

Edition from	02.07.2021	Alloy datasheet	No. 340
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Alloy	ISO	EN	ASTM
60A	CuZn38Pb2	CW608N	C37700

Others:

- -

Main characteristics Free machining brass offering a better cold deformability than the standards of machining.

Chemical composition

Cu	Zn	Pb
60,0 – 60,7 %	Remainder	1.6 – 2.5 %

Impurities Max.

Ni	Sn	Fe	Others
0,2 %	0,2 %	0,1 %	0,2 %

Product portfolio Hot extruded and cold drawn products

Section type	Round, square, hexagonal
Rod	Available
Wire	Available
Profile	On demand

Examples of use Any part made by a combination of machining and a light cold deformation, thread rolling, bending and revetting.

Mechanical properties	Form	Dimension Ø	Temper	UTS N/mm ²	YS N/mm ²	A %	Hardness HV
	Rod Wire	2 – 40 mm	R410	≥410	230	≥12	-
H100			-	-	-	100	
2 – 14 mm		R500	≥500	350	≥8	-	
		H120	-	-	-	120	

Other tempers on demand

Physical properties

Density	kg/dm ³	8,4
Melting range	°C	885 – 900
Linear expansion coefficient (20-400°C)		0,000021
Specific heat	J/kgK	380
Thermal conductivity at 20°C	W/mK	120
Electrical conductivity at 20°C	% IACS	23,0
Elasticity modulus	kN/mm ²	95 – 110

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Workability	Cold working, maximum section reduction	%	fair, 50
	Hot working	%	good, 85
	Machining, compared with CuZn39Pb3 (100 %)	%	good, 85
	Annealing temperatures	°C	450 - 650
	Stress relieving temperatures	°C	250 - 350
	Soft soldering		good
	Hard soldering		poor-fair
	Autogenous welding		poor-fair
	Arc welding		poor-fair
	Resistance welding		poor-fair

Symbols	∅	= round rod diameter (mm)
	UTS	= ultimate tensile strength
	YS	= yield stress at 0,2 %
	A	= tensile elongation
