

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](#) -> [Latten \(copper-zinc alloy\)](#)

Characteristics for grade LS63-3 (ЛС63-3).

Grade :	LS63-3 (ЛС63-3) (ЛС63-3А)
Classification :	Copper-zinc alloys pressure treated
Equivalent grades:	Go here

Chemical composition in % for grade LS63-3 (ЛС63-3)

Fe	P	Cu	Pb	Zn	Sb	Bi	Sn	Impurity
max 0.1	max 0.01	62 - 65	2.4 - 3	31.65 - 35.6	max 0.005	max 0.002	max 0.1	all 0.25

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

Mechanical properties under T=20°C for grade LS63-3 (ЛС63-3)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
Bar, GOST 2060-2006			350		12			
Bar, GOST 2060-2006			490-590					
Band, GOST 4442-72			295		40			
Band, GOST 4442-72			440-550					

Brinell hardness for LS63-3 (ЛС63-3) , Bar GOST 2060-2006	HB 10⁻¹ = 130 - 155 MPa
Brinell hardness for LS63-3 (ЛС63-3) , Bar GOST 2060-2006	HB 10⁻¹ = 95 MPa
Brinell hardness for LS63-3 (ЛС63-3) , soft	HB 10⁻¹ = 45 - 55 MPa

Technological properties of the material LS63-3 (ЛС63-3) .

Melting temperature :	905 °C
Annealing temperature :	600 - 650 °C

Physical properties for grade LS63-3 (ЛС63-3)

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	0.98		117	8500		69
100		20.5			376.8	

Equivalent steels for grade LS63-3 (ЛС63-3)

Warning! Indicated both exact and nearest equivalents.

USA	Germany	Japan
-	DIN, WNr	JIS
C35300	2.0331	C3560
C35600	CuZn36Pb1.5	C3561

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 then 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

