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**NATIONAL STANDARD OF THE  
PEOPLE'S REPUBLIC OF CHINA**

**GB/T 23894-2009**

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**Plain bearing -- Copper alloy bearing with solid lubricant**

滑动轴承 铜合金镶嵌固体润滑轴承

**(English Translation)**

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### Foreword

This standard and ISO 4379:1993 "bearing copper alloy bearing," the non-equivalent.

The standard proposed by China Machinery Industry Federation.

This standard sliding bearing by the National Standardization Technical Committee (SAC/TC236) centralized.

This standard was drafted. Zhejiang SF Oilless Bearing Co., Ltd., Zhejiang Bearing Co., Ltd., Zhejiang Changsheng Sliding Bearings Co., the company.

This standard by the National Standardization Technical Committee Secretariat slide bearing responsible for the interpretation.

This standard is the first release.

### Introduction

Copper alloy inlaid solid lubricating bearings are cast copper alloy substrate and the substrate out orderly, appropriate size hole, then insert the solid lubricant, this structure is a combination of copper alloys and their respective characteristics of solid lubricating materials may be difficult to form a lubricating oil film and by Article Limitations on not add lubricant occasions.

Condominiums and straight with a wall-type structure type with reference to the kinds of bearings GB/T 18324-2001, also derived from the thrust washer and slide Two structural types.

Bearing copper alloy inlaid solid lubricating bearings

## 1 Scope

This standard specifies the copper alloy inlaid solid lubricating bearing structure type, basic dimensions, technical requirements and test methods.

This standard applies to the solid lubricant embedded in line with GB/T 1176 as specified in the copper alloy matrix, processed from mosaic Solid lubricating bearings (hereinafter referred to as bearing).

## 2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 228-2002 metallic materials at room temperature tensile test method (eqvISO 6892.1998) GB/T 1176-1987 Cast Copper Alloys conditions (neqISO 1388. 1977) GB/T 1800.4-1999 Limits and fits standard tolerance grades and limit deviations for holes and shafts of (eqvISO 286-2. 1988) GB/T 1184-1996 shape and position tolerances without individual tolerance value (eqvISO 2768-2. 1989) 5121.1-2008 copper and GB/T copper alloy chemical analysis methods - Part 1. Determination of copper content (ISO 1554. 1976, ISO 1553. 1976, MOD) GB/T 5121.9-2008 Copper and copper alloys chemical analysis methods - Part 9. Determination of iron content (ISO 4748. 1984, ISO 1812. 1976, MOD) GB/T 5121.11-2008 Copper and copper alloys chemical analysis - Part 11. Determination of zinc content (ISO 4740. 1985, MOD) GB/T 5121.13-2008 Part 13 copper and copper alloy chemical analysis method. Determination of aluminum content (ISO 3110. 1975, MOD) GB/T 5121.14-2008 Copper and copper alloys chemical analysis - Part 14. Determination of manganese content (ISO 2543. 1973, MOD) GB/T 18324-2001 copper alloy sliding bearing bushings (idtISO 4379.1993) JB/T 7925.1-1995 plain bearings Antifriction bearings single alloy hardness testing methods

### 3.1 Direct bearing structural type of dwelling size, dimensions and tolerances

Straight dwelling bearing structure type shown in Figure 1, the dimensions and tolerances shown in Figure 1 and Table 1.

3.2 with a wall bearing structure type, dimensions and tolerances with a wall bearing structure type shown in Figure 2, the dimensions and tolerances shown in Figure 2 and Table 2.

### **3.3 Thrust washer structure type, dimensions and tolerances**

Thrust washer structure type shown in Figure 3, the dimensions and tolerances shown in Figure 3 and Table 3.

### **3.4 Skateboard structure type, dimensions and tolerances**

Skateboard structure type shown in Figure 4, the dimensions and tolerances shown in Figure 4 and Table 4.