



PRODUCTION PROGRAM

Unit: mm	●	■	■	◆
Drawn	14 ÷ 76,2	20 ÷ 65	Spess. 12 ÷ 55	20 ÷ 63,5
Extruded	30 ÷ 254	50 ÷ 165	Spess. 30 ÷ 127	-

According to EU directives:

2000/53/EU (ELV) - 2018/740/EU (RoHS II)

PRESENTATION

This alloy has high mechanical properties, excellent resistance to fatigue, good attitude to forging and a fair machinability.

2014A by Eural can also be made according to aerospace BS L168 standard, which requires higher mechanical properties compared to traditional EN standards.

This version is available only for extruded bars in T6511 temper, from diameter 30 mm up to 152,4 mm.

Main applications: High structural resistance components for aircraft and defense.



Properties	T3/T4/T6
Machinability	■
Protective anodizing	■
Decorative anodizing	■
Hard anodizing	■
Resistance to atmospheric corrosion	■
Resistance to marine corrosion	■
MIG-TIG weldability	■
At resistance weldability	■
Brazing weldability	■
Plastic formability when cold	■
Plastic formability when hot	■

Legend

Excellent	Good	Acceptable	Not recommended
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Samples of finished products made of Eural bars



Chemical composition	
Si	0,50 ÷ 0,90
Fe	≤ 0,50
Cu	3,90 ÷ 5,00
Mn	0,40 ÷ 1,20
Mg	0,20 ÷ 0,80
Cr	≤ 0,10
Ni	≤ 0,10
Zn	≤ 0,25
Ti	≤ 0,15
Pb	
Others	Each 0,05 Total 0,15
Al	Remainder

Physical properties	
Density	Kg/dm ³ 2,80
Modulus of elasticity	MPa 72.400
Coefficient of thermal expansion	x10 ⁻⁶ /°C 23
Thermal conductivity at 20°C	W/mk T6: 155
Typical electrical resistivity at 20°C	Ω mm ² /m T6: 0,043

Minimum mechanical properties						
Temper	Diam. mm	Rm	Rp0,2	HBW		
		MPa	MPa	A%	Typical	
Drawn	T3	≤ 80	380 290	8	110	
	T351	≤ 80	380 290	6	110	
	T4	≤ 80	380 220	12	110	
	T451	≤ 80	380 220	10	110	
	T6	≤ 80	450 380	8	140	
Extruded	T651	≤ 80	450 380	6	140	
	T4, T4510, T4511	≤ 75	410 270	12	110	
	T4, T4510, T4511	75 < D ≤ 150	390 250	10	110	
	T4, T4510, T4511	150 < D ≤ 200	350 230	8	110	
	T6, T6510, T6511	≤ 75	460 415	7	140	
	T6, T6510, T6511	75 < D ≤ 150	465 420	7	140	
	T6, T6510, T6511	150 < D ≤ 200	430 350	6	140	
	T6, T6510, T6511	200 < D ≤ 250	420 320	5	140	
	BSL168 Extruded	T6, T6510, T6511	≤ 75	490 440	7	-
		T6, T6510, T6511	75 < D ≤ 100	480 435	7	-
T6, T6510, T6511		100 < D ≤ 150	465 420	7	-	
T6, T6510, T6511		150 < D ≤ 200	435 390	7	-	