CW505L

LEAD FREE BRASS

DESCRIPTION

CuZn30 as well as CuZn28 is combining excellent cold forming properties with good mechanical strength. CuZn30 has good hot forming properties and excellent soldering and brazing properties. Due to the outstanding deep drawing properties CuZn30 and the other two mentioned alloys are called “deep-draw” or “cartridge” brass.

CHEMICAL COMPOSITION

Elements	Min (%)	Max (%)
Cu	69.00	71.00
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	-	21	-	-
Hex (A/F)	3	70	350	430	-	21	-	-
Square (A/F)	3	60	350	430	-	21	-	-

RAJHANS METALS PRIVATE LIMITED

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LEAD FREE BRASS

PHYSICAL PROPERTIES

Melting Point - Liquidus°F	1750
Melting Point - Solidus°F	1680
Density lb/cu in. at 68°F	0.308
Specific Gravity	8.53
Electrical Conductivity % IACS at 68°F	28
Thermal Conductivity Btu/ sq ft/ ft hr/ °F at 68°F	70
Coefficient of Thermal Expansion 68-57210"6 per °F (68 - 572°F)	11.1
Specific Heat Capacity Btu/ lb /°F at 68°F	0.09
Modulus of Elasticity in Tension ksi	16000
Modulus of Rigidity ksi	6000

FABRICATION PROPERTIES

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

TYPICAL USES

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

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