

# Wieland-G10

CuSn10-C-GC | Red brass

## Material designation

EN CuSn10-C-GC  
CC480K

UNS -

## Chemical composition\*

Cu 89 %

Sn 10 %

Pb 1 %

\*Reference values in % by weight

## Material properties and typical applications

Wieland-G10 belongs to the group of cast copper-tin alloys (bronzes) and has a relatively high elongation. It is used for parts such as fittings and water turbines.

## Physical properties\*

Electrical conductivity MS/m 7.71  
%IACS 12

Thermal conductivity W/(m·K) 59

Thermal expansion coefficient (0–300 °C) 10<sup>-6</sup>/K 18.5

Density g/cm<sup>3</sup> 8.8

Modulus of elasticity GPa 100

\*Reference values at room temperature

## Types of delivery

The BU Extruded Products supplies bars, wire, sections and tubes. Please get in touch with your contact person regarding the available delivery forms, dimensions and tempers.

## Fabrication properties

### Forming

Machinability 85 %  
(CuZn39Pb3 = 100 %)

Capacity for being cold worked not possible

Capacity for being hot worked not possible

### Heat treatment

Melting range 830 °C

Thermal stress relieving 250–450 °C

## Corrosion resistance

Cast alloys belong to the most corrosion-resistant copper alloys. They exhibit excellent resistance to atmospheric influences, carbonic acid and saline water. Also important is their resistance to seawater and their insensitivity to stress corrosion cracking.

## Mechanical properties, reference values

	Tensile strength R <sub>m</sub> MPa	Yield strength R <sub>p0.2</sub> MPa	Elongation A %	Hardness HBW
Continuous casting	280	170	10	80

## Product standards

Cast alloys EN 1982