

COPPER ALLOY

JM 14

CuSn5Pb20-C



Composition

Element	Cu ¹	Ni	P	Pb	Sn	Zn	Al	Fe	Mn	S	Sb	Si
w/w	%	%	%	%	%	%	%	%	%	%	%	%
min.	70,0	0,5		18,0	4,0							
max.	78,0	2,5	0,1	23,0	6,0	2,0	0,01	0,25	0,2	0,1	0,75	0,01

¹ Including Ni

Mechanical properties

Casting process and designation	Proof Strength <i>R_{p0,2}</i> [MPa]	Tensile strength <i>R_m</i> [MPa]	Elongation <i>A₅</i> [%]	Brinell hardness HBW [HB]
-03 (sand)	≥70	≥150	≥5	≥45
-15 (continuous)	≥80	≥160	≥6	≥50
-15 (centrifugal)	≥80	≥160	≥6	≥50

Physical properties

Density [g/cm ³]	Young's modulus [GPa]	Thermal conductivity [W/mK]	Electrical conductivity [%IACS]
9,3	70	60	9

Fabrication properties

Machinability	Weldability	Solderability	Stress-relieving temperature
Excellent	Not recommended	Good	260 °C

Applications

High-load low-speed bearings, light-load high-speed bearings, soft bushings, high speed - light to medium pressure bushings

Comparable standards

Swedish standard	SS-EN 1982	CC497K
European standard	EN 1982	CC497K
US standard	UNS	C94300
British standard (old)	BS	1400 LB5
German standard (old)	DIN	1716 CuPb20Sn