

Data sheet CW118C EN Cu-TeP Alumeco A/S				Internal alloy name: CW118C International alloy name: EN Cu-TeP DIN-Werkstoff no.: 2.1546 Alloy type: Electrical conducting Revision date: 14-01-2021				
Main usage • Electrical • Bases for diodes and thyristors • Torch tips in gas welding • Screws • Small parts in electronics • Pipe connections • Fittings		Main properties • Very good conductivity • Very good Turning properties		Important norms and literature Extruded products EN 13601: Copper and copper alloys - Copper rod, bar and wire for general electrical purposes.				
Chemical composition (%) DIN EN 12164								
Cu		P	Te	Each	Other elements together			
Rest.		0,003-0,012	0,4-0,7	-	0.1			
Typical mechanical properties DIN EN 12164								
Material condition	Thickness range (mm)	Width range (mm)	R _m N/mm ²	R _{p0,2} MPa	A _{100mm} %	A _{11.3} %	A %	Hardness HV
			Min.	Approximately	Min.	Min.	Min.	Approximately
R250	2-50	2-40	Min.250	200	3	5	7	90
** Information values only								
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		
8.9	1050	82-86	360	17		-		
Properties and information								
Fabrication Properties				Joining Methods				
Hot Formability		Good		Soldering		Excellent		
Cold Formability		Good		Brazing		Good		
				Oxy-acetylene welding		Not Recommended		
				Gas-shielded arc welding		Fair		