

Database of Steel and Alloy (Marochnik)

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Characteristics for grade BrSu3N3TS3S20F (БpCy3H3Ц3C20Φ).

Grade :	BrSu3N3TS3S20F (БpCy3H3Ц3C20Φ)
Classification :	Tin-free foundry bronzes
Equivalent grades:	Is absent

Chemical composition in % for grade BrSu3N3TS3S20F (БpCy3H3Ц3C20Φ)

Fe	Si	Ni	P	Al	Cu	As	Pb	Zn	Sb	Bi	Sn	Impurity
max 0.3	max 0.02	3 - 4	0.15 - 0.3	max 0.02	64.8 - 72.85	max 0.1	18 - 22	3 - 4	3 - 4	max 0.025	max 0.5	all 0.9

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

Mechanical properties under T=20°C for grade BrSu3N3TS3S20F (БpCy3H3Ц3C20Φ)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
cast in a metal mould, GOST 493-79			157		2			

Brinell hardness for BrSu3N3TS3S20F (БpCy3H3Ц3C20Φ) , cast in a metal mould GOST 493	HB 10⁻¹ = 65 MPa
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Technological properties of the material BrSu3N3TS3S20F (БpCy3H3Ц3C20Φ) .

Linear shrinkage :	1.25 %
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Physical properties for grade BrSu3N3TS3S20F (БpCy3H3Ц3C20Φ)

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	0.735	17.4	54.4	9100		

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 / m²]
- 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/m³]
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

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