

Cu-DHP

ALLOY NAME

JIS	ASTM	KMW
C1220	C-12200	Cu-DHP

Chemical Composition	(% By Weight)	Main Applications
Cu	99.85 Min %	Bus Bars
P	0.015-0.04 %	Electromechanical Hardware connectors

Physical Properties Typical values in annealed temper at 20°C

Density	8.90	g/cm ³
Thermal Conductivity	196	W/m
Electrical Resistivity	0.0246	micro hm m
Electrical Conductivity (annealed)	85	%
Modulus of Elasticity	117	Gpa
Coeff. of Thermal Expansion	9.4	µm/m at 20° C to 300° C

Mechanical Properties (EN 1652)

Temper	Tensile Strength Rm MPa (N/mm ²)	Yield Strength Rp0.2 MPa (N/mm ²)	Elongation A50mm %	Hardness HV
O (SOFT)	36 Typ	28 Typ	30 Typ	—
HB (Half Hard)	42 Typ	36 Typ	14 Typ	—
HD (Hard)	50 Typ	45 Typ	12 Typ	—

Fabrication Properties	Cold formability	Excellent
	Hot formability	Excellent
	Soldering	Excellent
	Brazing	Excellent
	Oxyacetylene welding	Good
	Gas shielded arc welding	Excellent