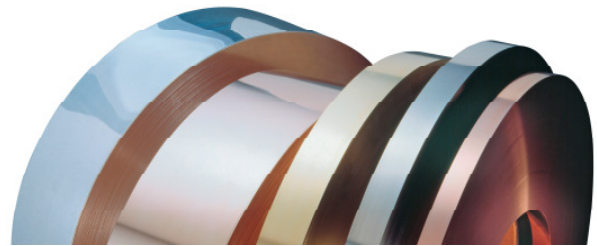


# Brass (Copper-Zinc) MB36



Material Designation	
DIN-EN Symbol	CuZn36
DIN-EN	CW507L
UNS	C27000
JIS	C2700
The Miller Company	-

Nominal Composition (mass content in %)	
Cu	Balance
Sn	< 0.05
Zn	36
Ni	< 0.2
Fe	< 0.05
Al	< 0.02
Pb	< 0.005
Other	< 0.1

## About The Alloy

MB36 is a brass having good workability, drawability and good properties on plating.

Among the Copper Zinc Alloys MB36 exhibits a high electrical and thermal conductivity at a moderate strength level.

The colour of MB36 is due to the increased Zn content already deep yellow. Applications are found in terminal connectors, stamped and deep drawn parts.

MB36 is a single phase Copper alloy and available in a temper condition which allows good cold forming and deep drawing with almost no earring.

MB36 meets with respect to Pb and Cd the OEKO-TEX Standard 100.

## Physical Properties

Electrical conductivity soft	14.5	MS/m
Thermal conductivity	120	W/(m·K)
Thermal expansion coefficient **	20.2	10 <sup>-6</sup> /K
Density	8.4	g/cm <sup>3</sup>
Modulus of elasticity	110	GPa = kN/mm <sup>2</sup>

\* Reference values at room temperature

\*\* Between 20 and 300 °C

## Typical Applications

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

## Mechanical Properties \*)

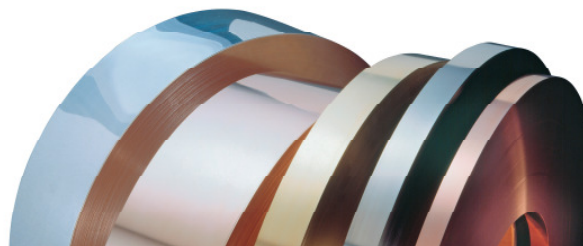
Temper condition	O30 R 290 H 55	H01 R 360 H 95	H02 R 410 H 120	H03 R 460 H 140	H04 R 490 H 155	H06 R 550 H 170
Tensile strength in N/mm <sup>2</sup>	290 - 370	360 - 440	410 - 490	460 - 530	490 - 560	550 - 640
0.2 % yield Strength in N/mm <sup>2</sup>	< 190	> 200	> 300	> 380	> 450	> 500
Elongation A <sub>L50</sub> %	> 40	> 30	> 15	> 10	> 5	> 1
Vickers hardness HV	55 - 95	95 - 125	120 - 150	140 - 170	155 - 185	170 - 200
Electrical conductivity in % IACS	25	25	24	24	23	23

Minimum radius of the bending mandrel for 90° bend and strip thickness s

0.10 ≤ s ≤ 0.25 mm	transverse	0 x s	0 x s	0 x s	0 x s	0 x s	0.5 x s
	parallel	0 x s	0 x s	0 x s	0 x s	0 x s	1 x s
0.25 < s ≤ 0.50 mm	transverse	0 x s	0 x s	0 x s	0 x s	0 x s	1 x s
	parallel	0 x s	0 x s	0 x s	0.5 x s	1 x s	2 x s

\*) Reference values

## Brass (Copper-Zinc) MB36



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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We reserve the right to make alterations especially where necessitated by technical developments or changes in availability. Please ask for the latest edition of this material data sheet.