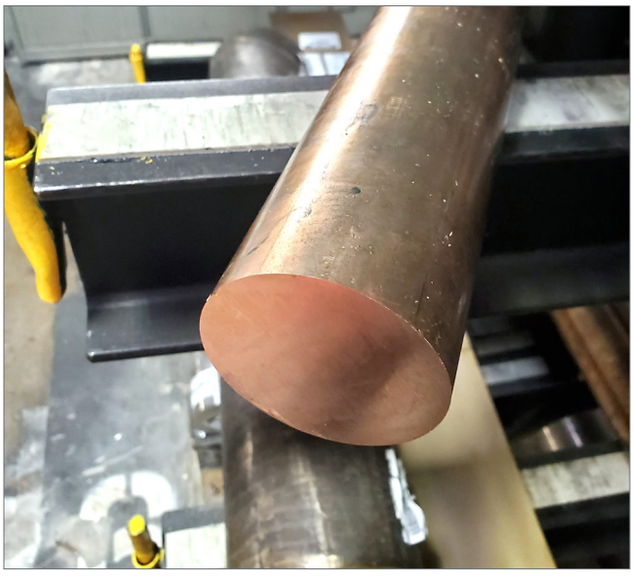
THAMES STOCKHOLDERS
A Division of SMITHS

PB104

PHOSPHOR BRONZE ALLOY



Product Overview

PB104 is a high-performance wrought phosphor alloy that is suitable for more demanding applications and offers high mechanical properties.

The product benefits from various positive performance characteristics, including excellent wear resistance, superior corrosion resistance and good cold formability. Other attractive features include good spring capabilities and good resistance to shock loading. The alloy's bearing properties are exceptional and represent an excellent choice for demanding marine applications.

Availability:

- Round bar

Key Features

- Superior corrosion resistance
- Excellent wear resistance
- Exceptional bearing properties
- High mechanical properties

Applications

- Shafts, spindles and bearing components
- High-performance gears & engine valve guides
- Aerospace & marine fasteners
- Pump components

* Chemical Composition (weight, %)

	Cu	Sn	P	Zn	Ni	Fe	Pb	Total Impurities	
Min.	Rem	7.50	0.02						
Max.	Rem	9.00	0.40	0.30	0.30	0.10	0.05	0.30	

* Properties as per BS 2874

* Mechanical Properties

Proof Stress	360 MPa min.
Ultimate Tensile Strength	500 MPa min.
Elongation (%)	18% min

* Properties as per BS 2874 (18-40mm)

Physical Properties

Density	8.8 g/cm^3
Melting Point	1040° C
Modulus of Elasticity	105,000 N/mm^2
Thermal Conductivity	46 W/m° C
Electrical Resistivity	12% IACS

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