

Database of Steel and Alloy (Marochnik)

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Characteristics for grade LAN59-3-2 (ЛАН59-3-2).

Grade :	LAN59-3-2 (ЛАН59-3-2)
Classification :	Copper-zinc alloys pressure treated
Equivalent grades:	Is absent

Chemical composition in % for grade LAN59-3-2 (ЛАН59-3-2)

Fe	Ni	P	Al	Cu	Pb	Zn	Sb	Bi	Impurity
max 0.5	2 - 3	max 0.01	2.5 - 3.5	57 - 60	max 0.1	32.6 - 38.5	max 0.005	max 0.003	all 0.9

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

Mechanical properties under T=20°C for grade LAN59-3-2 (ЛАН59-3-2)

Assortment	Dimension	Direct.	σ_B	σ_T	δ_5	ψ	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
soft			450-550		40-50			
hard			650-750		7-11			

Brinell hardness for LAN59-3-2 (ЛАН59-3-2), soft	HB 10 ⁻¹ = 110 - 120 MPa
Brinell hardness for LAN59-3-2 (ЛАН59-3-2), hard	HB 10 ⁻¹ = 175 - 185 MPa

Friction coefficient of the material LAN59-3-2 (ЛАН59-3-2).

Friction coefficient with oil :	0.01
Friction coefficient without oil :	0.32

Technological properties of the material LAN59-3-2 (ЛАН59-3-2).

Melting temperature :	956 °C
Annealing temperature :	600 - 650 °C

Physical properties for grade LAN59-3-2 (ЛАН59-3-2)

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	1.08		83.7	8200		78
100		19				

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 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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