CuSn8

This bronze alloy with 8 % tin is characterized by its adequate electrical conductivity, its high mechanical strength and its good spring properties. CuSn8 is resilient towards corrosion and is well suited for soldering.

**COMPOSITION OF MATERIAL**
- Sn: 7,5 – 8,5 %
- Cu: balance

**PHYSICAL PROPERTIES**
- Density 8,79 g/cm³
- Melting point 860 - 1040 °C
- Electrical conductivity 7,5 m/Ω mm² (at 20 °C R370)
- Electrical resistivity 0,133 Ω mm²/m (at 20 °C R370)
- Thermal conductivity 67 W/K m (at 20 °C)
- Temperature coefficient of electrical resistance 0,377 J/g K (at 20 °C)
- Coefficient of thermal expansion (linear) 18,2-10⁻⁶/K (at 20 to 300 °C)
- Modulus of elasticity (tensile) 109 GPa (at 20 °C R370)

**MANUFACTURING PROGRAM**
- Rolls, spools, sheets 0,01 - 0,2 mm 1 - 640 mm
  * not all combinations of thickness and width are available

**TEMPER ACCORDING TO DIN EN 1652**

<table>
<thead>
<tr>
<th>Temper</th>
<th>Tensile strengthRm in MPa</th>
<th>Yield strengthRp0,2 in MPa</th>
<th>Elongation in % Lo = 100 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>R370</td>
<td>≤ 450</td>
<td>≤ 300</td>
<td>&gt; 10</td>
</tr>
<tr>
<td>R450</td>
<td>450 - 550</td>
<td>≥ 370</td>
<td>&lt; 30</td>
</tr>
<tr>
<td>R540</td>
<td>540 - 630</td>
<td>≥ 470</td>
<td>&lt; 25</td>
</tr>
<tr>
<td>R600</td>
<td>600 - 690</td>
<td>≥ 540</td>
<td>&lt; 16</td>
</tr>
<tr>
<td>R660</td>
<td>≥ 660</td>
<td>≥ 620</td>
<td>&lt; 13</td>
</tr>
</tbody>
</table>

The values in the table are valid only for foils with thickness > 0,1 mm.

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