

ALUMINIUM BRONZE to BS 1400: AB2

AB2 Aluminium Bronze, offering high strength, good wear resistance, good corrosion resistance, with high resistance to oxidation and good strength at elevated temperatures.

Typical Applications:

Marine, oil and chemical industry as high strength propellers, propeller shafts, valve fittings, worm wheels, pump rods, bolts, spark plug bodies, heavy duty bearings, gear wheels, valve seats, non-sparking tools and pinions etc.

Production Range:

Continuous Cast: Solid & Hollow
 Outside diameter 12mm – 305mm
 Inside diameter 12mm – 254mm
 Length 305mm – 3100mm
 In multiples of 305mm – 1000mm
 Round/hexagon/octagon
 Rectangular: Solid only

Centrifugal Cast: Hollow only
 Outside diameter 330mm – 560mm
 Inside diameter 175mm – 500mm
 Length 305mm – 1000mm

NB: Smaller I/D produced to order

Chemical Composition

Copper	(Cu)	79% min
Tin	(Sn)	0.10% max
Zinc	(Zn)	0.50% max
Nickel	(Ni)	4.00 – 5.00%
Aluminium	(Al)	8.50 – 9.50%
Iron	(Fe)	3.50 – 4.50%
Manganese	(Mn)	0.80 – 1.50%
Lead	(Pb)	0.05% max

Related Specifications:

AS 1565	C95810
ASTM B505 & B271	958
SAE	CA958
UNS	C95800

Electrical conductivity – 8%
 Freezing range 1055 – 1065°C (approx)

Other:

Activity	Rating
Machinability	3
Pressure Tightness	1
Weldability (Mig)	1

1 – 4 in decreasing order of merit

Typical Mechanical Properties – for guidance only

0.2% Proof Stress MPa	Tensile Strength MPa	Elongation %	Hardness HB
240 – 260	590 – 655	18 – 25	150 – 170