

# Brass (Copper-Zinc) MD02



| Material Designation |         |
|----------------------|---------|
| DMA Symbol           | MD02    |
| DIN-EN Symbol        | (CuZn2) |

| Nominal Composition<br>(mass content in %) |         |
|--|---------|
| Cu   | 98.0    |
| Zn   | Balance |
| Others                                     | < 0.2   |

**About the Alloy**

MD02 - belonging to the tombak class - is a low-alloyed copper alloy.

MD02 is highly suitable for cold forming as well as hard and soft soldering. Depending on the processing, it is easily weldable and resistant to atmospheric influences, fresh water, neutral and alkaline saline solutions and organic compounds.

| Physical Properties*            |            |                             |
|---------------------------------|------------|-----------------------------|
| Electrical conductivity         | 36.5<br>63 | MS/m<br>% IACS              |
| Thermal conductivity            | 250        | W/(m·K)                     |
| Thermal expansion coefficient** | 17.5       | 10 <sup>-6</sup> /K         |
| Density                         | 8.9        | g/cm <sup>3</sup>           |
| Modulus of elasticity           | 110        | GPa<br>= kN/mm <sup>2</sup> |

\* Reference values at room temperature  
\*\* Between 20 and 300 °C

| Mechanical Properties*                     |           |
|--|-----------|
| Tensile strength soft<br>N/mm <sup>2</sup> | 230 - 290 |
| Elongation soft<br>A100 in %               | > 30      |
| Tensile strength hard<br>N/mm <sup>2</sup> | 400 - 480 |

\* Reference values

| Available Dimensions               |                           |              |
|------------------------------------|---------------------------|--------------|
| Rolled,<br>modified<br>square wire | 5.1 mm<br>7.4 mm          | max. 2000 kg |
|                                    | 1.2 - 6.2 mm<br>in coils  | max. 200 kg  |
| Round wire                         | 1.8 - 6.2 mm<br>on stands | max. 1500 kg |
|                                    | 0.5 - 3 mm<br>on reels    | max. 1000 kg |
|                                    | 1.5 - 3 mm<br>on acropaks | max. 400 kg  |
|                                    | On request:<br>in drums   | max. 400 kg  |

- Typical Applications**
- Electrical engineering, electronics
  - Connecting and fixing elements
  - Rivets, extrusion parts
  - Fashion jewelry, watchmaking industry
  - Arts and crafts

| Your Contact Person              |   |
|----------------------------------|---|
| Worldwide                        |   |
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DMA\_Wire\_MD02\_V1\_M-5M

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