

# Material data sheet

## ALBROMET-W200

<b>ALBROMET-W200</b>	<b>Low-alloy copper</b>
Material properties	Innovative, beryllium-free, high-strength copper alloy with an ideal combination of properties comprising very high thermal conductivity, medium strength and good wear resistance. Beryllium-free alternative to CuCo2Be.
Application examples	Electrodes for resistance welding, ingot molds, die casting pistons. In plastic mold construction: mold inserts for thermal requirements.
Machining notes	Machining is possible without any problems using HSS or carbide tools (P quality). Ensure sufficient cooling! Machining should be carried out as supplied (hardened at the factory). The material is easy to erode and can be welded in the same material.
Typical analysis	Ni 2,5 % Si 0,7 % Cr 0 - 0,5 % Cu Balance
Standards/Specifications	CuNiCrSi EN CW 112 C / ~ CW 111 C DIN 2.0857 / ~ 2.0855
Delivery formats	Forged parts, semi-finished products, finished parts according to drawing

### Mechanical and physical properties

Hardness Brinell (HB 30)	190 – 220
Tensile strength $R_m$	> 600 N/mm <sup>2</sup>
Yield strength $R_{p0,2}$	500 N/mm <sup>2</sup>
Elongation at break A5	> 10 %
Density	8,7 g/cm <sup>3</sup>
Softening temperature	~ 480° C
Elasticity modulus E	140 kN/mm <sup>2</sup>
Mean linear coefficient of thermal expansion	16,0 10 <sup>-6</sup> /K
Thermal conductivity at 20° C	~ 200 W/m*K
Electrical conductivity at 20° C	22 m/Ohm*mm <sup>2</sup>

These data are based on information provided by our supplier, all changes reserved. The mechanical strength values are typical standard values and depends on the measurement and the production method. (Version: 07/2024).