

Brass

Ms60 (CuZn40)

Material Designation*

UNS	C28000
EN	CuZn40 (CW 509 L)
JIS	C2801
GB	H60

Chemical Composition

Cu	59.0-63.0	%
Zn	Balance	%



Characteristics

The alloy has high strength, excellent hot working performance and good cold working performance. It has good performance under pressure machining and cutting, is easy to be brazed and welded and has good corrosion resistance.

Typical Applications

It is widely used for hardware, machinery, electronic engineering, valve body and plug industries.

Physical Properties

Density ^①	8.39	g/cm ³
Electrical conductivity ^①	26	%IACS
Thermal conductivity ^①	123	W/(m·K)
Coefficient of thermal expansion ^②	20.1	10 ⁻⁶ /K
Modulus of elasticity	103	GPa

Note①: Temperature for testing is 20°C.

Note②: Temperature range for testing is 20-300°C.

Fabrication Properties

Cold workability	Fair
Hot workability	Excellent
Brazing	Excellent
Machinability compared with C36000	40%

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Mechanical Properties

Diameter	Temper	Tensile Strength	Yield Strength	Elongation
mm		MPa min.	MPa min.	% min.
$2 \leq \Phi < 14$	Y2	≥ 500	--	8
$14 \leq \Phi < 40$	Y2	≥ 410	--	12
$40 \leq \Phi < 80$	Y2	≥ 360	--	20

Tolerance and Delivery Form

Diameter	Tolerance ^③	Standard coil weights	Coil ID
mm	mm	kg	mm
$1.0 < \Phi \leq 1.6$	0.03	18-30	260-300
$1.6 < \Phi \leq 2.5$	0.03	25-40	320-350
$2.5 < \Phi \leq 4.0$	0.04	30-45	370-400
$2.8 < \Phi \leq 6.5$	0.04	100-250	400-650
$4.0 < \Phi \leq 6.5$	0.05	45-60	370-400
$6.5 < \Phi \leq 10.0$	0.05	200-400	1000-1200
$8.0 < \Phi \leq 12.0$	0.06	200-400	1200-1400

Note③: The tolerances listed in the table are specified as all plus or all minus. When tolerances are specified as plus and minus (\pm), half the values given.

*Composition UNS
 Conductivity UNS
 Mechanical Properties For reference only, measured at room temperature, 68°F(20°C).
 Fabrication Properties UNS, Machinability for reference only.
 Other Physical Properties For reference only

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