

# BRASS

## CZ132 - CW602N



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CZ132 brass, also known as CW602N, is a dezincification-resistant (DZR) brass alloy that contains small amounts of lead and arsenic. CZ132 brass is appreciated for its combination of strength, resistance to corrosion and ease of fabrication, making it a versatile material for various industrial applications. CZ132 is easy to form, machine and hot forge, which is ideal for manufacturing complex parts.

### KEY FEATURES

- High Strength and Ductility
- Dezincification Resistance
- Good Corrosion Resistance
- Good Machinability and Formability
- Good for Hot Stamping

### CHEMICAL PROPERTIES

Zinc (Zn)	Lead (Pb)	Iron (Fe)	Tin (Sn)	Arsenic (As)	Copper (Cu)
<b>35-37%</b>	<b>1.7-2.8%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.08-0.15%</b>	<b>rest</b>

### MECHANICAL PROPERTIES

Tensile strength (N/mm <sup>2</sup> )	<b>340-380</b>
Yield strength (N/mm <sup>2</sup> )	<b>220-300</b>
Elongation (% at break)	<b>27-37</b>
Hardness - Brinell (HB) tube	<b>70-150</b>
Hardness - Vickers (HV)	<b>70-150</b>

### PHYSICAL PROPERTIES

Density (kg/m <sup>3</sup> )	<b>8500</b>	
Modulus of elasticity (Gpa)	<b>103</b>	
Mean coefficient of thermal expansion	0-100°C (µm/m/°C)	<b>20.5</b>
	0-350°C (µm/m/°C)	<b>22.9</b>
	0-538°C (µm/m/°C)	<b>24.1</b>
Thermal conductivity	at 100°C (W/m.K)	<b>117</b>
	at 500°C (W/m.K)	<b>96</b>
Specific Heat 0-100°C (J/kg.K)	<b>377</b>	
Electrical conductivity (IACS %)	<b>26</b>	
Melting point (°C)	<b>900</b>	

### MARKET SECTORS



**Heating & Plumbing**

Water fittings, valves, taps, stopcocks, fluid handling



**Marine Equipment**

Marine fittings, valves, fasteners, fittings



**Construction & Architectural**

Decorative and functional elements



**Automotive Industry**

Heating and cooling system components, fasteners



**Manufacturing & Engineering**

Hot formed and machined parts, fasteners, fittings



**Aerospace Industry**

Heating and cooling system components, fasteners