

## Aluminiumbronze | Flat and Square Bars

DATA SHEET



<b>Alloy</b>	Cu Al10 Ni 5 Fe 4, CW307G
<b>Method of Manufacture</b>	forged & premachined
<b>Specification</b>	EN 12 167
<b>Tolerance</b>	width +2/-0 mm thickness +2/-0 mm
<b>Temper</b>	M, mostly R680
<b>Machinability</b>	moderate, similar to steel of same hardness
<b>Hot Working</b>	good
<b>Corrosion Resistance</b>	very good versus most media, incl. sea water
<b>Wear Resistance</b>	very good
<b>REACH</b>	no obligations
<b>RoHS</b>	conformal

### Mechanical Properties

	Tensile strength $R_m$	Yield stress $R_{p0.2}$	Elongation A	Hardness HB
<b>M</b>	as obtained			
<b>R680</b>	$\geq 680 \text{ N/mm}^2$	$\geq 320 \text{ N/mm}^2$	$\geq 10 \%$	
<b>H170</b>				170-210
<b>R740</b>	$\geq 740 \text{ N/mm}^2$	$\geq 400 \text{ N/mm}^2$	$\geq 8 \%$	
<b>H200</b>				$\geq 200$

### Chemical Composition

Cu Rest
Al 8.5-11.0%
Ni 4.0-6.0%
Fe 3.0-5.0%
Impurities, max.:
Mn 1.0%, Pb 0.05%, Si 0.2%, Sn 0.1%, Zn 0.4%, other 0.2%

High strength even at higher temperatures up to approx. 400°C.  
High fatigue strength even when exposed to corrosion. Resistant to neutral and acid, watery media as well as seawater. Good resistance to scaling, erosion and cavitation. Very high wear resistance. Good sliding properties in conjunction with mating material with hard surfaces and perfect lubrication. Plates for condenser and heat exchanger sheets. Shafts, screws, wear parts, control parts for hydraulics, high-pressure steam fittings. Mechanically and chemically stressed parts in mechanical engineering, shipbuilding and mining.

### Comparable Specifications

Cu Al10 Ni5 Fe4, 2.0966, DIN 17 665
C 63 200, C 63 000 UNS
CA 104, BS 2872, 2874, 2875

Schreier Metall GmbH  
 Bessemerstr. 17  
 D-40699 Erkrath-Hochdahl  
 Telefon +49 2104 1737-0  
 Internet: [www.schreier-metall.de](http://www.schreier-metall.de)  
 E-Mail: [sales@schreier-metall.de](mailto:sales@schreier-metall.de)