

CuZn5

Mechanical properties	Temper condition						
	M20 HV45-75	H01 HV75-105	H03 HV100-140	H04 HV115-150	H06 HV130-170	H08 HV150-190	
Tensile strength in N/mm ²	220-290	255-325	315-385	345-405	385-440	415-470	
0,2% yield strength in N/mm ²	<130	>180	>260	>330	>360	>390	
Vickers hardness HV (ref. value)	45-75	75-105	100-140	115-150	130-170	150-190	
Elongation A _{L50%}	> 40	> 20	> 10	> 4	-	-	
Bendability							
0.10 ≤ s ≤ 0.25 mm	Transverse	0 x t	0 x t	0 x t	0 x t	-	-
	Parallel	0 x t	0 x t	0 x t	0 x t	-	-
0.25 < s ≤ 0.5 mm	Transverse	0 x t	0 x t	0 x t	0.5 x t	-	-
	Parallel	0 x t	0 x t	0 x t	1 x t	-	-

Physical properties (Typical values in annealed temper at 20 °C)		
Thermal expansion coefficient 20 ... 300 °C	18.0	10 ⁻⁶ /K
Specific heat capacity	0.380	J/(g·K)
Density	8.8	g/cm ³
Thermal conductivity	243	W/(m·K)
Thermal coefficient of electrical resistance (0 ... 100 °C)	2.6	10 ⁻³ /K
Modulus of elasticity (1 GPa = 1 kN/mm ²) cold formed	127	GPa
Electrical conductivity (IACS)	57	%

Material designation	
DIN EN	CW500L
UNS	C21000

Chemical composition	
Cu	Rest %
Sn	<0.05 %
Zn	5 %
Other	≤ 0.175 %

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