

Material Designation

GB	BZN18-20
UNS	C75900
EN	CuNi18Zn20
JIS	/

Chemical Composition

Copper, Cu	60.0 – 65.0%
Nickel, Ni	17.0 – 19.0%
Zinc, Zn	Rem.

Properties

Density	8.73 g/cm ³
Electrical Conductivity	6 %IACS
Thermal Conductivity	30 W/(m·K)
Coefficiency of Thermal Expansion	16.5 µm/(m·K)
Modulus of Elasticity	132 Gpa
Cold Workability	Excellent
Hot Working	Fair
Machinability (C36000 = 100 %)	25 %

Mechanical Properties

Specification mm (up to)	Temper	Tensile Strength Min. MPa	Yield Strength Min. MPa	Elongation Min. A%	Hardness Min. HV5
COIL φ 0.5-15.0	H01	440	/	/	90
	H02	550	/	/	140
	H03	600	/	/	160
	H04	650	/	/	180
	H06	700	/	/	190
ROD	H04	500	/	/	150

Machinability (C36000 = 100 %)	Excellent
Electroplating	Excellent
Resistance Welding (Butt Weld)	Excellent
Hard Soldering	Excellent
Inert Gas Shielded Arc Welding	Fair

Characteristics

This alloy is lead-free nickel silver which has a silvery color and good resistance to tarnishing, has excellent cold working performance, high strength and high elasticity, Nickel silver is characterized by good temperature resistance necessary for welding and soldering.

Application

Mainly used in electronic industry shields, resonator shells, metal structures such as rivets, screws, tableware, bow parts, camera parts, templates and other optical parts, as well as spectacle frames, nameplates, hollow parts, etched bases, radio dials and the musical instrument industry.

Advantage

1. We actively respond to any questions from customers and provide shorter delivery times. If customers have urgent needs, we will fully cooperate.
2. We focus on controlling the production process so that the performance of each batch is as consistent as possible and the product quality is excellent.
3. We cooperate with the best domestic freight forwarders to provide customers with sea, rail and air transportation and combined transportation solutions, and have plans for transportation difficulties caused by natural disasters, epidemics, wars and other factors.

