

Material data sheet

ALBROMET-W200

ALBROMET-W200	Low-alloy copper alloy, beryllium-free
Material properties	Innovative, beryllium-free copper alloy with very high thermal conductivity, medium strength and good wear resistance, non-magnetic, good corrosion resistance, high softening temperature, Beryllium-free alternative to CuCo2Be.
Application examples	Injection moulding tools, plastic mould making, tool making, mould making, mould inserts for thermal requirements, electrodes for resistance welding, ingot moulds, die-cast pistons, energy technology
Machining notes	Machining is possible without any problems using HSS or carbide tools. 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 ²
Yield strength $R_{p0,2}$	500 N/mm ²
Elongation at break A5	> 10 %
Density	8,7 g/cm ³
Softening temperature	~ 480° C
Elasticity modulus E	140 kN/mm ²
Mean linear coefficient of thermal expansion	16,0 10 ⁻⁶ /K
Thermal conductivity at 20° C	~ 200 W/m*K
Electrical conductivity at 20°C	22 m/Ohm*mm ²

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).