

TECHNICAL DATA SHEET

Nonferrous alloy type PB

General notes:

- » **Phosphor bronze** (CuSn8P)
- » copper-tin alloy
- » non-magnetizable (100%)
- » good to excellent corrosion resistance; all copper alloys resist corrosion by fresh water and steam
- » good cold workability (forming)
- » generally it is utilized when, in addition to corrosion resistance, good tensile properties are required
- » typical applications include tweezers for handling scratch-sensitive mechanical parts, watch components, magnets

Composition

Component	Wt. %	Component	Wt. %
Cu	92	Sn	8

Mechanical properties

State	annealed	
Density	8.8 g/cm³	
Hardness, Vickers	185 HV	
Tensile strength, ultimate	600-700 MPa	
Tensile strength, yield	350-400	
Elongation, break	70%	
Modulus of elasticity	110 GPa	

Thermal properties

Coef. of lin. therm expansion	18.2 E-6/°C	20°C-300°C
Thermal conductivity	62 W/(m K)	

Electrical properties

Resistivity	n/a
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