Material Data Sheet

BÖGRA – T48

CuAl10Fe2-C

Chemical Composition [wt%]	
Cu	remainder
Al	9,5
Fe	2,5
Ni	<1,5
Mn	<1,0

Material Designation

Bögra: **T48** according to Production-Specification BT-T48-830 lead free

DIN: Complies with CuAl10Fe2-C according to DIN EN 1982:2017

Material-No.

CC331G (formerly 2.0940 according to DIN 1714)

Supplied as

- Gravity Die-Castings

Applications

Constructional material with high resistance to corrosion by seawater and acids. Only small temperature dependence between -200 and +200 °C.
This alloy is used in the food processing industry, for acid-resistant fittings, as carbon-brush holders, worm- and bevel-gears, pumps and pump-impellers. In spite of its high hardness, T48 is excellent for fine machining.

Physical properties (standard values)			
Condition		GC	GM
Density	ρ [kg/dm³]		7,5
Coefficient of thermal expansion	α [*10^{-6}/K]		16,5
Electrical conductivity	κ [MS/m]		6,5
Modulus of elasticity	E [kN/mm²]		110

Mechanical properties (standard values)			
Condition		GC	GM
Brinell Hardness	HBW		Min. 130
0,2% - proofstress	$Rp_{0,2}$ [N/mm²]		Min. 250
Tensile strength	R_m [N/mm²]		Min. 600
Elongation	A [%]		20
Compressive strength	R_d [N/mm²]		-
Max. loading pressure	$p_{zul.}$ [N/mm²]		-