

TECHNICAL DATA SHEET

Nonferrous alloy type N

General notes:

- » **Nickel silver** 65-18 (CuNi18Zn20)
- » copper-nickel-zinc alloy
- » non-magnetizable (100%)
- » soft and elastic
- » all copper alloys resist corrosion by fresh water and steam. Copper nickels provide superior resistance to saltwater corrosion, have high resistance to alkalies and organic acids, but have poor resistance to inorganic acids
- » good cold workability (forming)
- » typical applications include handling of scratch-sensitive parts in electronic, micro-mechanical and jewellery applications

Composition

Component	Wt.%	Component	Wt.%	Component	Wt.%
Cu	65	Ni	18	Zn	17

Mechanical properties

State	annealed
Density	8.73 g/cm ³
Hardness, Vickers	200 HV
Tensile strength, ultimate	500-550 MPa
Tensile strength, yield	380-400 MPa
Elongation, break	45%
Modulus of elasticity	125 GPa

Thermal properties

Coef. of lin. therm expansion	16.2 E-6/°C	20°C-300°C
Thermal conductivity	33 W/(mK)	

Electrical properties

Resistivity	n/a
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