



Microstructure

Alloy

CuSn5Pb9



Characteristics & Typical Applications

It has a very high electrical conductivity among cast bronzes. In addition, it has a fairly low tensile strength and a fairly low ductility. General-purpose bearings made from this material will withstand slacker tolerances and infrequent lubrication if a softer shaft material is used.

Chemical Composition

Elements	Cu	Pb	Sn	Zn	Ni	Sb	Fe	Mn	P	S	Al	Si
EN 1982	80-87	8-10	4-6	2,0 max	2,0 max	0,05 max	0,25 max	0,2 max	0,1 max	0,1 max	0,01 max	0,01 max
Average Nominal	83	9	5	1,5	1	0,13	0,1	0,1	0,1	0,05	0,01	0,01

Typical Mechanical Properties

		Continuous Cast		Centrifugal Cast	
Tensile Strength Rm	MPa(min)	200		200	
%0,2 Yield Stress	MPa(min)	100		90	
Elongation	%(min)	9		6	
Hardness	HB(min)	60		60	

Physical Properties

Density	Specific Heat Capacity	Electrical Conductivity	Thermal Conductivity
9.1 g/cm ³	360 J/kg-K	16% IACS	63 W/m-K

Related Specifications

EN 1982	BS 1400	ASTM B271	ASTM B505
CC494K	LB4	C93500	C93500