



Microstructure

Alloy

CuSn7Zn4Pb7 - RG7



Characteristics & Typical Applications

Commonest, low-budget gun metal alloy for slide bearings. Still has good dry-running properties and sufficient wear resistance at medium hardness. Also suitable when unhardened shafts and light edge pressure are being used. Short-chipping material, good machinability, good corrosion resistance (even in seawater), soft solderable and to a limited extent hard solderable. The main areas of application are slide bearings and bearing bushings for general mechanical engineering.

Chemical Composition

Elements	Cu	Sn	Pb	Zn	Ni	Sb	Fe	P	S	Al	Si
EN 1982	81 - 85	6 - 8	5 - 8	2 - 5	2,0 max	0,3 max	0,2 max	0,1 max	0,1 max	0,01 max	0,01 max
Average Nominal	80	7	7	4	1,5	0,2	0,1	0,1	0,08	0,01	0,01

Typical Mechanical Properties

		Continuous Cast	Centrifugal Cast
Tensile Strength Rm	MPa(min)	260	260
%0,2 Yield Stress	MPa(min)	120	120
Elongation	%(min)	12	12
Hardness	HB(min)	70	70

Physical Properties

Density	Specific Heat Capacity	Electrical Conductivity	Thermal Conductivity
8.91 gm/cm ³ at 20°C	377.1 J/kg. °K at 20°C	0.07 Mega Siemens/cm at 20°C	58.2 W/m.°K at 20°C

Fabrication Processes

Joining Technique	Soldering	Brazing	Oxyacetylene Welding	Gas Shielded Arc Welding	Coated Metal Arc Welding	Machinability Rating
Suitability	Excellent	Good	Not Recommended	Not Recommended	Not Recommended	70

Related Specifications

DIN EN 1982	ASTM B271	ASTM B505
CC493K	C93200	C93200