Overview & application

- Very good machinability with short chips (suitable for high-speed automatic turning)
- No contents of lead (ELV, RoHS & REACH compatible)
- Good corrosion resistance and suitable for hard anodizing
- Excellent surface quality after machining, also good weldability

- Suitable for automotive, electrical, hydraulic & pneumatic industry
- Fully RoHS compliant with Pb ≤ 0,1% (EU regulation 2018/740/EU, as of May 2021)

Product range

<table>
<thead>
<tr>
<th>Drawn</th>
<th>Extruded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round (mm)</td>
<td>6-80</td>
</tr>
<tr>
<td>Hexagonal (mm)</td>
<td>13-80</td>
</tr>
<tr>
<td>Shaped (mm²)</td>
<td>200-6400</td>
</tr>
<tr>
<td>Profiles (mm³)</td>
<td>200-14400 - 500-9900</td>
</tr>
</tbody>
</table>

Typical tempers

T6 (T6510, T6511), T8, T9

Chemical composition (Weight %)

<table>
<thead>
<tr>
<th>Si</th>
<th>Fe</th>
<th>Cu</th>
<th>Mn</th>
<th>Mg</th>
<th>Cr</th>
<th>Zn</th>
<th>Bi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min.</td>
<td>0,60</td>
<td>0,20</td>
<td>0,20</td>
<td>0,60</td>
<td>-</td>
<td>-</td>
<td>0,50</td>
</tr>
<tr>
<td>Max.</td>
<td>1,4</td>
<td>0,7</td>
<td>0,50</td>
<td>1,0</td>
<td>1,2</td>
<td>0,30</td>
<td>0,30</td>
</tr>
</tbody>
</table>

Remarks

- Ti max. 0,20
- Others: each: 0,05 / total: 0,15

Processing properties

- Machinability
- Machining index (chips #/100g) 3500
- MIG-TIG weldability
- Resistance fusion weldability
- Soft soldering & brazing

Protective anodising

- Hard anodising

Corrosion

- Corrosion resistance @ sea water
- Corrosion resistance @ atmosphere
- Corrosion depth ISO 11846B (µm) 250

Physical properties

- Density 2,72 g/cm³
- Young's modulus of elasticity 69600 MPa
- Coeff. of thermal expansion (20-100°C) 23,4 x10⁻⁶ /°C
- Thermal conductivity at 20°C 172 W/m*K
- Specific heat capacity 891 J/kg*K
- Electrical conductivity at 20°C 26 MS/m

Legend:
- Excellent
- Good
- Acceptable
- Conditional
- Not recommended