bedra
intelligent wires

Ms63b (C27200)

Material Designation*

UNS	C27200
EN	CuZn37 (CW 508 L)
JIS	C2720
GB	H63

Chemical Composition

Cu	62-65	%
Zn	Balance	%

Characteristics

This single-phase brass has good mechanical properties and also high strength and plasticity performance. It can withstand cold and hot pressure processing and has fair corrosion resistance.

Typical Applications

It is used for all kinds of light stamping parts, sugar machinery and ship parts, hardware screws, plugs, etc.

Physical Properties

Density ①	8.44	g/cm^3
Electrical conductivity ①	27.6	%IACS
Thermal conductivity ①	116	W/(m·K)
Coefficient of thermal expansion ②	19.7	10^{-6} / K
Modulus of elasticity	110	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	35%

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Mechanical Properties

Diameter	Temper	Tensile Strength	Yield Strength	Elongation
mm		MPa min.	MPa	% min.
3 < Φ ⩽ 12	H02	375	250	10
12 < Φ ⩽ 18	H02	350	230	14
25 < Φ ⩽ 50	H02	--	--	--
50 < Φ ⩽ 80	H02	--	--	--
3 < Φ ⩽ 12	H04	590	450	--
12 < Φ ⩽ 18	H04	490	360	--
25 < Φ ⩽ 50	H04	--	--	--

Tolerance and Delivery Form

Diameter	Standard coil weights	Tolerance③	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

Note③: The tolerances listed in the table are specified as all plus or all minus. When tolerances are specified as plus and minus (±), 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