

CuZn + Classe 2

BL5

Nearest international Standards		Nominal Composition			
m Lego	BL5	Elements	% mean	Impurities	% max.
NF A 51-106	CuZn + Classe 2	Cu	59.3	Si	0.015
		Pb	0.95		
		Fe	1.1		
		Ni	1.5		
		Mn	1.25		
		Al	1.6		
		Zn	Balance	Total maxi	0.15

Typical uses

Free Cutting and Die Forging High Strength Brasses, Locks

Physical Properties at 20° C		Thermal Properties	
Density (g/cm ³)	8.3	Thermal Conductivity (W/m.K)	
young's Modulus (Gpa)	105	Thermal Capacity (J/Kg.K)	
Coulomb's Modulus (Gpa)		Melting Range (°C)	
Coefficient of Linear Expansion (20-300°C)		Stress Relief Temperature (°C)	250-350
Coefficient of friction (slip)		Hot Stamping Temperature (°C)	650-750
Coefficient of friction (adhesion)		Annealing Temperature (°C)	500-600

Properties	Mechanical						Electrical	
Reference Diam. Ø 20 mm	Rp 0,2 (Mpa)	Rm (Mpa)	A (%)	HB	HV	Impact Strenght (daJ/cm ²)	Conductivity (% I.A.C.S.)	Resistivity (-.cm)
Drawn / treated	510	600	16	164			12	14.5
Extruded	220	540	17	128				

Different General Capabilities			Welding and Brazing Capacities	
Hot Working	80	Very Good	Brazing	
Cold Working	35	Satisfactory	Soft	Not Recommended
Free Cutting	80	Very Good	Strong	Not Recommended
Corrosion Resistance	Satisfactory		Welding	
General Capabilities: 65%			Oxy-acetylene	Not Recommended
			Gas-shielded arc	Not Recommended
			Coated metal-ard	Not Recommended
Profile and flat dimensions on request			Carbon arc	Not Recommended
			Resistance	Not Recommended

Fabrication Range (mm)			
	Round	Square	Hexagonal
Turned billet			
Extruded	from 15 to 84		
Drawn / treated	from 6 to 83	from 6 to 60	from 6 to 72