

ALBROMET-W 130	Data sheet high-conductivity copper
Material properties:	Heat treated beryllium-copper alloy that is extremely hard and strong and has relatively good conductivity.
Application examples:	Electrodes for resistance and flash butt welding, non-magnetic and no-sparking applications, dies, moulds for plastics, mould cores, mould inserts, hot runner nozzles.
Machining tips:	In the hardened state, machine with carbide-equipped tools (P quality) Alternative: Solution annealed (soft) or semi-hard pre-machined with HSS or HM, then harden according to the regulations and finish machining. EDM possible. Because of the beryllium content, protective measures should be taken to ensure that no dust or steam appear. Machine in wet state and ensure good cooling. Use ALBROMET Machining Guidelines.
Typical analysis:	Be 2,0% Other 0,5 % max. Cu Balance
Standards/Specifications:	CuBe2 EN CW 101 C Typ A 4/2 DIN 2.1247
Delivery formats:	Forged parts, Extruded rods, Semi-finished products, Finished parts based on drawings
Mechanical and physical properties:	
Brinell hardness (HB 30) Tensile strength R_m Yield strength $R_p 0,2$ Elongation at break A5 Density Liquidus Softening point Elasticity modulus E Mean linear coefficient of thermal expansion Thermal conductivity at 20° C Electrical conductivity	340 - 390 1250 N/mm ² 1000 N/mm ² 3 % 8,4 g/cm ³ 950 °C ~300 °C 135 KN/mm ² 17,0 10 ⁻⁶ /K ~130 W/m x k 18 m/Ohm x 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 10/2022