



Tel : (0044) (0)1384 868080 Fax : (0044) (0)1384 482088

Email : sales@ppnonferrous.co.uk

This corrosion resistant, high strength Phosphor Bronze is a much favoured material for engineering components subject to friction.

It is also ideal as a contact material for fasteners & masonry fixings.

In its strip form it has been used as one of the main non ferrous spring, contact and connector pin materials.

PB102 is mainly available in the following forms.

Round bar, Hexagon, Sheet, Strip in Coil, Cut Plate.

Bar from 1/8" to 4" diameter

Hexagon from 1/2" a/f to 2.22" a/f

Sheet from 1.2mm to 6mm thick

Plate from 3/8" to 3" thick.

Strip in Coil.

Thickness from 0.15mm to 6.30mm



Tel : (0044) (0)1384 868080 Fax : (0044) (0)1384 482088

Email : sales@ppnonferrous.co.uk

Chemical & Physical Properties.

Typical Chemical Composition.

Cu. 95% Sn. 5% P. 0.02 - 0.04

Typical Mechanical Properties.

Sheet & Strip

0.1% Proof Stress (n/mm ²)	Tensile Strength (n/mm ²)	Elongation (%)		Hardness (HV)
(a) (h)	(a) (h)	(a) (h)	(a) (h)	
120 510	340 630	60	8 80	190

Plate

0.1% Proof Stress (n/mm ²)	Tensile Strength (n/mm ²)	Elongation (%)		Hardness (HV)
(a) (h)	(a) (h)	(a) (h)	(a) (h)	
110 260	320 420	55 40	80	130

Bar:

0.1% Proof Stress (n/mm ²)	Tensile Strength (n/mm ²)	Elongation (%)		Hardness (HV)
(a) (h)	(a) (h)	(a) (h)	(a) (h)	
120 140	340 540	55	20 80	170



Tel : (0044) (0)1384 868080 Fax : (0044) (0)1384 482088

Email : sales@ppnonferrous.co.uk

Tolerances

Dimensional tolerances for bars to BS2874 1986

Round bars

<u>Size</u>	Close Tolerance	Normal tolerance
3 - 6mm	- 0.12mm	+/- 0.15mm
6 - 10mm	- 0.15mm	+/- 0.18mm
10 - 18mm	- 0.18mm	+/- 0.22mm
18 - 30mm	- 0.21mm	+/- 0.26mm
30 - 50mm	- 0.39mm	+/- 0.32mm
50 - 80mm	- 0.37mm	+/- 0.7mm
80mm plus		+/- .29%

Hexagon + Square Bars

<u>Size</u>	Hexagon	Square
3 - 6mm		+/- 0.15mm
6 - 10mm	-0.22mm	+/- 0.18mm
10- 18mm	-0.27mm	+/- 0.22mm
18- 30mm	-0.33mm	+/- 0.26mm
30- 50mm	-0.39mm	+/- 0.32mm
50- 80mm	-0.74mm	+/- 0.60mm

Cut Plate

Normal cutting tolerances are +/- 1mm

The information given above is based on our current knowledge and is given in good faith; however the company will accept no liability in respect of any third party reliance thereon.