



THAMES
STOCKHOLDERS

PB1 (BS1400 PB1)

PHOSPHOR BRONZE ALLOY

Page: 1 of 1



Product Overview

PB1 (BS1400 PB1) is a continuously cast copper-based alloy which contains 10-12% tin.

The material combines good ductility, corrosion resistance, wear resistance and high mechanical strength. The alloy can be successfully soldered and brazed whilst offering good resistance to shock load though the performance of wrought grades is superior. PB1 finds typical use in heavy-load applications run at high speeds. The machinability rating of the alloy is good to fair.

Availability:

- Round bar, hollow bar, flat bar, plate

Key Features

- High Fatigue strength
- Excellent seawater corrosion resistance
- High mechanical strength & wear resistance
- Good resistance to impact loading

Applications

- Flanges, hydraulics, marine ultrasonics
- Linear bearings, worms and gears under high loads
- Bushes and bearings
- Pump and valve components

* Chemical Composition (weight, %)

	Cu	Sn	Zn	Ni	Pb	P	Al	Fe	Mn	Sb	Si	S	Others
Min.	Rem	10.00				0.50							
Max.	Rem	11.50	0.05	0.10	0.25	1.00	0.01	0.10	0.05	0.05	0.02	0.05	0.60

* Properties as per BS 1400

* Mechanical Properties

Casting	0.2% Proof Stress MPa	Tensile Strength MPa	Elongation %
Continuous	170 min	360 min	6 min
Centrifugal	170 min	330 min	4 min

* Properties as per BS 1400

Material Specifications: BS1400 PB1, BS1400 PB2, CC481K, SigmaBronze12



Thames Stockholders

Unit 5W, Woodall Road, Redburn Industrial Estate
Ponders End, Enfield, Middlesex EN3 4LQ

Tel: +44 (0)20 8805 3282



SCAN ME



sales@thamesstock.com



www.thamesstock.com

All information in our data sheet is based on approximate testing and is stated to the best of our knowledge and belief. 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.