) DIN EN							
Cu	Al	Fe	Ni	Pb	Sn	Zn	Other elements
57,0-59,0	Max. 0,05	Max. 0,3	Max. 0,3	2,5-3,5	Max 0,3	Rest.	Max. 0,2
Typical mechanical properties DIN EN							
Material condition	As Manufactured						
M							
<small>** Information values only</small>							
Physical properties							
Density (20 °C) g cm ⁻³	Solidification range °C	Electrical conductivity %IACS	Thermal conductivity (20 °C) W m ⁻¹ K ⁻¹	Thermal expansion (20-300 °C) µm m ⁻¹ K ⁻¹	Annealing temperature °C	E - modulus (20 °C) N mm ⁻²	
8.4	890	28	121	21,4		-	
Properties and information							
Fabrication Properties				Joining Methods			
Hot Formability		Excellent		Soldering		Excellent	
Cold Formability		Poor		Brazing		Good	
				Oxy-acetylene welding		Not Recommended	
				Gas-shielded arc welding		Not Recommended	