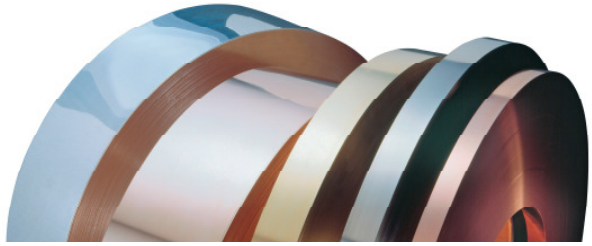
Brass (Copper-Zinc)
MB30



Material Designation

DIN-EN Symbol	CuZn30
DIN-EN	CW505L
UNS	C26000
JIS	C2600
The Miller Company	C260

Physical Properties

Electrical conductivity soft	15.7	MS/m
Thermal conductivity	124	W/(m·K)
Thermal expansion coefficient **	19.6	10-6/K
Density	8.5	g/cm³
Modulus of elasticity	115	GPa = kN/mm²

* Reference values at room temperature
** Between 20 and 300 °C

Nominal Composition (mass content in %)

Cu	Balance
Sn	< 0.05
Zn	30
Ni	< 0.2
Fe	< 0.05
Al	< 0.02
Pb	< 0.005
Other	< 0.1

Typical Applications

- Jewellery
- Metal ware
- Transistor carriers
- Deep drawing parts
- Stamped-bent parts
- Connectors

About The Alloy

MB30 is a brass having superior workability, drawability and good properties on plating. Among the Copper Zinc Alloys MB30 exhibits a high electrical and thermal conductivity as well an intermediate high modulus of elasticity at a moderate strength level.

The colour of MB30 is due to the increased Zn content already yellow. Applications are found in terminal connectors and for cups.
MB30 is an single phase Copper alloy and available in a temper condition which allows extraordinary good cold forming and deep drawing with almost no earring.

The alloy is registered with the U.S. EPA as Antimicrobial and with respect to Pb and Cd meets the OEKO-TEX Standard 100.

Mechanical Properties *)

Temper condition		O30 **R 270** H 55	H01 **R 350** H 90	H02 **R 410** H 120	H04 **R 480** H 150	H06 **R 540** H 170	H08 **R 630** H 190
Tensile strength in N/mm²		270 - 350	350 - 430	410 - 490	480 - 560	540 - 620	> 630
0.2 % yield Strength in N/mm²		< 160	> 240	> 370	> 440	> 520	> 610
Elongation A_{L50} %		> 45	> 30	> 15	> 12	> 8	> 2
Vickers hardness HV		55 - 90	90 - 125	120 - 150	150 - 180	170 - 200	> 190
Electrical conductivity in % IACS		27	27	26	26	25	25
Minimum radius of the bending mandrel for 90° bend and strip thickness s							
0.10 ≤ s ≤ 0.25 mm	transverse parallel	0 x s 0 x s	0 x s 0 x s	0 x s 0 x s	0 x s 0 x s	0.5 x s 1 x s	2 x s 5 x s
0.25 < s ≤ 0.50 mm	transverse parallel	0 x s 0 x s	0 x s 0 x s	0 x s 0 x s	0 x s 0.5 x s	1 x s 2 x s	2 x s 6 x s

*) Reference values

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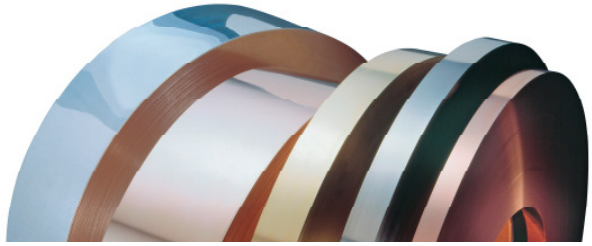

Processing Instructions	
Cold forming properties	very good
Machinability	satisfactory
Electroplating properties	very good
Hot-dip tinning properties	very good
Soldering	very good
Resistance welding	good
Gas shielded arc welding	satisfactory
Laser welding	sufficient

Available Dimensions
Bright pre-rolled strips 1 to 2.5 mm
Precision strip thickness from 0.05 to 1.2 mm
Strip width from 3.0 to 600 mm, but at least 10 times of the strip thickness
Other widths available on request.

Available Versions
Coils with standard outer diameters of 1200 mm
Strips in reel form with coil weight of up to 1500 kg
Multipancake up to 2.5 t
Hot-dip tinned strips
Profiled strips
Electroplated strips (tin, nickel)

Your Local Contact Person

Europe	USA	Asia
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