

CW506L

LEAD FREE BRASS

DESCRIPTION

CuZn33, is combining excellent cold forming properties with good mechanical strength. CuZn33 has good hot forming properties and excellent soldering and brazing properties. Due to the Outstanding deep drawing properties CuZn33 are called "deep-draw" brass.

CHEMICAL COMPOSITION

Elements	Min (%)	Max (%)
Cu	66.00	68.00
Pb	-	0.05
Fe	-	0.05
Sn	-	0.10
Ni	-	0.30
Al	-	0.02
Total Others	-	0.10
Zn	Remainder	

MECHANICAL PROPERTIES (AS PER TEMPER R350)

Range (mm)	From	To	UTS Min (Mpa)	UTS Max (Mpa)	PS Min (Mpa)	Elongation Min (%)	Hardness Min	Hardness Max
Round (Dia)	1.5	75	350	430	170	23	-	-
Hex (A/F)	3	70	350	430	170	23	-	-
Square (A/F)	3	60	350	430	170	23	-	-

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PHYSICAL PROPERTIES

Melting Point - Liquidus°F	1710
Melting Point - Solidus°F	1660
Density lb/cu in. at 68°F	0.306
Specific Gravity	8.47
Electrical Conductivity % IACS at 68°F	27
Thermal Conductivity Btu/ sq ft/ ft hr/ °F at 68°F	67
Coefficient of Thermal Expansion 68-57210-6 per °F (68 - 572°F)	11.3
Specific Heat Capacity Btu/ lb /°F at 68°F	0.09
Modulus of Elasticity in Tension ksi	15000
Modulus of Rigidity ksi	5600

FABRICATION PROPERTIES

Technique	Suitability
Soldering	Excellent
Brazing	Excellent
Oxyacetylene Welding	Good
Gas Shielded Arc Welding	Fair
Coated Metal Arc Welding	Not Recommended
Spot Weld	Good
Seam Weld	Not Recommended
Butt Weld	Good
Capacity for Being Cold Worked	Excellent
Capacity for Being Hot Formed	Poor
Machinability Rating	30

TYPICAL USES

- Architecture
- Automotive
- Builders Hardware
- Consumer
- Electrical
- Fasteners
- Industrial
- Ordnance
- Plumbing