

# CW608N

## FORGING BRASS

### DESCRIPTION

CW608N is a machining brass which combines the contrasting material Properties of machining and cold working exceptionally well. This material is therefore well established in various industries as the standard alloy for machining and cold Working.

### CHEMICAL COMPOSITION

Elements	Min (%)	Max (%)
Cu	60.00	61.00
Pb	1.60	2.50
Sn	-	0.20
Fe	-	0.20
Al	-	0.05
Ni	-	0.30
Total Others	-	0.20
Zn	Remainder	

### MECHANICAL PROPERTIES (AS PER TEMPER R410)

Range (mm)	From	To	UTS Min (N/mm <sup>2</sup> )	PS Min (N/mm <sup>2</sup> )	Elongation Min (%)	Hardness Min	Hardness Max
Round (Dia)	2.00	40.00	410.00	230.00	12.00	-	-
Hex (A/F)	2.00	35.00	410.00	230.00	12.00	-	-
Square (A/F)	2.00	35.00	410.00	230.00	12.00	-	-
Rectangle (Thickness)	2.00	50.00	-	-	-	-	-

### PHYSICAL PROPERTIES

Density	8.44 g/cm <sup>3</sup>
Electrical Conductivity % IACS at 68°F	24
Thermal Conductivity Btu/ sq ft/ ft hr/ °F at 68°F	109 W/m.K
Thermal expansion coefficient	20.4 10 <sup>-6</sup> /K
Modulus of Elasticity	102 Gpa

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### FABRICATION PROPERTIES

Machinability (CuZn39Pb3 = 100 %)	90%
Capacity for being cold worked	fair
Capacity for being hot worked	excellent
Resistance welding (butt weld)	good
Inert gas shielded arc welding	poor
Gas welding	Poor
Hard soldering	fair
Soft soldering	excellent
Melting range	895-900 °C
Hot working	650-750 °C
Soft annealing	450-650 °C (1-3 hr)
Thermal stress relieving	200-300 °C (1-3 hr)

### TYPICAL USES

- Furniture
- Window fittings
- Valve
- Valve parts
- Decorative metalwork
- Clock and instrument
- Casings
- Gears
- Cams
- Fasteners