2017A by EURAL Meets the requirements

of alloy 2017



Color code green

According to EU directives: 2000/53/EU (ELV) – 2011/65/EU (RoHS II)



PRESENTATION

Unit: in

Drawn

Extruded

PRODUCTION PROGRAM

This alloy has high mechanical properties and excellent resistance to fatigue. During machining, it creates quite long chips, therefore it is not well suited for automatic lathes.

0.787 - 2.559

1.181 - 6.5

0.551 - 3

1.181 - 10

It can be replaced by 2030, which has the same mechanical properties but has better machinability, allowing higher productivity.

Main applications: screws and bolts, high structural resistance components for aviation and defense.

Samples of finished products made of Eural bars

Properties		T3/T4		
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				

Good

Legend

Excellent

Chemical composition

Acceptable Not recommended



Minimum mechanical properties								
_			UTS	YTS		HBW		
	Temper	Diam. in	ksi	ksi	A%	Typical		
Drawn	Т3	≤ 3	58.0	36.3	10	105		
	T351	≤ 3	58.0	36.3	8	105		
Extruded	T4, T4510, T4511	≤ 3	58.0	39.2	10	105		
	T4, T4510, T4511	$3 \le D \le 6$	56.6	37.7	9	105		
	T4, T4510, T4511	6 < D ≤ 8	53.7	34.8	8	105		
	T4, T4510, T4511	8 < D ≤ 10	52.2	31.9	7	105		

Si 0.20 - 0.80 ≤ 0.70 Fe Cu 3.50 - 4.50 Mn 0.40 - 1.00 0.40 - 1.00 Mg ≤ 0.10 Cr Ni Zn ≤ 0.25 Zr+Ti ≤ 0.25 Pb Bi Others Each 0.05 Total 0.15 AI Remainder

Physical properties					
Density	lb	0 1000			
Density	in ³	0.1008			
Modulus of elasticity	ksi	10,878			
Coefficient of thermal evenencion	x10 ⁻⁶	40.4			
Coeffi cient of thermal expansion	°F	13.1			
Thermal conductivity at 60°E	Btu	77.0			
Thermal conductivity at 68°F	ft h °F	77.0			
Typical electrical resistivity at 68°F	$\Omega \ mm^2$	0.051			
rypical electrical resistivity at 66 F	m	0.051			

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Thick. 0.472 - 2.165

Thick. 1.181 - 5

0.787 - 2.5

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