Material data sheet

ALBROMET-A340

ALBROMET-A340	Aluminum bronze
Material properties	Very high compressive strength and mechanical wear resistance, excellent sliding properties, not suitable for applications involving shock or impact loads, low nickel content
Application examples	Guides for hardened steel, dies, rollers and tools for sheet metal forming, particularly for stainless steel grades; tools for bending, embossing, profiling and deep drawing of sheet metal and tubes; flaring tools
Processing	Machining only with carbide tools; polishes well; weldable only to a limited extent
Typical analysis	Cu: Remaining; Al: 12 - 14 %; Fe: < 5 %; Mn: < 3,0 %; Pb: < 0.02 %; Others: < 2 %
Standards/Specifications	non-standardised (DIN EN 12163, DIN EN 12164, DIN EN 12420) (DIN EN 1982) ~ C62500 (ASTM B505)
Delivery formats	Plates, round bars, cut to length pieces; finished parts according to drawings

Mechanical and physical properties	forged / pressed	cast
Hardness Brinell (HBW 10/3000)	320 – 360	320 – 350
Hardness Rockwell (HRC, converted)	34 - 39	34 - 37
Tensile strength R_m	700 - 1100 MPa	650 - 1100 MPa
Yield strength $R_{P0,2}$	> 500 MPa	> 450 MPa
Elongation at break A_5	1 %	1 %
Elasticity modulus E	105 GPa	105 GPa
Compressive strength	1,300 MPa	1,200 MPa
Density	7.2 g/cm^3	
Mean linear coefficient of thermal expansion	17.5 10^{-6}/K	
Thermal conductivity at 20° C	40 W/m*K	
Electrical conductivity at 20 °C	5.8 m/Ohm*mm^2; 10 % 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	1.12 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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