

COPPER ALLOY

JM 3

CuSn12-C



Edition 5

COMPOSITION

Density 8,8

	Composition %											
	Cu ¹	Sn	Al ³	Fe	Mn	Ni ¹	P ²	Pb	S	Sb	Si ²	Zn
Nom	88	12										
Min	Bal	11,0										
Max	Bal	13,0	0,01	0,25	0,2	2,0	0,4	1,0	0,05	0,2	0,01	0,5

- 1) Including Nickel
- 2) For centrifugal- and continuous castings the P contents may be max 1,5% by agreement.
- 3) Al + Si max 0,01%

MECHANICAL PROPERTIES

			Sandcast	Centrifugally- & continuously cast
			JM3-03	JM3-15
Rp0,2	Proof strength	N/mm ²	>=130	>=150
Rm	Tensile strength	N/mm ²	>=240	>=270
A5	Elongation	%	>=7	>=5
HB	Hardness	10/1000	>=80	>=90
E	Young's modulus	N/mm ²	100 000	100 000
	Coeff. of thermal expansion	X10 ⁻⁶ ,0-100°C	17,4	17,4
	Thermal conductivity	W/m °C	50	50
	Resistivity	nΩm,20°C	200	200
	Skärbarhet		Very good	Very good
	Machinability			
			Values given refer to separately cast test specimen to SIS 112152 or specimen cut from centrifugal- or continuous castings with a wall thickness corresponding to the test specimen diameter.	
Nearest equivalent standards				
Swedish standard		SS-EN 1982	CC483K-GS	CC483K-GC/GZ
European standard		EN 1982	CC483K-GS	CC483K-GC/GZ
US standard		UNS	C 90800	C 90800
British standard (old)		BS	1400 PB2	1400 PB2
German standard (old)		DIN	1705, G-CuSn12	1705, GZ/GC-CuSn12