



PRODUCTION PROGRAM

Unit: mm	●	■	■	◆
Drawn	6 ÷ 76,2	10 ÷ 65	Thick. 12 ÷ 55	10 ÷ 63,5
Extruded	30 ÷ 254	50 ÷ 165	Thick. 30 ÷ 127	-

According to EU directives:

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



PRESENTATION

This is an ecologic alloy, it does not have lead, it has good machinability and high mechanical characteristics. Moreover, it has a good resistance to corrosion and suitability to hard, protective and decorative anodizing. It is an alternative to 6012, 6262, 6020, 6023 alloys.

Main applications: machining on high-speed automatic lathes, particulars for automotive applications, automatic transmission shafts, valves and clutches, hydraulic parts.

NOTE: it is particularly suitable for the realization of parts not subject to extreme heat solicitations (max 160°C) and therefore it is appropriate for automotive parts as automatic transmission shafts. For higher temperatures, we suggest to use other Eural alloys, as 6026 LEAD FREE, 6026 or 6064A.

Properties	T6	T8/T9
Machinability	Excellent	Good
Protective anodizing	Good	Good
Decorative anodizing	Good	Good
Hard anodizing	Good	Good
Resistance to atmospheric corrosion	Good	Good
Resistance to marine corrosion	Good	Good
MIG-TIG weldability	Good	Good
At resistance weldability	Good	Good
Brazing weldability	Good	Good
Plastic formability when cold	Good	Good
Plastic formability when hot	Good	Good

Legend



Samples of finished products made of Eural bars



Chemical composition	
Si	0,40 ÷ 0,80
Fe	≤ 0,70
Cu	0,15 ÷ 0,40
Mn	≤ 0,15
Mg	0,80 ÷ 1,20
Cr	0,04 ÷ 0,14
Ni	
Zn	≤ 0,25
Ti	≤ 0,10
Bi	0,40 ÷ 0,90
Sn	0,40 ÷ 1,00
Others	Each 0,05 Total 0,15
Al	Remainder

Physical properties	
Density	Kg/dm ³ 2,72
Modulus of elasticity	MPa 69.000
Coefficient of thermal expansion	x10 ⁻⁶ /°C 23,4
Thermal conductivity at 20°C	W/mk 172
Typical electrical resistivity at 20°C	Ω mm ² /m 0,038

Minimum mechanical properties					
Temper	Diam. mm	Rm	Rp0,2	HBW	A% Typical
		MPa	MPa		
Drawn	T6	≤ 80	290 240	10	-
	T8	≤ 50	345 315	4	-
	T9	≤ 50	360 330	4	-
Extruded	T6	≤ 220	260 240	10	75