

COPPER ALLOY

JM 6

CuAl10Fe2-C



Composition

Element	Al	Cu	Fe	Mn	Ni	Mg	Pb	Si	Sn	Zn
w/w	%	%	%	%	%	%	%	%	%	%
min.	8,5	83,0	1,5							
max.	10,5	89,5	3,5	1,0	1,5	0,05	0,1	0,2	0,2	0,5

Mechanical properties

Casting process and designation	Proof Strength $R_{p0,2}$ [MPa]	Tensile strength R_m [MPa]	Elongation A_5 [%]	Brinell hardness HBW [HB]
-03 (sand)	≥180	≥440	≥10	≥100
-15 (continuous)	≥200	≥490	≥10	≥125
-15 (centrifugal)	≥200	≥490	≥10	≥125

Physical properties

Density [g/cm ³]	Young's modulus [GPa]	Thermal conductivity [W/mK]	Electrical conductivity [%IACS]
7,6	105	50	12

Fabrication properties

Machinability	Weldability	Solderability	Stress-relieving temperature
Good	Excellent	Good	315 °C

Applications

Acid-resisting pumps, bearings, bushings, gears, valve seats, guides, plungers, pump rods, pickling hooks, non-sparking hardware

Comparable standards

Swedish standard	SS-EN 1982	CC331G
European standard	EN 1982	CC331G
US standard	UNS	C95200
British standard (old)	BS	1400 AB1
German standard (old)	DIN	1714 CuAl10Fe