

C38000

FORGING BRASS

DESCRIPTION

C38000, Section brass, is a readily extrudable leaded alpha/beta brass with a small aluminium addition, which gives a bright golden colour. The lead gives free cutting properties. C38000 is available as extruded rods and flats which are typically used in builders' hardware.

CHEMICAL COMPOSITION

Elements	Min (%)	Max (%)
Cu	55.00	60.00
Pb	1.50	2.50
Fe	-	0.35
Al	-	0.50
Sn	-	0.30
Total Others	-	0.50
Zn	Remainder	

MECHANICAL PROPERTIES (AS PER TEMPER HO2)

Range (Inch)	From	To	UTS Min (Ksi)	PS Min (Ksi)	Elongation Min (%)	Hardness Min	Hardness Max
Round (Dia)	0.1181	2.9527	48.00	16.00	15.00	-	-
Hex (A/F)	0.1181	2.7559	48.00	16.00	10.00	-	-

Range (Inch)	From	To	UTS Min (MPa)	PS Min (MPa)	Elongation Min (%)	Hardness Min	Hardness Max
Round (Dia)	1.5	75.00	330.00	110.00	15.00	-	-
Hex (A/F)	3.00	70.00	330.00	110.00	15.00	-	-

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PHYSICAL PROPERTIES

PHYSICAL PROPERTIES	ENGLISH
Density	0.303 lb/in ³
CTE. linear	14.4 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$
Specific Heat Capacity	0.0908 BTU/lb- $^{\circ}\text{F}$
Thermal Conductivity	784 BTU-in/hr-ft ² - $^{\circ}\text{F}$
Melting Point	1620 – 1650 $^{\circ}\text{F}$
Solidus	1620 $^{\circ}\text{F}$
Liquidus	1650 $^{\circ}\text{F}$

FABRICATION PROPERTIES

Technique	Suitability
Machinability (CuZn39Pb3 = 100 %)	95.00%
Capacity for Being Cold Worked	Poor
Capacity for Being Hot Worked	Excellent

TYPICAL USES

- › Architecture
- › Builders Hardware