

BRASS

CZ108 - CW508L

BORNMORE METALS



CZ108 - CW508L

Brass alloy CZ108, also known as CW508L or C27200, is a common alpha brass with good mechanical properties, excellent ductility and good corrosion resistance. Commonly referred to as basis brass, it's composed primarily of copper and zinc, with a high copper content which typically stands around 63%. This composition grants CZ108 excellent ductility and a clean, bright finish, making it ideal for decorative purposes.

KEY FEATURES

- Excellent cold workability
- Can be hot formed and hot forged
- Good corrosion resistance
- High ductility
- Excellent soldering and brazing properties

CHEMICAL PROPERTIES

Copper (Cu)	Nickel (Ni)	Tin (Sn)	Lead (Pb)	Aluminium (Al)	Other Elements	Zinc (Zn)
63-69%	0.3%	0.1%	0.05%	0.02%	0.1%	rest

MECHANICAL PROPERTIES

Tensile strength (N/mm ²)	330-520
Yield strength (N/mm ²)	110-450
Elongation (% at break)	30-50
Hardness - Brinell (HB) tube	70-115
Hardness - Vickers (HV)	70-140

PHYSICAL PROPERTIES

Density (kg/m ³)	8470	
Modulus of elasticity (Gpa)	100	
Mean coefficient of thermal expansion	0-100°C (µm/m/°C)	21.0
	0-350°C (µm/m/°C)	22.2
	0-538°C (µm/m/°C)	23.1
Thermal conductivity	at 100°C (W/m.K)	118
	at 500°C (W/m.K)	102
Specific Heat 0-100°C (J/kg.K)	377	
Electrical conductivity (IAPS)	28	
Melting point (°C)	935	

MARKET SECTORS



Pipes, fittings, valves, components



Connectors, terminals, switch gear components, fittings



Screws, nuts, bolts, fasteners, machinery components



Radiators, heat sinks, fuel lines, connectors



Components, fittings, valves, pumps, tanks



Heat exchangers, condensers, components