# **Material Data Sheet**



## BÖGRA - TO

CuZn16Si4-C

Chemical Composition [wt%]			
Cu	remainder		
Zn	14,0		
Si	4,0		
Ni	<1,0		
Pb	<0,8		
Al	<0,1		

#### **Material Designation**

Bögra: TO according to Production-

Specification BT-TO-390

DIN: Complies with CuZn16Si4-C

according to DIN EN 1982:2017

#### Material-No.

CC761S (formerly 2.0492 according to DIN 1709)

### Supplied as

· Gravity Die-Castings

#### **Applications**

Constructional material with excellent casting properties, good corrosion and saltwater resistance. It is especially suitable for complex castings with not too great wall thicknesses.

The material is readily chromium or nickel plated and has good soft and hard solderability. Good machinability. The finest threads can be cut with perfect shape with a positive cutting angle.

This special alloy is to be preferred for highly stressed fittings and cast components such as housing covers for industrial water meters, steam fittings, valves and control parts for compressed air and hydraulics.

Physical properties (standard values)					
Condition		GC	GM		
Density	ρ [kg/dm³]		8,3		
Coefficient of thermal expansion	α [*10 <sup>-6</sup> /K]		18		
Electrical conductivity	<b>κ</b> [MS/m]		4		
Modulus of elasticity	E [kN/mm²]		100		

Mechanical properties (standard values)					
Condition		GC	GM		
Brinell Hardness	HBW		Min. 130		
0,2% - proofstress	<b>Rp<sub>0,2</sub></b> [N/mm <sup>2</sup> ]		Min. 300		
Tensile strength	R <sub>m</sub> [N/mm <sup>2</sup> ]		Min. 500		
Elongation	<b>A</b> [%]		8		
Compressive strength	R <sub>d</sub> [N/mm <sup>2</sup> ]		-		
Max. loading pressure	<b>p<sub>zul.</sub></b> [N/mm²]		-		

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