



PHOSPHOR BRONZE PB2

(BS 1400 1985 PB2)

PB2 is a Phosphor Bronze with a higher Tin content than PB1, which means it has excellent resistance to wear. As a result of these properties, PB2 is an ideal material for the manufacture of components such as gears and heavy sliding or reciprocating loads.

PB2 has good machining properties, high strength and good corrosion resistance to seawater and brine, making it suitable for pump and valve components. PB2 is suitable for bearings having medium to high loads and speeds, and has good resistance to impact loading or pounding.

Chemical Composition - CuSn11P

Element		%
Tin	Sn	11.20 - 13.0
Phosphorus	P	0.25 - 0.60
Lead	Pb	0.50 maximum
Nickel	Ni	0.50 maximum
Zinc	Zn	0.30 maximum
Iron	Fe	0.10 maximum
Sulphur	S	0.10 maximum
Silicon	Si	0.20 maximum
Aluminium	Al	0.01 maximum
Copper	Cu	Balance
Total Impurities 0.20 maximum		

Typical Mechanical Properties

Ultimate Tensile Strength	220 - 310 MPa
Elongation (minimum)	5 - 15 %
Typical Hardness	75 - 110 BHN
Compressive Strength	130 - 170 MPa
Specific Gravity	8.8

Comparative Specifications

BS 1400 PB2	BS EN 1982-2008 GC CC481K
CuSn11P-C	SAE 65C
ASTM B 505 C90700	UNI 7013-72-2A
DIN 1705 2.1052.04	AS 1565-1985 C90810
AS 1565-1974 904D	

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

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