

Database of Steel and Alloy (Marochnik)

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Characteristics for grade LS60-1 (ЛС60-1).

Grade :	LS60-1 (ЛС60-1)
Classification :	Copper-zinc alloys pressure treated
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Chemical composition in % for grade LS60-1 (ЛС60-1)

Fe	P	Cu	Pb	Zn	Sb	Bi	Impurity
max 0.15	max 0.01	59 - 61	0.6 - 1	37.5 - 40.4	max 0.005	max 0.002	all 0.5

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

Mechanical properties under T=20°C for grade LS60-1 (ЛС60-1)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
soft			300-400		45-55			
hard			600-700		4-6			

Brinell hardness for LS60-1 (ЛС60-1) , soft	HB 10 ⁻¹ = 60 - 70 MPa
Brinell hardness for LS60-1 (ЛС60-1) , hard	HB 10 ⁻¹ = 150 - 160 MPa

Friction coefficient of the material LS60-1 (ЛС60-1) .

Friction coefficient with oil :	0.1
Friction coefficient without oil :	0.22

Technological properties of the material LS60-1 (ЛС60-1) .

Melting temperature :	900 °C
Annealing temperature :	600 - 650 °C

Physical properties for grade LS60-1 (ЛС60-1)

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	1.05			8500		65
100		20.8				

Equivalent steels for grade LS60-1 (ЛС60-1)

Warning! Indicated both exact and nearest equivalents.

USA	Germany	Japan	France	England	European	Italy	Sweden	Czechia	Inter
-	DIN, WNr	JIS	AFNOR	BS	EN	UNI	SS	CSN	ISO
C36500	2.0372 CuZn39Pb0.5	C3710 C3712	CuZn39Pb0.8	CZ123	CuZn37Pb1 CW605N	PCuZn39Pb1	CuZn40Pb	423221	CuZn37Pb1

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

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