Material data sheet

ALBROMET-A300

ALBROMET-A300	Aluminum bronze
Material properties	Very high compressive strength and mechanical wear resistance, excellent sliding properties, low nickel content
Application examples	Guides for hardened steel, dies, rollers and tools for sheet metal forming, particularly stainless steel grades; bending tools, flaring tools, drawing tools, workpiece holders for centreless grinding
Processing	Machining only with carbide tools; polishes well; weldable only to a limited extent
Typical analysis	<table><tr><td>Cu</td><td>Al</td><td>Fe</td><td>Mn</td><td>Pb</td><td>Others</td></tr><tr><td>Remaining</td><td>12 - 13 %</td><td>3 - 5 %</td><td>< 3,0 %</td><td>< 0.02 %</td><td>< 2 %</td></tr></table>
Standards/Specifications	non-standardised (DIN EN 12163, DIN EN 12164, DIN EN 12167, DIN EN 12420) (DIN EN 1982) ~ C62500, ~ C95900 (ASTM B505) Certified for use in the food industry (certificate of compliance)
Delivery formats	Plates, round bars, flat bars, square bars, cut to length pieces; finished parts according to drawings

Mechanical and physical properties	forged / extruded / pressed	cast
Hardness Brinell (HBW 10/3000)	270 – 320	260 - 320
Hardness Rockwell (HRC, converted)	28 - 33	26 - 32
Tensile strength R_m	600 - 1000 MPa	600 - 900 MPa
Yield strength $R_{P0,2}$	> 350 MPa	> 350 MPa
Elongation at break A_5	1 %	1 %
Elasticity modulus E	110 GPa	105 GPa
Compressive strength	1,200 MPa	1,200 MPa
Density	7.25 g/cm^3	
Mean linear coefficient of thermal expansion	17.5 10^{-6}/K	
Thermal conductivity at 20° C	42 W/m*K	
Electrical conductivity at 20 °C	4.6 m/Ohm*mm^2; 8 % I.A.C.S	
Softening temperature	> 300 °C a significant change in strength values occurs	
Melting range	Solidus ~ 1045 °C and Liquidus ~ 1060 °C	
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 depend on the dimension and the production method (Status: 07/2026).

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