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

GB/T 2889.1-2020

**Plain bearings - Terms, definitions, classification and symbols -
Part 1: Design, bearing materials and their properties**

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Foreword

GB/T 2889 is divided into the following 6 parts.

--- GB/T 2889.1 Sliding bearing terms, definitions, classification and symbols Part 1. Structure, bearing materials and their properties;

--- GB/T 2889.2 Sliding bearing terms, definitions, classification and symbols Part 2. Friction and wear;

--- GB/T 2889.3 Sliding bearing terms, definitions, classification and symbols Part 3. Lubrication;

--- GB/T 2889.4 Sliding bearing terms, definitions and classification Part 4. Basic symbols;

--- GB/T 2889.5 Sliding bearing terms, definitions, classification and symbols Part 5. Application of symbols;

--- GB/T 2889.6 Sliding bearing terms, definitions, classification and symbols Part 6. Abbreviations.

This part is part 1 of GB/T 2889.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

This part replaces GB/T 2889.1-2008 "Sliding bearing terms, definitions and classification. Part 1. Design, bearing materials and their properties

Energy ", compared with GB/T 2889.1-2008, except for editorial changes, the main technical changes are as follows.

--- Added 28 terms and definitions including oil bearing (3.2.3.10), foil bearing (3.2.3.12), spiral groove bearing (3.2.3.13);

--- Modified 52 terms and definitions such as bearing (3.1.1), sliding bearing (3.1.2), sliding bearing unit (3.1.3) and so on.

The translation method used in this part is equivalent to the use of ISO 4378-1..2017 ``

Sliding bearing terms, definitions, classification and symbols Part 1. Conclusion

Structure, bearing materials and their performance. "

Compared with ISO 4378-1..2017, the following editorial changes have been made in this section.

--- Modified the expression of note in 3.5.12;

--- Added index.

This part is proposed by China Machinery Industry Federation.

This part is under the jurisdiction of the National Sliding Bearing Standardization Technical Committee (SAC/TC236).

This section was drafted by. China Machine Productivity Promotion Center, Shanghai Jiaotong University, Xi'an Jiaotong University, Luoyang Axis Research Technology Co., Ltd.

Division, Linan Dongfang Sliding Bearing Co., Ltd., Hefei Bolin New Material Co., Ltd.

This part is interpreted by the National Technical Committee for Standardization of Sliding Bearings.

The previous versions of the standard replaced by this part are as follows.

--- GB/T 2889-1982, GB/T 2889-1994;

--- GB/T 2889.1-2008.

Introduction

Due to the existence of a large number of parameter symbols and terminology named in multiple ways in the field of sliding bearings, in the interpretation of standards and technical literature

It is very easy to cause misunderstandings in the process. This situation has caused the continuous increase of supplementary definitions and further exacerbated the possibility of misunderstandings.

The purpose of this part of GB/T 2889 is to establish a unified, basic structure for explaining the structure, bearing materials and properties of sliding bearings

Nomenclature system.

Plain bearing terms, definitions, classifications and symbols

Part 1. Structure, bearing materials and their properties

1 Scope

This part of GB/T 2889 defines the most commonly used terms, definitions and related to the structure of sliding bearings, bearing materials and their properties classification.

This section gives some acronyms of certain terms and compound words, which can be used when there is no ambiguity. No explanation is required for unexplained terms
Its definition.

2 Normative references

There are no normative references in this section.

3 Terms and definitions

The following terms and definitions apply to this document.

The website of the ISO and IEC standardized terminology database is as follows.

3.1 Basic terms

3.1.1

Bearing

Mechanical parts in mechanical devices used to support moving parts in relative motion and/or guide relative parts.

3.1.2

Plain bearing plainbearing; sliding bearing

The relative motion is a sliding bearing (3.1.1).

3.1.3

Plainbearing unit

Mechanical components including sliding bearings (3.1.2), supporting elements (such as bearing housings), shafts and lubrication systems.

3.2.1 Classification according to load form

3.2.1.1

Static-loaded plain bearing

A sliding bearing (3.1.2) that bears a load with a constant magnitude and direction.

3.2.1.2

Dynamically loaded plain bearings

Sliding bearings (3.1.2) that are subjected to loads that vary in size and/or direction.

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