

Colour code EU red



Colour code USA brown

PRODUCTION PROGRAM

| Unit: mm | • | | | | According to EU directives: |
|----------|----------|----------|-----------------|-----------|---|
| Drawn | 5 ÷ 76,2 | 10 ÷ 65 | Thick. 12 ÷ 55 | 10 ÷ 63,5 | 2000/53/EU (ELV) – 2011/65/EU (RoHS II) |
| Extruded | 30 ÷ 254 | 30 ÷ 165 | Thick. 30 ÷ 127 | - | 2000/33/20 (220) - 201//03/20 (10113 1) |



PRESENTATION

This alloy is the most often selected for high speed automatic lathes. It offers the following advantages:

- easy machining with any equipment;
- cutting stress lower than most of other alloys;
- longer life of cutting tools;
- cutting area always clean due to very thin chip;
- high mechanical properties;
 possibility to anodize finished parts in several colours *.
- possibility to anotize misried parts in several colours "

Main applications: screws, bolts, nuts, threaded bars.

* To get an optimal surface finishing of anodized pieces, we suggest use suitable lubricants during machining.

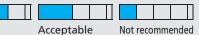
Samples of finished products made of Eural bars

| Properties | | T3/T6 | | | T8 | | |
|-------------------------------------|--|-------|--|--|----|--|--|
| 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 | | | | | | | |



Legend





| Chemical composition | | | | | |
|----------------------|----------------------|--|--|--|--|
| Si | ≤ 0,40 | | | | |
| Fe | ≤ 0,70 | | | | |
| Cu | 5,00 ÷ 6,00 | | | | |
| Mn | | | | | |
| Mg | | | | | |
| Cr | | | | | |
| Ni | | | | | |
| Zn | ≤ 0,30 | | | | |
| Ti | | | | | |
| Pb | 0,20 ÷ 0,40 | | | | |
| Bi | 0,20 ÷ 0,60 | | | | |
| Others | Each 0,05 Total 0,15 | | | | |

Remainder

| Physical properties | | | | | |
|--|--------------------------|-----------|--|--|--|
| Doncity | Kg | 2 0 2 | | | |
| Density | dm ³ | - 2,83 | | | |
| Modulus of elasticity | MPa | 70.000 | | | |
| Coefficient of thermal evenencien | x10 ⁻⁶ | 22.0 | | | |
| Coefficient of thermal expansion | °C | 22,9 | | | |
| Thermal conductivity at 20% | W | T3: 151 | | | |
| Thermal conductivity at 20°C | mk | T8: 171 | | | |
| Typical electrical resistivity at 20°C | $\Omega \ \mathrm{mm^2}$ | T3: 0.038 | | | |
| Typical electrical resistivity at 20°C | m | T8: 0.043 | | | |

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| Mechanical properties | | | | | | | | |
|-----------------------|--------|-----------------|-----|-------|----|---------|--|--|
| | | | Rm | Rp0,2 | | HBW | | |
| | Temper | Diam. mm | MPa | MPa | A% | Typical | | |
| Drawn | T3 | ≤ 40 | 320 | 270 | 10 | 90 | | |
| | Т3 | $40 < D \le 50$ | 300 | 250 | 10 | 90 | | |
| | T3 | 50 < D ≤ 80 | 280 | 210 | 10 | 90 | | |
| | T8 | ≤ 80 | 370 | 270 | 8 | 115 | | |
| Extruded | T6 | ≤ 75 | 310 | 230 | 8 | 110 | | |
| | T6 | 75 < D ≤ 200 | 295 | 195 | 6 | 110 | | |

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Al

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