

BRASS

CZ108 - CW508L



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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)
62-64%	0.3%	0.1%	0.1%	0.05%	0.2%	rest

MECHANICAL PROPERTIES

	Soft	1/2 Hard	Hard
Tensile strength (N/mm ²)	300-350	350-420	400-480
Yield strength (N/mm ²)	100-150	200-260	250-320
Elongation (% in 50mm)	40	20	8
Hardness - Brinell (HB) tube	110	110	110
Hardness - Vickers (HV)	70	90-120	130

PHYSICAL PROPERTIES

Density (kg/m ³)	8440
Modulus of elasticity (Gpa)	97
Mean coefficient of thermal expansion	0-100°C (µm/m/°C) 19.2
	0-350°C (µm/m/°C) 21.4
	0-538°C (µm/m/°C) 22.6
Thermal conductivity	at 100°C (W/m.K) 120
	at 500°C (W/m.K) 101
Specific Heat 0-100°C (J/kg.K)	380
Electrical conductivity (IACS %)	31
Melting point (°C)	920

MARKET SECTORS



Pipes, fittings, valves, components



Connectors, terminals, switch gear components, fittings



Fasteners, hardware, components, parts



Radiator cores, fuel line fittings, components



Marine fittings, hardware, components



Decorative fittings, door handles, hardware