



## Phosphor Bronze Phosphor Bronze Technical Data

| Material and Specification              | Tensile Strength Ton/Ins <sup>2</sup> | Vickers Hardness (HV) | Description & Application  |                   |       |
|---|---------------------------------------|-----------------------|--|-------------------|-------|
| Phos-Bronze Rod<br>BS2874/PB102 Hard    | 32                                    |                       | This alloy has high corrosion resistance qualities with good mechanical properties. Poor machinability, used in bearings where subjection to friction is required. |                   |       |
| Phos-Bronze Sheets<br>BS2870/PB102 Hard | 38                                    |                       | Good Mechanical properties, combined with resistance to corrosion and corrosion fatigue. Used for springs and instrument components.                               |                   |       |
| Approximate Weights                     |                                       |                       |  |                   |       |
| Size/Inches                             | Dia Kg/ft                             | Square Kg/ft          | A/F Hex Kg/ft  | Hexagon Whitworth |       |
|   |                                       |                       |  | Size/Inches       | Kg/ft |
| 1/8                                     | 0.022                                 | -                     | -  | 0.338 A/F         | 0.172 |
| 3/16                                    | 0.050                                 | 0.060                 | 0.052  | 0.445 A/F         | 0.296 |
| 1/4                                     | 0.086                                 | 0.109                 | 0.094  | 0.525 A/F         | 0.419 |
| 5/16                                    | 0.134                                 | 0.171                 | 0.146  | 0.601 A/F         | 0.548 |
| 3/8                                     | 0.194                                 | 0.247                 | 0.211  | 0.710 A/F         | 0.766 |
| 7/16                                    | 0.264                                 | 0.336                 | 0.287  | 0.820 A/F         | 1.02  |
| 1/2                                     | 0.345                                 | 0.439                 | 0.378  | 0.919 A/F         | 1.28  |
| 9/16                                    | 0.436                                 | -                     | -  | 1.01 A/F          | 1.55  |
| 5/8                                     | 0.539                                 | 0.684                 | 0.589  | 1.10 A/F          | 1.84  |
| 3/4                                     | 0.775                                 | 0.988                 | 0.857  | 1.20 A/F          | 2.19  |
| 7/8                                     | 1.05                                  | 1.34                  | 1.16   | 1.30 A/F          | 2.57  |
| 1                                       | 1.37                                  | 1.76                  | 1.52   | 1.479 A/F         | 3.33  |
| 1.1/8                                   | 1.74                                  | 2.22                  | 1.91   | 1.670 A/F         | 4.24  |
| 1.1/4                                   | 2.16                                  | 2.74                  | 2.36   | -                 | -     |
| 1.3/8                                   | 2.61                                  | 3.32                  | 2.86   | -                 | -     |
| 1.1/2                                   | 3.10                                  | 3.95                  | 3.40   | -                 | -     |
| 1.5/8                                   | 3.64                                  | -                     | -  | -                 | -     |
| 1.3/4                                   | 4.22                                  | 5.39                  | -  | -                 | -     |
| 1.7/8                                   | 4.85                                  | -                     | -  | -                 | -     |
| 2                                       | 5.52                                  | 7.03                  | 6.07   | -                 | -     |
| 2.1/8                                   | 6.23                                  | -                     | -  | -                 | -     |
| 2.1/4                                   | 6.89                                  | 8.89                  | -  | -                 | -     |
| 2.3/8                                   | 7.78                                  | -                     | -  | -                 | -     |
| 2.1/2                                   | 8.63                                  | 10.98                 | -  | -                 | -     |
| 2.3/4                                   | 10.44                                 | 13.29                 | -  | -                 | -     |
| 3                                       | 12.42                                 | 15.82                 | -  | -                 | -     |
| 3.1/4                                   | 14.51                                 | -                     | -  | -                 | -     |
| 3.1/2                                   | 16.78                                 | -                     | -  | -                 | -     |
| 3.3/4                                   | 18.82                                 | -                     | -  | -                 | -     |
| 4                                       | 21.75                                 | 28.12                 | -  | -                 | -     |
| 4.1/2                                   | 27.76                                 | -                     | -  | -                 | -     |
| 5                                       | 34.24                                 | -                     | -  | -                 | -     |
| 6                                       | 49.21                                 | -                     | -  | -                 | -     |
| Flat Size                               | Kg/ft                                 | Size                  | Kg/ft  | Size              | Kg/ft |
| 1/2 X 1/8                               | 0.108                                 | 1 X 3/4               | 1.31   | 1.3/4 X 1/8       | 0.385 |
| X 3/16                                  | 0.162                                 | 1.1/4 X 1/8           | 0.274  | X 3/16            | 0.576 |
| X 1/4                                   | 0.216                                 | X 3/16                | 0.412  | X 1/4             | 0.711 |
| X 3/8                                   | 0.324                                 | X 1/4                 | 0.548  | X 3/8             | 1.13  |
| 3/4 X 1/8                               | 0.164                                 | X 3/8                 | 0.825  | X 1/2             | 1.54  |
| X 3/16                                  | 0.247                                 | X 1/2                 | 1.10   | 2 X 1/8           | 0.439 |
| X 1/4                                   | 0.328                                 | 1.1/2 X 1/8           | 0.328  | X 3/16            | 0.657 |
| X 3/8                                   | 0.494                                 | X 3/16                | 0.494  | X 1/4             | 0.880 |
| X 1/2                                   | 0.657                                 | X 1/4                 | 0.657  | X 3/8             | 1.31  |
| 1 X 1/8                                 | 0.216                                 | X 3/8                 | 0.988  | X 1/2             | 1.75  |
| X 3/16                                  | 0.324                                 | X 1/2                 | 1.31   | X 5/8             | 2.19  |
| X 1/4                                   | 0.440                                 | X 3/8                 | 1.65   | X 3/4             | 2.63  |
| X 3/8                                   | 0.657                                 | X 3/4                 | 1.98   | X 1               | 3.51  |
| X 1/2                                   | 0.880                                 | X 1                   | 2.63   | X 1.1/2           | 5.27  |
| X 5/8                                   | 1.09                                  | -                     | -  | -                 | -     |

ICB - MMBCB - JAN 08 - P11