



## PRODUCTION PROGRAM

Unit: in	●	■	■	●
Drawn	0.551 - 3	0.787 - 2.559	Thick. 0.472 - 2.165	0.787 - 2.5
Extruded	1.181 - 10	1.181 - 6.5	Thick. 1.181 - 5	-

According to EU directives:  
2000/53/EU (ELV) – 2011/65/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 1.181 in up to 6 in.

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

Samples of finished products made of Eural bars

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	■

### Legenda



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	lb / in <sup>3</sup> 0.1012
Modulus of elasticity	ksi 10,500
Coefficient of thermal expansion	x10 <sup>-6</sup> / °F 12.8
Thermal conductivity at 68°F	Btu / ft h °F T6: 89
Typical electrical resistivity at 68°F	Ω mm <sup>2</sup> / m T6: 0.043



Minimum mechanical properties						
Temper	Diam. in	UTS		YTS		
		ksi	ksi	A%	HBW Typical	
Drawn	T3	≤ 3	55.1	42.1	8 110	
	T351	≤ 3	55.1	42.1	6 110	
	T4	≤ 3	55.1	31.9	12 110	
	T451	≤ 3	55.1	31.9	10 110	
	T6	≤ 3	65.3	55.1	8 140	
	T651	≤ 3	65.3	55.1	6 140	
Extruded	T4, T4510, T4511	≤ 3	59.5	39.2	12 110	
	T4, T4510, T4511	3 < D ≤ 6	56.6	36.3	10 110	
	T4, T4510, T4511	6 < D ≤ 8	50.8	33.4	8 110	
	T6, T6510, T6511	≤ 3	66.7	60.2	7 140	
	T6, T6510, T6511	3 < D ≤ 6	67.4	60.9	7 140	
	T6, T6510, T6511	6 < D ≤ 8	62.4	50.8	6 140	
	T6, T6510, T6511	8 < D ≤ 10	60.9	46.4	5 140	
	BSL168 Extruded	T6, T6510, T6511	≤ 3	71.1	63.8	7 -
		T6, T6510, T6511	3 < D ≤ 6	69.6	63.1	7 -
		T6, T6510, T6511	6 < D ≤ 8	67.4	60.9	7 -
		T6, T6510, T6511	8 < D ≤ 10	63.1	56.6	7 -