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Material Datasheet:
C67300

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MACHINING / HOT STAMPING BRASS RODS

C67300

High Tensile Brass

C67300 alloy combines excellent hot stamping characteristics and good machinability. It has high impact resistance and excellent wear resistance making it well suited for shaft rings, bearings, gears cams and pump parts.

MATERIAL DESIGNATION

ASBW	International	EN	UNS	JIS	Further Restrictions*
B27	CuZn35Mn3Pb2Si1	-	C67300	-	-

REFERENCE CHEMICAL COMPOSITION IN % (MAIN ELEMENTS)

Material	Cu	Pb	Ni	Fe	Si	Sn	Al	Mn	Zn	Other elements
B27	Min. 58,0	0,4	-	-	0,5	-	-	2,0	Rem.	≤ 0.5 %
	Máx. 63,0	3,0	0,25	0,5	1,5	0,3	0,25	3,5		

FABRICATION PROPERTIES

FORMING

Machinability (CuZn39Pb3 = 100 %)	70 %
Cold Workability	Poor
Hot Workability	Good

JOINING

Resistance Welding (Butt Welding)	Not recommended
Inert Gas Shielded Arc Welding	Fair
Gas Welding (Most Commonly Oxyacetylene)	Fair
Soldering	Not recommended
Brazing	Not recommended

HEAT TREATMENT

Melting Range	885 - 920 °C
Hot Working	640 - 770 °C
Thermal Stress Relieving	200 - 300 °C Duration: 1 - 3 h
Soft Annealing	480 - 580 °C Duration: 1 - 3 h

CORROSION RESISTANCE

This high strength brass is quite resistant to organic substances and to neutral or alkaline compounds due to alloying additions.

PRODUCT STANDARDS

Rod	EN 12164* EN 12165*
Section	EN 12267*

*Despite of the alloy B23 is not present on the standards EN12164/65/67, ASBW B23 rods ensure all the major characteristics that are present on those standards, granting all necessary properties for a smooth and clean manufacture

Physical properties*

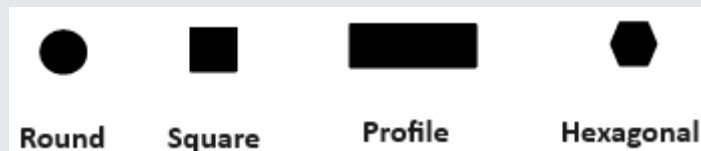
Material Density [g/cm ³]	Electrical Conductivity		Thermal Conductivity [W/(m.K)]	Thermal Expansion Coefficient (0 - 300 °C) [10 ⁻⁶ /K]	Modulus of Elasticity [GPa]
	[MS/m]	[% IACS]			
8,34	13,80	23	96	20,2	118

* Refence values at room temperature

Mechanical properties (indicative values)

Tensile Strength [Rm] (N/mm ²)	Yield Strength [Rp0.2] (N/mm ²)	Elongation (%)	Hardness (HBW)
>400	>220	>15	>120

Production Range/Geometries available



For further information regarding the dimensions, tolerances and temper conditions contact us.

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For further detailing on technical aspects such as material condition, machining, mechanical data, temper

ASBW

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