

Datasheet: EN CuZn33Pb1,5AlAs / CW626N Brass with Lead Rods for free machining purposes Alumeco ApS 06-05-2025				Internal alloy name: CW626N Metal: Brass Chemical Symbol: CuZn33Pb1,5AlAs EN: EN CuZn33Pb1,5AlAs UNS: - SIS: - GB: - JIS: - Also known as: - Alloy type: Brass with lead																																																																																																																																										
Main usage: Faucets, fittings and pipes for industrial or homes Machined parts, screws, gears, nuts and bolts Components for water boiler, condenser and heat exchanger Main properties: Great machinability Higher copper and aluminium content compared to CW625N Increased corrosion and oxidation resistance compared to CW602N Contact with drinking water because resistance to dezincification				Important norms and literature: General Standards EN 12164:2024: Copper and copper alloys – Rod for free machining purposes Geometric Tolerance EN 12164:2024: Copper and copper alloys – Rod for free machining purposes EN 12165:2024: Copper and copper alloys – Wrought and unwrought forging stock																																																																																																																																										
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Tolerances for Rods of CW626N

Dimensions: EN 12164:2024*		Dimensions in millimetres
Tolerances on diameter of round rod		
Nominal diameter	Tolerances Class B	
$2 \leq D \leq 3$	0	- 0,025
$3 < D \leq 6$	0	- 0,030
$6 < D \leq 10$	0	- 0,036
$10 < D \leq 18$	0	- 0,043
$18 < D \leq 30$	0	- 0,052
$30 < D \leq 50$	-	
$50 < D \leq 80$	-	

* Values are referred from Table 16 of EN 12164:2024

Dimensions: EN 12164:2024*		Dimensions in millimetres
Tolerances on width across-flats of regular polygonal rod		
Nominal width across-flats	Tolerances	
$2 \leq W \leq 3$	0	- 0,06
$3 < W \leq 6$	0	- 0,08
$6 < W \leq 10$	0	- 0,09
$10 < W \leq 18$	0	- 0,11
$18 < W \leq 30$	0	- 0,13
$30 < W \leq 50$	0	- 0,16
$50 < W \leq 60$	0	- 0,19

* Values are referred from Table 17 of EN 12164:2024

Dimensions: EN 12164:2024*			Dimensions in millimetres
Tolerances on straightness of rod			
Nominal diameter	Maximum deviation from straightness (See Figure 1 in EN 12164:2024)		
	h_2 depth of arch in any length l_2 of 400 mm	h_1 depth of arch in any length l_1 of 1000 mm	
$10 \leq D \leq 50$	0,4	1,0	

* Values are referred from Table 18 of EN 12164:2024

Dimensions: EN 12164:2024*			Dimensions in millimetres
Corner radii for square and polygonal rod			
Nominal diameter or width across-flats	Preferred lengths	Tolerance on length	
$2 \leq w \leq 30$	3000 or 4000	± 50	
$30 < w \leq 50$	3000 or 4000	± 100	
$50 < w \leq 80$	3000	± 100	

* Values are referred from Table 19 of EN 12164:2024

Dimensions: EN 12164:2024*			Dimensions in millimetres
Corner radii for square, hexagonal and octagonal rod			
Nominal width across-flats	Radii for sharp and rounded corners		
	Sharp max.	Rounded range	
$2 \leq w \leq 3$	0,2	0,2 – 0,3	
$3 < w \leq 6$	0,3	0,3 – 0,5	
$6 < w \leq 10$	0,4	0,4 – 0,8	
$10 < w \leq 18$	0,5	0,5 – 1,2	
$18 < w \leq 30$	0,6	0,6 – 1,8	
$30 < w \leq 50$	0,7	0,7 – 2,8	
$50 < w \leq 80$	0,8	0,8 – 4,0	

* Values are referred from Table 20 of EN 12164:2024

Dimensions: EN 12164:2024* Maximum twist of square, hexagonal and octagonal rod		Dimensions in millimetres
Nominal width across-flats W	Maximum permitted twist V in any 1 m length of rod (mm)	
$10 \leq W \leq 18$	1,0	
$18 < W \leq 30$	2,0	
$30 < W \leq 60$	3,0	

* Values are referred from Table 21 of EN 12164:2024

Dimensions: EN 12164:2024* Sampling rate	
Nominal diameter or width across-flats w (mm)	Mass of inspection lot for one test sample kg
$D/W \leq 25$	≤ 1000
$25 < D/W$	≤ 2000

* Values are referred from Table 22 of EN 12164:2024

Dimensions: EN 12165:2024* Tolerances on diameter of round forging stock		Dimensions in millimetres
Nominal diameter	Tolerances Class A	
$80 < D \leq 120$	± 2	
$120 < D \leq 160$	$\pm 2,5$	

* Values are referred from Table 10 of EN 12165:2024

Dimensions: EN 12165:2024* Tolerances on straightness of round forging stock			Dimensions in millimetres
Nominal diameter	Maximum deviation from straightness (See Figure 1 in EN 12164:2024)		
	h_2 depth of arch in any length l_2 of 400 mm	h_1 depth of arch in any length l_1 of 1000 mm	
Straightness tolerances for rods over 60 mm diameter shall be agreed between the involved parties			