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MATERIAL DATA SHEET

PHOSPHOR BRONZE

Alloy:- Japanese spec PBC2C; JIS H5121 CAC502C

Typical Applications

Pump and valve components; heavy duty gears, bearings with high loads and speeds; good resistance to impact loads; good resistance to sea water corrosion,

Chemical Composition %

Element		Nominal
Copper	Cu	87.0 – 91.0
Tin	Sn	9.0 - 12.0
Lead	Pb	0.3 max
Zinc	Zn	0.3 max
Nickel	Ni	0.2 max
Silicon	Si	0.01 max
Aluminium	Al	1.0 max
Phosphor	P	0.05 – 0.50

Mechanical Properties

Ultimate Tensile Strength	295 MPa minimum
Elongation	10 % minimum
Typical Hardness	80 BHN minimum
Machinability	20 % (free machining brass = 100%)

Similar Specifications

PB1; UNS C90700; PB4; DIN CuSn10

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