

Aluminiumbronze | Round bars



Alloy	Cu Al10 Fe3 Mn2, CW306G
Method of Manufacture	extruded only
Specification	EN 12163:1998
Tolerance	class A
	Ø 16 mm +/- 0.25 mm
	Ø 18-30 mm +/- 0.30 mm
	Ø 32-50 mm +/- 0.60 mm
	Ø 55-80 mm +/- 0.70 mm
	Ø 85-120 mm +/- 1.4 mm
	Ø 130 mm +/- 1.8 mm
Temper	M, mostly approx. R690
Machinability	moderate
Hot Working	good
Cold Working	not good, only after soft annealing
Corrosion Resistance	good versus most media
REACH	no obligations
RoHS	conformal

Mechanical Properties

	Tensile strength R_m	Yield stress $R_{p0.2}$	Elongation A	Hardness HB
M	as obtained			
R590	$\geq 590 \text{ N/mm}^2$		$\geq 12\%$	
H140				140-180
R690	$\geq 690 \text{ N/mm}^2$		$\geq 6\%$	
H170				≥ 170

Chemical Composition

Cu Rest
Al 9.0-11.0%
Fe 2.0-4.0%
Mn 1.5-3.5%
Impurities, max.:
Ni 1.0%, Pb 0.05%, Si 0.2%, Sn 0.1%, Zn 0.5%, other 0.2%

High strength even at higher temperatures. Good corrosion resistance. Good resistance to scaling, erosion and cavitation. Impacting, vibrating or subject to wear parts in engine and gear construction. Bolts, high-strength bolts and nuts, shafts, spindles, worm and gear wheels, wheel rims, bearings and sliding components.

Comparable Specifications

Cu Al10 Fe3 Mn2, 2.0936, DIN 17 665
C 62 300, C 62 500 UNS
CA103, BS 2872, 2874