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Pb < 0,1%
0% Cadmium
RoHS & ELV ok

- High tensile lead free brass - H75

Material designation

C67500 - ASTM B138

Chemical composition*

Elements	% mean	Impurities	% max.
Cu	58.7	**Pb**	**0.1**
Fe	1.2	Ni	0.20
Sn	0.6		
Mn	0.3		
Zn	balance		

* Reference values in % by weight

Properties and typical applications

High strength lead free brass for machining and stamping. Aeronautics, automotive equipment…

Physical properties at 20°C

Density (g/cm3)	8,4
Young modulus (GPa)	103
Thermal expansion coefficient (20-300°C) (10^{-6}/K)	21
Thermal conductivity (W/m.K)	105
Thermal capacity (J/Kg.K)	377
Electrical conductivity (% I.A.C.S.)	24

Heat treatment

Melting range (°C)	890-910
Hot working (°C)	650-750
Annealing temperature (°C)*	500-600
Stress relieving treatment (°C)**	300-400

**** Annealing treatment of a material leads to reduce its hardness and increase its ductility.***

***** Stress relieving treatment allows to eliminate the residual stresses present in the material in ordrer to avoid the stress corrosion cracking.***

Forming

Hot forming	Good
Cold forming	Fair
Machinability	50% (CuZn39Pb3 = 100%)

Corrosion resistance

High tensile brasses generally exhibit good corrosion resistance to organic materials and neutral or alkaline compounds due to alloying elements.

Joining

Soldering	
Soft	Excellent
Hard	Excellent
Welding	
Gaz welding	Fair
Inert gas shielded arc welding	Not recommanded
Resistance welding	Not recommanded

Mechanical properties (indicative values)

Yield Strength $Rp_{0,5}$ [Mpa]	**> 240**
Tensile Strength Rm [Mpa]	**> 480**
Elongation [%]	**> 15**
Hardness [HB]	**> 120**

Fabrication range

Available forms: 

Do not hesitate to contact us for further information regarding the dimensions, tolerances and metallurgical conditions.
Our technical teams are by your side to help you succeed in your projects.
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