6064A by EURAL

Color code
orange

PRODUCTION PROGRAM

Unit: in	●	■	▬	⬢
Drawn	0.313 - 3	0.472 - 2.559	Thick. 0.472 - 2.165	0.472 - 2.362
Extruded	1.181 - 10	1.969 - 6.5	Thick. 1.181 - 5	–

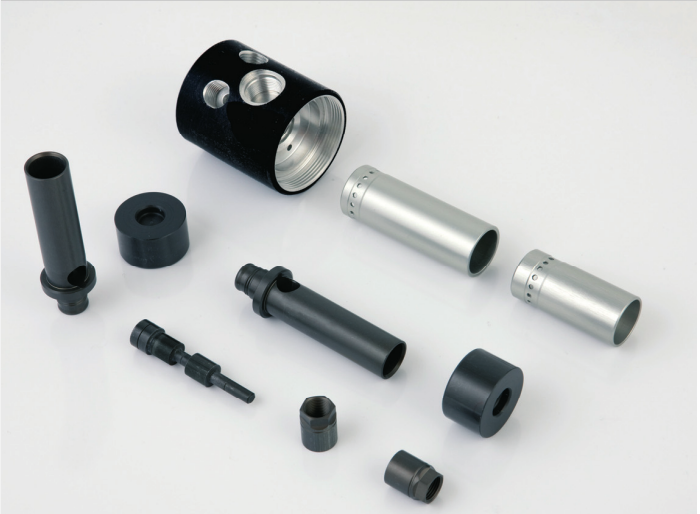
According to EU directives:
2000/53/EC (ELV) – 2011/65/EU (RoHS II)

PRESENTATION

This alloy has good machinability and high mechanical properties. Moreover, it has good resistance to corrosion and suitability to hard, protective and decorative anodizing.

Main applications: particulars for braking systems for automotive, structural components for civil constructions, railroad and heavy street vehicles.

Samples of finished products made of Eural bars



Properties	T6	T8/T9
Machinability	Excellent	Excellent
Protective anodizing	Excellent	Excellent
Decorative anodizing	Excellent	Excellent
Hard anodizing	Excellent	Excellent
Resistance to atmospheric corrosion	Excellent	Excellent
Resistance to marine corrosion	Good	Good
MIG-TIG weldability	Excellent	Excellent
At resistance weldability	Excellent	Excellent
Brazing weldability	Good	Good
Plastic formability when cold	Good	Not recommended
Plastic formability when hot	Excellent	Excellent

Legend

Excellent | Good | Acceptable | Not recommended

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	≤ 0,15
Zr	
Pb	0.20 - 0.40
Bi	0.40 - 0.80
Al	Remainder

Physical properties

Density	$\frac{lb}{in^3}$	0.0983
Modulus of elasticity	ksi	10,008
Coefficient of thermal expansion	$\frac{x10^{-6}}{°F}$	13.0
Thermal conductivity at 68°F	$\frac{Btu}{ft\ h\ °F}$	98.8
Electrical resistivity at 68°F	$\frac{\Omega\ mm^2}{m}$	0.039

Mechanical properties

	Temper	UTS ksi	YTS ksi	A%	HBW
Extruded	T6	37.7	34.8	10	90
	T6 *	50.8	46.4	10	110
Drawn	T6	42.1	34.8	10	90
	T6 *	50.8	42.8	12	95
	T8	50.0	45.7	4	95
	T8 *	54.4	51.5	10	105
	T9	52.2	47.9	4	95
	T9 *	55.8	53.7	7	110

** Typical Eural properties*