

Material data sheet

ALBROMET-A300

ALBROMET-A300	Aluminum bronze
Material properties	High hardness with low elongation at break. Very high compressive strength and mechanical wear resistance, not suitable for impact and shock loads.
Application examples	Guides against hardened steel, tools for sheet metal forming, especially stainless steel grades.
Machining notes	Mechanical processing only with carbide-tipped tools. Material is only conditionally weldable.
Typical analysis	Al 13,0 % Fe 4,0 % Others 2,0 % max. Cu Rest
Standards/Specifications	Not standardized
Delivery formats	Forged parts, Extruded rods, Semi-finished products, Finished parts based on drawings

Mechanical and physical properties	
Hardness Brinell (HB 30)	285 – 310
Tensile strength R_m	$\geq 700 \text{ N/mm}^2$
Yield strength $R_{p0.2}$	$\geq 400 \text{ N/mm}^2$
Elongation at break A5	1 %
Density	$7,25 \text{ g/cm}^3$
Compressive strength	1.200 MPa
Elasticity modulus E	110,0 kN/mm ²
Mean linear coefficient of thermal expansion	$17,5 \cdot 10^{-6}/\text{K}$
Thermal conductivity at 20° C	42 W/m*K
Electrical conductivity	4,64 m/Ohm*mm ²
Temperature resistance	< 300° C up to clear change in strength value
Magnetic permeability	1,10 H = 100 Oe

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).