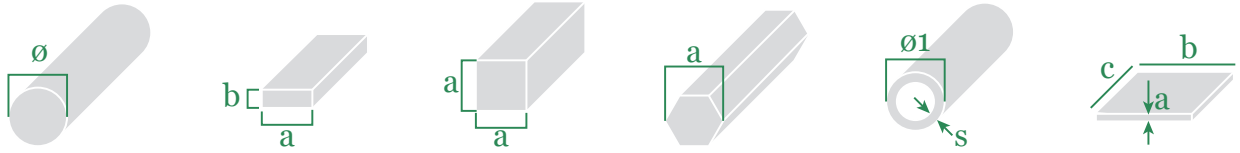
Bronze

Aluminium bronzes

Alloys, international standards*, and examples of use

Supply program



Round bars | Flat bars | Square bars | Hexagonal bars | Pipes | Plates /cut-outs

Production method: drawn, extruded, rolled, cast, forged, continuously cast Gc, centrifugally cast Gz.

Alloy	ČSN/STN	EN	DIN	UNS	BS	GOST	AFNOR		
CuAl10Ni5Fe4	423047	CW307G	2.0966	C63000	CA104	BrAZHN10-4-4	CuAl9Ni5Fe3	High strength even at elevated temperatures. High fatigue strength even under corrosive conditions. Resistant to neutral and acidic aqueous media and seawater. Good resistance to scaling, erosion, and cavitation. Very high wear resistance.	For components highly stressed by friction, alternating loads, and impacts. Roller bushings, spherical bearings, guide bushings, valve seats, and oil sealing rings. Components exposed to corrosion in the chemical industry.
CuAl10Ni5Fe5	423147	CC333G	CuAl10Ni/2.0975	C95500	AB2			Resistant to cold and even hot seawater. Excellent thermal resistance. Excellent fatigue strength in air and seawater. Highly resistant to cavitation and corrosion, with high wear resistance.	Highly stressed sliding bearings and worm gears. Steam fittings, fittings for aggressive water, pump casings.
CuAl-10Fe3Mn2	423046	CW306G	2.0936	C62500	CA 103	BrAZHMts10-3-1.5		Good corrosion resistance. Good resistance to scaling, erosion, and cavitation. High strength even at elevated temperatures.	Components subjected to friction, impacts, and variable loads. Gears, gear rims, highly stressed fittings up to 200 atm, valves, seats, pressure cylinders. Bearings and nuts for friction presses. Bearing pans and bushings.
CuAl11Ni6Fe6		CW308G	CuAl11Ni6Fe5/2.0978					Exceptional strength, corrosion resistance, and wear resistance.	Valves, valve seats, cover plates, sliding elements, wear-prone parts.
CuAl11Ni6Fe6		CC334G	G-CuAl11Ni/2.0980					Similar to CuAl10Fe5Ni5-C, but with enhanced cavitation and/or wear resistance requirements.	For example, in the chemical industry.
CuAl8Fe3		CW303G	CuAl8Fe3/2.0932		CA106				
CuAl9Ni3Fe2		CW304G	CuAl9Ni3Fe2/2.0971						

* The listed standards are equivalent but may not be identical and could differ.

Alloy	ČSN/STN	EN	DIN	UNS	BS	GOST	AFNOR		
CuAl9Mn2	423044		2.0960					High strength. Suitable for impact loads. Good thermal conductivity.	Highly stressed bearing parts, gears, and worm wheels.
CuAl7Si		CW302G		C64200				High strength and excellent wear resistance. Easily machinable.	Sliding bearings with high-impact loads. Valves, screws, gearbox parts.
CuAl10Ni3Fe2		CC332G	CuAl9Ni/2.0970						
CuAl10Fe2		CC331G	CuAl10Fe/2.0940	C95200	AB1			Aluminum bronze with high strength and ductility. Good wear resistance, seawater resistance, and corrosion resistance.	Mechanically stressed components, pinions, and bevel gears.
CuAl9Fe3	423045								
CuAl6Si2Fe		CW301G							
CuAl10Fe1		CW305G							

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