

Material Data Sheet



BÖGRA - F50

CuZn35Mn2Al1Fe1-C

Chemical Composition [wt%]	
Cu	remainder
Zn	30,8
Mn	1,7
Al	1,5
Fe	1,3
Ni	<6,0
Sn	<1,0

Material Designation

Bögra: **F50** according to Production-Specification BT-F50-355

DIN: Complies with CuZn35Mn2Al1Fe1-C according to DIN EN 1982:2017

Material-No.

CC765S (formerly 2.0592 according to DIN 1709)

Supplied as

- Gravity Die-Castings

Applications

The high strength of this alloy makes it suitable for parts that are subject to high mechanical loads, such as special fitting and instrument components, valve and control parts, seatings and balls. It has good corrosion resistance and is therefore widely used in the food processing industry. This special casting brass is particularly tough and special attention should be given to the tools used for the brief, final machining.

Physical properties (standard values)			
Condition		GC	GM
Density	ρ [kg/dm ³]		8,6
Coefficient of thermal expansion	α [$\cdot 10^{-6}/K$]		19
Electrical conductivity	κ [MS/m]		8,8
Modulus of elasticity	E [kN/mm ²]		95

Mechanical properties (standard values)			
Condition		GC	GM
Brinell Hardness	HBW		Min. 110
0,2% - proofstress	R_{p0,2} [N/mm ²]		Min. 200
Tensile strength	R_m [N/mm ²]		Min. 475
Elongation	A [%]		18
Compressive strength	R_d [N/mm ²]		-
Max. loading pressure	p_{zul.} [N/mm ²]		Max. 80

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