

C35350

LEADED BRASS

DESCRIPTION

C35350 leaded brass has a copper content of not less than 61%

CHEMICAL COMPOSITION

Elements	Min (%)	Max (%)
Cu	61.00	63.00
Pb	2.00	4.50
Fe	-	0.40
P	0.05	0.20
Ni	0.05	0.30
Total Others	-	0.50
Zn	Remainder	

MECHANICAL PROPERTIES (AS PER TEMPER HO2)

Range (Inch)	From	To	UTS Min (Ksi)	UTS Max (Ksi)	PS Min (Ksi)	PS Max (Ksi)	Elongation Min (%)	Hardness Min	Hardness Max (HV)
Round (Dia)	0.059	2.953	50.00	69.00	39.00	64.00	25.00	-	140.00
Hex (A/F)	0.118	2.756	50.00	69.00	39.00	64.00	25.00	-	140.00
Square (A/F)	0.118	2.362	50.00	69.00	39.00	64.00	25.00	-	140.00

MECHANICAL PROPERTIES (AS PER TEMPER HO2)

Range (Inch)	From	To	UTS Min (MPa)	UTS Max (MPa)	PS Min (MPa)	PS Max (MPa)	Elongation Min (%)	Hardness Min	Hardness Max (HV)
Round (Dia)	1.5	75.00	345.00	475.00	269.00	440.00	25.00	-	140.00
Hex (A/F)	3.00	70.00	345.00	475.00	269.00	440.00	25.00	-	140.00
Square (A/F)	3.00	60.00	345.00	475.00	269.00	440.00	25.00	-	140.00

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PHYSICAL PROPERTIES

Melting Point - Liquidus°F	1654
Melting Point - Solidus°F	1578
Densitylb/cu in. at 68°F	0.301
Specific Gravity	8.4
Electrical Conductivity% IACS at 68°F	23
Thermal ConductivityBtu/ sq ft/ ft hr/ °F at 68°F	61.3
Coefficient of Thermal Expansion 68-57210 ⁻⁶ per °F (68 – 572°F)	12.2
Specific Heat CapacityBtu/ lb /°F at 68°F	0.09
Modulus of Elasticity in Tensionksi	17600
Modulus of Rigidityksi	4560
Modulus of Elasticity in Tensionksi	0.26

FABRICATION PROPERTIES

Technique	Suitability
Soldering	Good
Brazing	Good
Oxyacetylene Welding	Not Recommended
Gas Shielded Arc Welding	Not Recommended
Coated Metal Arc Welding	Not Recommended
Spot Weld	Not Recommended
Seam Weld	Not Recommended
Butt Weld	Not Recommended
Capacity for Being Cold Worked	Poor
Capacity for Being Hot Formed	Poor
Machinability Rating	88

TYPICAL USES

- Plumbing