

Database of Steel and Alloy (Marochnik)

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Characteristics for grade BrO10S10 (БpO10C10).

Grade :	BrO10S10 (БpO10C10)
Classification :	Tin foundry bronzes
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Chemical composition in % for grade BrO10S10 (БpO10C10)

Fe	Si	P	Al	Cu	Pb	Zn	Sb	Sn	Impurity
max 0.2	max 0.02	max 0.05	max 0.02	77.1 - 83	8 - 11	max 0.5	max 0.3	9 - 11	all 0.9

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

Mechanical properties under T=20°C for grade BrO10S10 (БpO10C10)

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 613-79			196		6			Without heat treatment
sand (mould) casting, GOST 613-79			176		7			Without heat treatment

Brinell hardness for BrO10S10 (БpO10C10) (without heat treatment), cast in a metal mould GOST 613-79	HB 10⁻¹ = 78 MPa
Brinell hardness for BrO10S10 (БpO10C10) (without heat treatment), sand (mould) casting GOST 613-79	HB 10⁻¹ = 65 MPa

Equivalent steels for grade BrO10S10 (БpO10C10)

Warning! Indicated both exact and nearest equivalents.

USA	Germany	Japan	France	England	European	Italy	Sweden	Poland	Czechia	Inter
-	DIN, WNr	JIS	AFNOR	BS	EN	UNI	SS	PN	CSN	ISO
C93700	2.1177 SnPbBz10	H5115/class3 H5115/class3C LBC3	CuSn10Pb10	LB2	CC495K CuSn10Pb10-C	GCuSn10Pb10	CuPb10Sn10	CuPb10Sn10	423122	CuPb10Sn10

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]

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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