

# Material data sheet

## ALBROMET-W240

<b>ALBROMET-W240</b>	<b>Highly conductive copper alloy, beryllium copper</b>	
Material properties	Age-hardened copper alloy with excellent thermal conductivity and electrical conductivity, with high values for mechanical strength and hardness, high softening temperature	
Application examples	Injection moulding tools, plastic mould making, tool making, mould making, hot runner nozzles, dies, die casting pistons, mould inserts, welding electrodes for resistance welding, energy technology	
Machining notes	Mechanical processing with HSS or carbide-tipped tools. 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	CuCoINiBe / 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 <sup>2</sup>
Yield strength $R_{p0,2}$	500 N/mm <sup>2</sup>
Elongation at break A5	> 8 %
Density	8,8 g/cm <sup>3</sup>
Softening temperature	~ 480° C
Elasticity modulus E	135 kN/mm <sup>2</sup>
Mean linear coefficient of thermal expansion	17,2 10 <sup>-6</sup> /K
Thermal conductivity at 20° C	~ 240 W/m*K
Electrical conductivity at 20°C	25 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).