

Brass

Ms85b (C23000)

Material Designation*

UNS	C23000
EN	CuZn15 (CW 502 L)
JIS	C2300
GB	H85

Chemical Composition

Cu	84-86	%
Zn	Balance	%



Characteristics

It has high strength, good plasticity, high mechanical properties and strong corrosion resistance in the air and water. It can withstand the cold and hot pressure processing and is easy to be welded, forged and tin plated. It has no tendency for stress corrosion cracking.

Typical Applications

It is used for condensing and cooling pipes, siphons, snaking pipes and cooling equipment.

Physical Properties

Density ^①	8.75	g/cm ³
Electrical conductivity ^①	37	%IACS
Thermal conductivity ^①	159.3	W/(m·K)
Coefficient of thermal expansion ^②	18.0	10 ⁻⁶ /K
Modulus of elasticity	122	GPa

Note①: Temperature for testing is 20°C.

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

Fabrication Properties

Cold workability	Excellent
Hot workability	Good
Brazing	Excellent
Machinability compared with C36000	30%

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Mechanical Properties

Diameter	Temper	Tensile Strength	Yield Strength	Elongation
mm		MPa min.	MPa min.	% min.
3 < Φ ≤ 12	H02	455	330	--
12 < Φ ≤ 18	H02	--	--	--
25 < Φ ≤ 50	H02	--	--	--
50 < Φ ≤ 80	H02	--	--	--
3 < Φ ≤ 12	H04	570	450	--
12 < Φ ≤ 18	H04	--	--	--
25 < Φ ≤ 50	H04	--	--	--

Tolerance and Delivery Form

Diameter	Standard coil weights	Tolerance ^③	Coil ID
mm	kg	mm	mm
0.1 < Φ ≤ 0.3	1-5	0.01	Spool packing
0.5 < Φ ≤ 0.8	5-12	0.01	160-200
0.8 < Φ ≤ 1.1	15-25	0.02	270-300
1.1 < Φ ≤ 1.6	18-30	0.02	260-300
1.6 < Φ ≤ 2.5	25-40	0.03	320-350
2.5 < Φ ≤ 4.0	30-45	0.03	370-400
4.0 < Φ ≤ 6.5	45-60	0.04	370-400
6.5 < Φ ≤ 10.0	200-400	0.04	1000-1200
8.0 < Φ ≤ 12.0	200-400	0.05	1200-1400

Note^③: 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
 Fabrication Properties UNS, Machinability for reference only.
 Other Physical Properties For reference only

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