

6064A

Color code
orange



EURAL

GNUTTI S.p.A.

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 a 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 street heavy vehicles.

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

Legend



Chemical composition	
Si	0.60 - 1.40
Fe	≤ 0.70
Cu	0.20 - 0.50
Mn	0.20 - 1.00
Mg	0.60 - 1.20
Cr	≤ 0.30
Ni	
Zn	≤ 0.30
Ti	≤ 0.20
Zr	
Pb	≤ 0.40
Bi	0.50 - 1.50
Al	Rem.

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

Mechanical characteristics					
	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 Characteristics