

CC490K / LG1 is a leaded gunmetal a reasonable strength and good corrosion resistance in domestic water systems even at elevated temperatures. It also offers an excellent machinability rating and good wear resistance properties.

The CC490 / LG1 material can be used in environments up to 200°C and can be offered in thinner walled sections.

Related Standards

LG1	CC490K
C84400	CuSn3Pb5Zn8
2.1098	

Chemical Composition (nominal)

Copper	81.0%
Tin	3.0%
Lead	7.0%
Zinc	9.0%
Phosphorus	0.02% max

Mechanical Properties (Minima all sizes Continuous Cast)

UTS	200 N/mm ²
0.2% Proof Strength	100 N/mm ²
Elongation	8%
Hardness	70 HB

Key Features

- High wear resistance
- Excellent Machinability
- Good corrosion resistance

Typical Physical Properties

Melting Point	1005°C
Density	8.7 g/cm ³
Thermal conductivity (RT)	61 W/m ^o K
Electrical conductivity	16.4 % IACS
Thermal expansion coefficient (20-200°C)	18 x 10 ⁻⁶ / °C
Modulus of Elasticity	89 GPa

Fabrication Properties

Hot Formability	Not Recommended
Cold Formability	Not Recommended
Machinability rating	90%

(free cutting brass = 100)	
Stress Relieving Temp. Range	260°C (1hr per inch thickness)
Maximum operating temperature	230°C

Joining Methods

Soldering	Excellent
Brazing	Good
Oxy-acetylene welding	Not recommended
Gas-shielded arc welding	Not recommended

Typical Uses

Traditional uses for the CC490K / LG1 would be in general hardware, ornamental castings, plumbing supplies and fixtures together with light bearing bushes and low pressure valves and fittings.

This technical information is given by Holme Dodsworth Metals without charge and the user shall employ such information at his own discretion and risk. For more detailed technical advice on temper selection, fabrication, joining, machining, physical and mechanical data please contact us as space does not permit the listing of every feature of the material.