

CW616N

FORGING BRASS

DESCRIPTION

CW616, 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. CW616 is available as extruded rods and flats which are typically used in builders' hardware.

CHEMICAL COMPOSITION

Elements	Min (%)	Max (%)
Cu	57.00	59.00
Pb	1.00	2.00
Sn	-	0.20
Fe	-	0.20
Al	0.05	0.30
Ni	-	0.20
Total Others	-	0.20
Zn	Remainder	

MECHANICAL PROPERTIES ACCORDING TO EN12165 (AS PER TEMPER H080)

Range (Inch)	From	To	UTS Min	PS Min	Elo Min (%)	Hardness Min (HV)	Hardness Max
Round (Dia)	1.5	75.00	-	-	-	80.00	170.00
Hex (A/F)	3.00	70.00	-	-	-	80.00	170.00
Square (A/F)	3.00	60.00	-	-	-	80.00	170.00
Rectangle (Thickness)	3.00	50.00	-	-	-	80.00	170.00

PHYSICAL PROPERTIES

PHYSICAL PROPERTIES	METRIC	ENGLISH
Density	8.40 g/cc	0.303 lb/in ³
CTE. linear	26.0 $\mu\text{p/m-}^\circ\text{C}$	14.4 $\mu\text{in/in-}^\circ\text{F}$
Specific Heat Capacity	0.380 J/g- $^\circ\text{C}$	0.0908 BTU/lb $^\circ\text{F}$
Thermal Conductivity	113 W/m-K	784 BTU-in/hr-ft ² - $^\circ\text{F}$
Melting Point	880 -900 $^\circ\text{C}$	1620 -1650 $^\circ\text{F}$
Solidus	880 $^\circ\text{C}$	1620 $^\circ\text{C}$
Liquidus	900 $^\circ\text{C}$	1650 $^\circ\text{F}$



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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

