

# CZ107

## LEAD FREE BRASS

### DESCRIPTION

Cz107 these brasses have relatively good corrosion resistance, are moderately high in strength, and in some forms, have very good ductility. They are available in many forms including rod, bar, sheet, plate and more.

### CHEMICAL COMPOSITION

Elements	Min (%)	Max (%)
Cu	64.00	67.0
Pb	-	0.10
Fe	-	0.10
Total Others	-	0.50
Zn	Remainder	

### MECHANICAL PROPERTIES (AS PER TEMPER 1/2H)

Range (mm)	From	To	UTS Min (Mpa)	UTS Max (Mpa)	PS Min	Elongation Min (%)	Hardness Min	Hardness Max
Round (Dia)	1.5	75	460	620	-	-	-	-
Hex (A/F)	3.00	70	460	620	-	-	-	-
Square (A/F)	3.00	60	460	620	-	-	-	-
Rectangle (Thickness)	3.00	50	460	620	-	-	-	-

# CZ107

# LEAD FREE BRASS

## 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 <sup>-6</sup> 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
Poor	Poor
Machinability Rating	30

## TYPICAL USES

- › Architecture
- › Automotive
- › Builders Hardware
- › Electrical
- › Fasteners
- › Industrial
- › Marine
- › Plumbing