



Estd. 1935

CuZn 15

ALLOY NAME

AMW-23	IS	ISO	ASTM	JIS	KMW
CuZn15	CuZn15	CuZn15	C23000	C2300	CuZn15

Chemical Composition	(% By Weight)	Main Applications	
Cu	84.0 – 86.0 %	Consumers	Sliders & Pullers for Zippers & Fasteners, Fashion Jewellery , Watch Industry
Pb	< 0.02 %	Industrial	Condenser Tubes, Pickling Crates, Heat Exchangers, Flexible Metal House, Fire
Fe	< 0.05 %		
Zn	Remainder %		
Total Impurity	< 0.13 %		

Physical Properties Typical values in annealed temper at 20°C

Density	8.75	g/cm ³
Thermal expansion coefficient -191 .. 16 / 0 .. 300°C	9.0 / 18.5	10-6/K / 10-6/K
Specific heat capacity	0.380	J/(g•K)
Thermal conductivity	159	W/(m•K)
Electrical conductivity (1 MS/m = 1 m/(O mm ²))	> 21	MS/m
Electrical conductivity (IACS)	36	%
Thermal coefficient of electrical resistance (0 .. 200 C)	2.6	10-3/K
Modulus of elasticity (1 GPa = 1 kN/mm ²) cold formed	99 - 115 / 122	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	< 170	35 Min	75 Max
HB (Half Hard)	325 Min	> 250	7 Min	95 Min
HD (Hard)	370 Min	> 300	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	Fair
	Machinability	Fair

