

Data Sheet

RIVETING & TURNING BRASS - CZ131/CW606N

CW606N / CZ131 is a riveting and turning brass with a duplex phase structure containing a fine dispersion of lead particles to improve machinability. In addition the alloy offers a high general corrosion resistance combined with a good strength and ductility.

The CW606N / CZ131 has high enough copper content to retain good cold heading and cold forming properties together with the ability to be crimped and knurled. Typically used for the production of headed components and is the ideal choice for components requiring forming and machining.

Key Features:	
Good strength and ductility	
High general corrosion resistance	
Ability to be machined and formed	
Related Specifications:	
CZ131	C35300
CW606N	CuZn36Pb2
Chemical Composition:	
Copper	61.0 - 63.0%
Lead	1.5 - 2.5%
Iron	0.2% max
Zinc	Rem
Others	0.50% max
Mechanical Properties:	
UTS	350 N/mm ²
Proof Strength	-
Elongation	25%

Typical Uses:

The CW606N / CZ131 is used for nuts, rivets, screws and other headed components, together with builders hardware, plumbing fitting, faucet seats, instrument parts, clock and watch components, battery terminals and other parts requiring a good machinability and reasonable cold forming.

Typical Physical Properties:	
Melting point	910°C
Density	8.50 g/cm ³
Specific heat	380 J/Kg °K
Thermal conductivity	117 W/m°C
Thermal expansion coefficient (20 - 200°C)	20 x 10 ⁻⁶ per °C
Electrical conductivity	26% IACS
Electrical resistivity	0.066 ohm mm ² /m
Fabrication Properties:	
Hot working temperature range	700 - 800°C
Hot formability	Good
Cold formability	Good
Cold reduction between anneals	50%
Machinability rating (free cutting brass=100)	75%
Annealing temp. Range	450 - 650°C
Stress relieving temp. Range	250 - 350°C
Joining Methods	
Soldering	Excellent
Brazing	Good
Oxy-acetylene welding	Not recommended
Gas-shielded arc welding	Not recommended
Resistance welding: Spot and seam butt	Not recommended