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**DATA SHEET:**  
**CZA26 CW626N**

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**FREE MACHINING**

The logo for HUG, featuring the word "HUG" in a bold, white, sans-serif font, enclosed within a white circular border.

**HUG**

## Standard anti dezincification alloy.

It has good machinability for chip removal and an excellent hot deformability. It is used in taps and components in contact with water intended for human consumption as a substitute for alloy CW602N. Approved by 4MS, it is included in the "Positive list" of metallic materials that can be used in contact with drinking water.

### NAME OF ALLOY

UNI EN: CW626N - CuZn33Pb1.5AlAs

### CHEMICAL COMPOSITION UNI EN 12164 ED.2016

Cu	Pb	Sn	Fe	Ni	Mn	Al	Si	Zn	Other elements
min. 64.0 max. 66.0 %	1.2 1.7 %	≤0.3 %	≤0.3 %	≤0.2 %	≤0.1 %	0.8 1.0 %	0.02 0.15 %	difference	≤0.2 %

Elements not listed must be ≤0.02 %.

Group of restriction of the surface in contact with drinking water: B,D.

### HEAT TREATMENTS

#### STRESS RELIEVING

Enables the redistribution of tensions induced by mechanical processing of cold plastic deformation, reducing the risk of stress corrosion cracking. The treatment consists of heating the items to 200°C - 250°C for 2 hours and cooling within the furnace. The validation of the stress relieving treatment can be performed with the ISO 6957 test.

#### SOLUBILIZATION OF RESIDUAL β PHASE

For the drawn products this treatment is performed by Almag Spa to eliminate the remaining beta phase left over from the extrusion. This treatment optimizes dezincification resistance for the alloy.

### MECHANICAL PROPERTIES UNI EN 12164 ED.2016

Condition of material	Diameter in mm		Hardness HB*		Rm	Rp <sub>0.2</sub> N/mm <sup>2</sup>		Elongation %
	from	to (included)	min.	max.	min.	min.	max.	min.
M	All		As a product					
R280	6 (5)	80 (60)	-	-	280	-	200	30
H070	6 (5)	80 (60)	70	110	-	-	-	-
R320	6 (5)	60 (50)	-	-	320	200	-	20
H090	6 (5)	60 (50)	90	135	-	-	-	-
R400	4	15 (13)	-	-	400	250	-	8
H105	4	15 (13)	105	-	-	-	-	-

\*the hardness value is determined in the mid-range

The values in brackets refer to the hexagonal section bar.

The standard condition produced by Almag is R400 for Rm or H105 for hardness.

The conditions shown are not included in any European standard.

TECHNOLOGICAL PROPERTIES		low	excellent
Structure	α	[Progressive bar chart]	
Density	8.4 kg/cm <sup>2</sup>	[Progressive bar chart]	
Electrical conductivity	20% IACS	[Progressive bar chart]	
Coeff. of thermal expansion	21.5 10 <sup>-6</sup> /K	[Progressive bar chart]	
Thermal conductivity*	95 W/(m K)	[Progressive bar chart]	
Specific heat	380 J/(kg K)	[Progressive bar chart]	
Elasticity module	96 kN/mm <sup>2</sup>	[Progressive bar chart]	
Melting point	875-900 °C	[Progressive bar chart]	
Machinability		[Progressive bar chart]	
Weldability		[Progressive bar chart]	
Hot forming		[Progressive bar chart]	
Cold forming		[Progressive bar chart]	
Corrosion resistance**	<200 μm	[Progressive bar chart]	

\*at room temperature  
\*\*use care to ascertain compatibility with chemical substances

## DIMENSIONS, TOLERANCES, AND STRAIGHTNESS UNI EN 12164 ED.2016

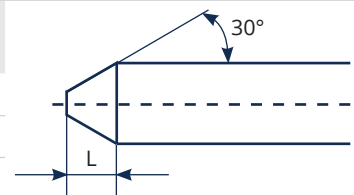
ROUND section bar					HEXAGONAL and SQUARE		
Nominal Diameter (mm)		TOLERANCES			Nominal key (mm)		Tolerance mm
from	to included	Class A	Class B	Class C	from	to included	
6	10	0 - 0.06	0 - 0.036	0 - 0.025	6	10	0 - 0.09
10	18	0 - 0.07	0 - 0.043		10	18	0 - 0.11
18	30	0 - 0.08	0 - 0.052		18	23	0 - 0.13
30	40	0 - 0.16					

The standard tolerance for the round bar is Class A. Any different tolerances must be agreed upon when ordering Almag Spa produces round bars up to Ø40 mm and hexagonal bars up to key 23 mm.

Diameter (mm)	Length of bar (mm)	Tolerance (mm)	Diameter or Key (mm)	Deviation from straightness in mm	
				Every 400 mm	Every m of length L ≥ 1
2	30	3000 o 4000	+/- 50		
30	50	3000 o 4000	+/- 100		
<b>Round section bar</b>					
6	40			0.4	1.0 x L
<b>Hexagonal and square section bar</b>					
6	23			0.6	1.5 x L

## BAR FINISHING AND PACKAGING

Diameter or Key (mm)	Chamfer Length L mm	Tip Length L mm
5	10	0.2 1.5 2 7
10	20	0.2 2 3 10
20	30	0.2 3 4 12



Unless otherwise specified by the buyer, the shape of the ends of products larger than 30 mm is up to the supplier

Ends of round bars	finishing with chamfer and tip up to and including Ø40 mm finishing with chamfer and cut greater than Ø40 mm
Ends of hexagonal bars	finishing with chamfer and cut
Bar surface	pickled
Packaging	1000 kg bundle - 3/5 metal straps different bundle packagings and quantities are possible upon request
Identification	adhesive label on bundle strap
Stress relieving	the polygonal bar was subjected to stress relieving treatment

COMPANY WITH  
MANAGEMENT SYSTEM  
CERTIFIED BY DNV GL  
= ISO 9001 =  
= ISO 14001 =  
= OHSAS 18001 =



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