COPPER ALLOY
JM 4

CuSn7Pb15-C

Composition

Element	Cu[1]	Ni	P	Pb	Sn	Zn	Al	Fe	Mn	S	Sb	Si
w/w	%	%	%	%	%	%	%	%	%	%	%	%
min.	74,0	0,5		13,0	7,0							
max.	80,0	2,0	0,1	17,0	9,0	2,0	0,01	0,25	0,2	0,1	0,5	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)	≥80	≥160	≥8	≥50
-15 (continuous)	≥80	≥180	≥8	≥60
-15 (centrifugal)	≥80	≥180	≥8	≥60

Physical properties

Density [g/cm^3]	Young's modulus [GPa]	Thermal conductivity [W/mK]	Electrical conductivity [%IACS]
9,25	75	52	11,5

Fabrication properties

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

Applications

Corrosion resistance to numerous environments, general-utility bearings and bushings for moderate pressure; general purpose wearing metal for rod bushings, shoes, and wedges; freight car bearings; bearings for locomotive tenders and passenger cars; pumps impellers, and bodies for use in acid mine water.

Comparable standards

Swedish standard	SS-EN 1982	CC496K
European standard	EN 1982	CC496K
US standard	UNS	C93800
British standard (old)	BS	1400 LB1
German standard (old)	DIN	1716 CuPb15Sn