

Database of Steel and Alloy (Marochnik)

splat.kharkov.com/en

[Home](#) [European steel grades](#) [Steel and Alloy](#) [Search](#) [Equivalent grades](#) [Grading](#) [GOST Standard](#) [Contacts](#)

YOU HERE: [Steel and Alloy](#) -> [Bronze](#)

Characteristics for grade BrSr0.1 (БpCp0.1).

Grade :	BrSr0.1 (БpCp0.1) (CuAg0.1)
Classification :	Tin-free pressure-worked bronzes
Equivalent grades:	Go here

Chemical composition in % for grade BrSr0.1 (БpCp0.1)

Cu	Ag	O	Impurity
99.72 - 99.82	0.08 - 0.12	max 0.06	all 0.1

Comment: Cu is a basis; the percentage of Cu is given approximately.

Mechanical properties under T=20°C for grade BrSr0.1 (БpCp0.1)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
soft			200	80	55			
hard			340	300	4			

Brinell hardness for BrSr0.1 (БpCp0.1) , soft	HB 10 ⁻¹ = 50 MPa
Brinell hardness for BrSr0.1 (БpCp0.1) , hard	HB 10 ⁻¹ = 110 MPa

Technological properties of the material BrSr0.1 (БpCp0.1) .

Melting temperature :	1082 °C
-----------------------	---------

Physical properties for grade BrSr0.1 (БpCp0.1)

T	E 10 ⁻⁵	α 10 ⁶	λ	ρ	C	R 10 ⁹
Grade	MPa	1/Grade	Watt/(m·Grade)	kg/m ³	J/(kg·Grade)	Ohm·m
20	1.27	17		8890		

Equivalent steels for grade BrSr0.1 (БpCp0.1)

Warning! Indicated both exact and nearest equivalents.

Germany
DIN, WNr
2.1191
2.1203

Specification :**Mechanical properties :**

σ_B	- Tensile strength , [MPa]
σ_T	- Yield stress , [MPa]
δ_5	- Specific elongation at fracture , [%]
ψ	- Reduction of area , [%]
KCU	- Impact strength , [kJ / m ²]
HB	- Brinell hardness , [MPa]

Physical properties :

T	- Test temperature , [Grade]
E	- Young modulus , [MPa]
α	- Coefficient of linear expansion (range 20° - T) , [1/Grade]
λ	- Thermal (heat) condition coefficient , [Watt/(m·Grade)]
ρ	- Density , [kg/m ³]
C	- Specific heat (range 20° - T) , [J/(kg·Grade)]
R	- Electrical resistance , [Ohm·m]

Database of steels and alloys (Marochnik) contains information about chemical composition and properties more than 2500 steels and alloys (stainless steel, alloy steel, carbone steel, structural steel, tool steel, cast iron, aluminum alloy, titanium alloy, copper alloy, nickel alloy, magnesium alloy and others).
Helpfull for specialists in grade technology, structural engineer, mechanical engineer, metallurgy and metal trader

[Top](#)

© 2003 - 2013 All rights reserved. [About program.](#)

The entire risk as to use of the Database of Steel and Alloy (Marochnik) content is assumed by you the user

