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Material Datasheet:
CuZn36Pb3
(CW603N)

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MACHINING BRASS RODS

CuZn36Pb3

Alloy for machining

CuZn36Pb3 alloy has special characteristics for machining operations, allowing to obtain optimum results through free cutting operations. These characteristics are conferred by the content in lead, homogeneously dispersed along the microstructure. This alloy is the standard American-type free cutting brass, widely used when extensive machining is required.

MATERIAL DESIGNATION

ASBW	International	EN	UNS	JIS	Further Restrictions**
B04	CuZn36Pb3	CW603N	C36000	C3601 C3602 C3603	4 MS Common Approach, Part B

REFERENCE CHEMICAL COMPOSITION IN % (MAIN ELEMENTS) *

Material	Cu	Pb	Ni	Fe	As	Sn	Al	Bi	Zn	Other elements
B04	61,0	3,0	0,2	0,2	-	0,1	0,03	-	Rem.	≤ 0.2 %

* Deviations from these values may occur within the restrictions of the relevant standard specifications.

** ASBW / B04 complies with the restrictions to the chemical composition of the signed materials in the table, according to the specified in the 4 MS Common Composition List, on customer request.

FABRICATION PROPERTIES

FORMING

Machinability (CuZn39Pb3 = 100 %)	95%
Cold Workability	Fair
Hot Workability	Good

JOINING

Resistance Welding (Butt Welding)	Fair
Inert Gas Shielded Arc Welding	Not Recommended
Gas Welding (Most Commonly Oxyacetylene)	Not Recommended
Hard Soldering	Fair
Soft Soldering	Excellent
Brazing	Poor

POLISHING

Mechanical	Good
Electrolytic	Fair
Electroplating	Excellent

FINISHING AND PACKAGING

Bar ends	Marked according to customer's specification
Bar surface	Standard machining rods: bright, stripped surface
Packaging	Size range up to 10 mm: The rods are packed loose in a wooden box and protected with oiled paper (net weight of approx. 500 kg). Each box is strapped with 4 steel straps to ensure material integrity during shipping. Size range > 10 mm: ASBW machining rods are supplied by standard in bundles either of approximately 1.000 kg or 500 kg. Different bundle weights are also possible upon customer's request. Each bundle is steel strapped three times on cardboard and both ends are protected with litter, to ensure the material integrity during the transportation
Identification	Adhesive label on bundle strap: customer <ul style="list-style-type: none">- number of customer's order- EN Standard of the material- ASBW material code and LOT number ensuring production tracking- rod length- ASBW's PO number- ASBW's Quality Approval Seal

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The end use of this content is up to the user discretion and risk.
For further detailing on technical aspects such as material condition, machining, mechanical data, temper selection through contact to our technical personal.



BARBOSA WORLD BRASS, S.A

Main office and factory: Rua de Sousanil, 476, 4525-100 Canedo VFR, Santa Maria da Feira - Portugal
Phone: +351 227 637 040
Email: asbw@asbw.pt
NIPC: 515 557 552
Social Capital: € 350.000