

CZ122

FORGING BRASS

DESCRIPTION

CZ122 are the reference materials for hot working. The mean Lead content provides good machinability of the drop-forged part. Because of its Composition the alloy is also suited for the production of drawn and complex profile.

CHEMICAL COMPOSITION

Elements	Min (%)	Max (%)
Cu	56.50	58.50
Pb	1.50	2.50
Fe	-	0.30
Total Others	-	0.70
Zn	Remainder	

MECHANICAL PROPERTIES ACCORDING TO BS2874 (AS PER TEMPER M)

Range (Inch)	From	To	UTS Min (N/mm ²)	PS Min	Elongation Min (%)	Hardness Min	Hardness Max
Round (Dia)	1.5	18.00	380.00	-	25.00	-	-
	18.00	40.00	380.00	-	25.00	-	-
	40.00	75.00	350.00	-	28.00	-	-
Hex (A/F)	3.00	18.00	380.00	-	25.00	-	-
	18.00	40.00	380.00	-	25.00	-	-
	40.00	70.00	350.00	-	28.00	-	-
Square (A/F)	3.00	18.00	380.00	-	25.00	-	-
	18.00	40.00	380.00	-	25.00	-	-
	40.00	60.00	350.00	-	28.00	-	-
Rectangle (Thickness)	3.00	18.00	380.00	-	25.00	-	-
	18.00	40.00	380.00	-	25.00	-	-
	40.00	50.00	350.00	-	28.00	-	-

PHYSICAL PROPERTIES

PHYSICAL PROPERTIES	ENGLISH
Density	0.303 lb/in ³
CTE, linear	14.4 $\mu\text{in/in-}^{\circ}\text{F}$
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

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

TYPICAL USES

- Architecture
- Builders Hardware