



## ALUMINIUM BRONZE AB2

### (BS1400 AB2)

AB2 is a Nickel Aluminium bronze conforming to the requirements of B.S. 1400 - 1985 alloy AB2. Suitable for Marine 'on deck' castings, water-cooled manifolds and jackets, car and road transport fittings; thin section and intricate castings such as housing, meter cases and switch boxes; for very large castings, e.g cast doors and panels where ease of casting is essential; for chemical and dye industry castings, e.g pump parts; for paint industry and food and domestic castings. AB2 has high strength, good wearing and erosion resistance. Corrosion resistance can be further enhanced by annealing of the components.

### Chemical Composition - CuAl10Fe5Ni5

Element		%
Aluminium	Al	8.80 - 10.00
Iron	Fe	4.00 - 5.50
Nickel	Ni	4.00 - 5.50
Manganese	Mn	3.00 maximum
Zinc	Zn	0.50 maximum
Silicon	Si	0.10 maximum
Tin	Sn	0.10 maximum
Magnesium	Mg	0.05 maximum
Lead	Pb	0.03 maximum
Copper	Cu	Balance
Total Impurities 0.20 maximum		

Typical Mechanical Properties	
Ultimate Tensile Strength	640 - 700 MPa
Elongation (minimum)	13 - 20 %
Typical Hardness	140 - 180 BHN
Compressive Strength	250 - 300 MPa
Specific Gravity	7.6

Comparative Specifications	
BS 1400 AB2	Def Stan 02 747 Part 1
NES 747 Part 1	NES 747 Part 2
NES 747 Part 3	ASTM B505 C95500
ASTM B148 C95500	ASTM B271 C95500
SAE J461	AMS 4870C
UNI 5275	AMS4880
AS1565 C95500 HT	BS EN 1982-2008 GC CC333G
DIN1714 GC CuAl10Ni 2,0975.04	

**To discuss your requirements, call a member of NovaCast's team on +44 (0) 1225 707466, or email [sales@novacast.co.uk](mailto:sales@novacast.co.uk)**

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy options rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of trading.

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