



Estd. 1935

CuZn 10

ALLOY NAME

AMW -22	IS	DIN CEN/TS 13388	UNS	JIS	KMW
CuZn10	CuZn10	CW501L	C22000	C2200	CuZn10

Chemical Composition	(% By Weight)	Main Applications	
Cu	89.0 – 91.0 %	Electrical	Wave guides, Rotor Bar-AC Motors, Cable Warp
Pb	≤ 0.05 %	Consumer	House for Lipstick compacts, Costume Jewelry, Ball point Pens.
Fe	≤ 0.05 %	Fasteners	Screw Shells , Bolts, Line Clamps, Rivets
Zn	Remainder %	Typical Applications	Jewellery and metal good, Components for the electrical industry, Leadframes.
Total Impurity	< 0.13 %		

Physical Properties Typical values in annealed temper at 20°C

Density	8.80	g/cm ³
Thermal expansion coefficient -191 .. 16 / 0 .. 300°C	9.0 / 18.2	10-6/K / 10-6/K
Specific heat capacity	0.376	J/(g•K)
Thermal conductivity	184	W/(m•K)
Electrical conductivity (1 MS/m = 1 m/(Ω mm ²))	≥ 25	MS/m
Electrical conductivity (IACS)	43	%
Thermal coefficient of electrical resistance (0 .. 200 C)	1.8	10-3/K
Modulus of elasticity (1 GPa = 1 kN/mm ²) cold formed	99....115 / 124	GPa / GPa

Mechanical Properties (EN 1652)

Temper	Tensile Strength Rm MPa (N/mm ²)	Yield Strength Rp0.2 MPa (N/mm ²)	Elongation Minimum A50mm %	Hardness HV
O (Soft)	245 Min	< 140	35 Min	75 Max
HB (Half Hard)	310 Min	≥ 200	7 Min	95 Min
HD (Hard)	350 Min	≥ 290	3 Min	110 Min

Fabrication Properties	Cold formability	Excellent
	Hot formability	Good
	Soldering	Excellent
	Brazing	Excellent
	Oxyacetylene welding	Good
	Gas shielded arc welding	Good
	Resistance welding	Not Recommended
	Machinability	Not Recommended

