

Material data sheet

ALBROMET-W240

ALBROMET-W240	Low-alloy copper, Beryllium copper	
Material properties	Heat-treated copper alloy with high strength and conductivity values.	
Application examples	Electrode material for resistance welding, permanent molds, die casting pistons. In plastic mold construction: For thermal requirements, mold cores, mold inserts, hot runner nozzles.	
Machining notes	Mechanical processing with HSS or carbide-tipped tools in P quality. Vapors and dust must be avoided or extracted. Wet machining, ensure good cooling. Limited spark erosion possible.	
Typical analysis	EN CW 103 C Co 0,8-1,3 % Ni 0,8-1,3 % Be 0,4-0,7 % Fe max. 0,2 % Si max. 0,2 % Others 0,5 % Cu Rest	EN CW 104 C Co 2,0-2,8 % Be 0,4-0,7 % Ni+Fe max. 0,5 % Others 0,5 % Cu Rest
Standards/Specifications	CuCo1Ni1Be / CuCo2Be EN CW 103 C / EN CW 104 C Typ A 3/1 DIN similar to 2.1285 / DIN 2.1285	
Delivery formats	Forged parts, semi-finished products, finished parts according to drawing	

Mechanical and physical properties

Hardness Brinell (HB 30)	220 – 260
Tensile strength R_m	650 N/mm ²
Yield strength $R_{p0,2}$	500 N/mm ²
Elongation at break A5	> 8 %
Density	8,8 g/cm ³
Softening temperature	~ 480° C
Elasticity modulus E	135 kN/mm ²
Mean linear coefficient of thermal expansion	17,2 10 ⁻⁶ /K
Thermal conductivity at 20° C	~ 240 W/m*K
Electrical conductivity at 20°C	25 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).