

# Technical Data Sheet



## CuAl10Ni

Aluminium bronze  
Continuous Cast

SPB Industrial Co., Limited  
<http://www.spboilles.com>

### Nominal composition:

Aluminium	(Al)	8.5 - 11.0 %
Nickel	(Ni)	4.0 - 6.5%
Iron	(Fe)	3.5 - 5.5 %
Manganese	(Mn)	3.0% max.
Copper	(Cu)	balance

### Specification

<b>D</b>	DIN 1714 CuAl10Ni	2.0975.04
<b>F</b>	AFNOR	U-A 10 N
<b>GB</b>	BS	
<b>USA</b>	CDA	C95500

Mechanical and physical properties	Units	Continuous castings Rounds, hollows
1) Tensile strength $R_m$	MPa	700
2) Yield strength $R_{p0.2}$	MPa	300
3) Elongation $A_5$	%	13
4) Brinell hardness	HB 10	160
5) Modulus of elasticity $E$	GPa	118
6) Density $\rho$	$g / cm^3$	7.6
7) Coefficient of expansion $\alpha$	$10^{-6} / K$	16.2
8) Thermal conductivity $\lambda$	$W / m \cdot K$	42
9a) Electrical conductivity $\gamma$	$m / \Omega \cdot mm^2$	5
9b) Electrical conductivity	% I.A.C.S	8
10) Specific heat $c_p$	$J / g \cdot K$	0.45

### APPLICATIONS:

Construction material with good strength properties, sea water resistant. Endless screws with high tooth pressures and good lubrication.