

Brass

CuZn30 / CW505/ C26000 / CZ106

Version 3

Reference standard: EN 12166

Symbol	Number	Element	Cu	Al	Fe	Ni	Pb	Sn	Zn	Bal	Density g/cm ³
CuZn30	CW505	Min %	69.0	-	-	-	-	-	Rem	-	8.5
		Max %	71.0	0.02	0.05	0.3	0.05	0.1	-	0.1	

Brass wire is a copper zinc alloy and is available in a range of alloys from 90% copper / 10% zinc to 63% copper / 37% zinc. The higher the percentage of zinc in the alloy the greater the cold working strength, whilst the higher the copper content the greater the ductility. Brass wire is manufactured in flat, round and square section in a full range of sizes and tempers to meet customer requirements.

Typical Tensile Strength N/mm ²					
Size Range	Soft	¼ Hard	½ Hard	Hard	Spring Hard
0.1-0.5mm	350-450	560-620	610-710	700-800	800min
0.5-1.5mm	340-440	500-600	590-690	670-770	750min
1.5-4.0mm	310-410	460-560	540-640	620-720	700min
4.0-8.0mm	-	440-540	530-630	-	-
4.0-20.0mm	300-400	-	-	-	-

Physical Properties:

- Resistivity: 0.060 ($\Omega \times \text{mm}^2/\text{m}$)
- Temperature coefficient of resistance at 20-100°C (1/K): 0.002
- Elongation at soft temper: >30%

Tolerances:

<0.25mm	±0.005mm
0.25-0.50mm	±0.008mm
0.50-1.00mm	±0.012mm
1.00-2.00mm	±0.02mm
2.00-4.00mm	±0.03mm

Typical applications:

- Jewellery and ornamental trims
- Components for the electrical industry
- Industrial fasteners
- Coinage, medals
- Resistance wire
- Brush wire



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