

Data sheet CuZn40Pb2/CW617N Metalcenter Group		Internal alloy name: CW617N International alloy name: CuZn40Pb2 DIN-Werkstoff no.: 2.0402 Alloy type: Electrical conducting					
Main usage <ul style="list-style-type: none"> Fittings, sanitary industry Turned parts Electrical engineering Machine and vehicle construction Precision engineering optics 		Main properties <ul style="list-style-type: none"> Very good machinability Very good heat-formability 		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. Profiles and bars 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	1,6-2,5	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	895	27	117	-	450-600	-	
Properties and information							
Fabrication Properties				Joining Methods			
Hot Formability		Excellent		Soldering		Excellent	
Cold Formability		Limited		Brazing		Good	
				Oxy-acetylene welding		Not Recommended	
				Gas-shielded arc welding		Not Recommended	