COPPER ALLOY
JM 1

CuSn7Zn4Pb7-C

Composition

Element	Cu[1]	Ni	P	Pb	Sn	Zn	Al	Fe	S	Sb	Si
w/w	%	%	%	%	%	%	%	%	%	%	%
min.	81,0			5,0	6,0	2,0					
max.	85,0	2,0	0,1	8,0	8,0	5,0	0,01	0,2	0,1	0,3	0,01

[1] Including Ni

Mechanical properties

Casting process and designation	Proof Strength $Rp_{0,2}$ [MPa]	Tensile strength R*m* [MPa]	Elongation A_5 [%]	Brinell hardness HBW [HB]
-03 (sand)	≥120	≥230	≥15	≥60
-15 (continuous)	≥120	≥260	≥12	≥70
-15 (centrifugal)	≥120	≥260	≥12	≥70

Physical properties

Density [g/cm^3]	Young's modulus [GPa]	Thermal conductivity [W/mK]	Electrical conductivity [%IACS]
8,8	110	59	12

Fabrication properties

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

Applications

General-utility bearings and bushings, automobile fittings, worm wheels, gears, bushings for heavy loads and low speeds

Comparable standards

Swedish standard	SS-EN 1982	CC493K
European standard	EN 1982	CC493K
US standard	UNS	C93200
British standard (old)	BS	1400 LG2
German standard (old)	DIN	1705 CuSn7ZnPb