

ICS 21.100.20

CCS J 11



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

GB/T 3882-2017

Replacing GB/T 3882-1995

**Rolling bearings -- Insert bearings and eccentric looking collars
-- Boundary dimensions**

Issued on: May 12, 2017

Implemented on: December 1, 2017

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China, Standardization
Administration of the People's Republic of China**

Table of Contents

Foreword

1 Scope

2 Normative references

3 Terms and definitions

4 symbol

5 characteristics

5.1 General

5.2 inner diameter

5.3 bearing outer diameter

5.4 Width of inner ring and fastening device

5.5 Width of the outer ring

5.6 Relubrication

6 code

7 tag example

8 Dimensions

8.2 The outer dimensions of the outer spherical ball bearings are shown in Table 4 to Table 6.

Foreword

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

This standard replaces GB/T 3882-1995 "Rolling bearing outer spherical ball bearings and eccentric sleeve dimensions", and GB/T 3882-

Compared with.1995, the main technical changes are as follows.

--- Added and revised some normative references (see Chapter 2, Chapter 2 of the.1995 edition);

--- Revised the definition of the term "outer spherical bearing" (see Chapter 3, Chapter 3 of the.1995 edition);

--- Modified the font and part of the symbol (see Chapter 4, Chapter 4 of the.1995 edition);

--- Revised the description of the characteristics of the outer spherical ball bearing (see Chapter 5, Chapter 5 of the.1995 edition);

- Added "code" chapter, "marking example" chapter (see Chapter 6, Chapter 7);
- Increased the model and dimensions of the inch diameter outer spherical ball bearings and eccentric sleeves (see Table 1 to Table 11);
- Expanded the size range of eccentric spherical ball bearings and modified some dimensions (see Table 1 ~ Table 3,.1995 edition)

Table 6~Table 8);

- Revised the part of the outer diameter of the outer spherical ball bearing (see Table 4 ~ Table 6,.1995 version of Table 1 ~ Table 3);

---Modified the partial dimensions of the tapered bore and the outer spherical ball bearing with the adapter sleeve (see Table 7, Table 8, Table 4 of the.1995 edition, table 5);

- Expanded the size range of the inner ring eccentric table, and modified some of the external dimensions (see Table 9, Table 9 of the.1995 version);

--- Expanded the size range of the eccentric sleeve and modified the partial eccentric sleeve size (see Table 10, Table 11, Table 5 of the.1995 edition,

Table 11);

- Revised the size of the lubrication area of the outer spherical ball bearing (see Table 1 to Table 8, Tables 1 to 8 of the.1995 edition).

This standard uses the redrafting method with reference to ISO 9628.2006 "Rolling bearing outer spherical ball bearings and eccentric sleeves.

Differences and ISO 9628.2006/Amd.1.2011 "Diameter Series 3", with ISO 9628.2006 and ISO 9628.2006/Amd.1.

The degree of consistency in.2011 is non-equivalent.

This standard was proposed by the China Machinery Industry Federation.

This standard is under the jurisdiction of the National Rolling Bearing Standardization Technical Committee (SAC/TC98).

This standard was drafted. Luoyang Bearing Research Institute Co., Ltd., Zhejiang Xinchang Peel Bearing Co., Ltd., Dongguan TR Bearing Co., Ltd.

Division, Fanke Bearing Group Co., Ltd., Fujian Fushan Bearing Co., Ltd., Fujian Yongan Bearing Co., Ltd.

1 Scope

This standard specifies the characteristics and dimensions of the outer spherical ball

bearings (hereinafter referred to as bearings) and eccentric bushings.

This standard applies to the design and selection of bearings.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 273.3 Rolling bearings - Overall dimensions - Part 3. Radial bearings

GB/T 4199 rolling bearing tolerance definition

GB/T 6930 rolling bearing vocabulary

GB/T 7811 rolling bearing parameter symbol

GB/T 27554 rolling bearing with seat ball bearing code method

3 Terms and definitions

The following terms and definitions as defined in GB/T 4199 and GB/T 6930 apply to this document.

3.1

Spherical ball bearing insertbearing

A radial rolling bearing with a spherical outer ring and a wide inner ring with fastening means.

Note. The fastening device is to fix the inner ring to the shaft. It can be eccentric sleeve or tight sleeve, or the top wire can be directly used on the inner ring.

4 symbol

The symbols given in GB/T 7811 and the following symbols apply to this document.

Unless otherwise stated, the symbols shown in Figures 1 through 8 (except for tolerance symbols) and the values listed in Tables 1 through 11 represent nominal dimensions.

Note. Figures 1 to 8 are only schematic views, and the cage is not shown.

A. inner circle eccentric width

A1. eccentric width of the eccentric sleeve

B. inner ring width

- B1. total width of inner ring with eccentric sleeve
 - B2. eccentric sleeve width
 - B3. Adapter sleeve width
 - C. outer ring width
 - C1. distance from the center of the outer ring to the center of the lubrication zone
 - C2. width of the lubrication zone
 - D. bearing outer diameter
 - d. bearing and eccentric sleeve inner diameter
 - Ds. top wire diameter
 - Dz. inner ring cone small end diameter
 - D0. adapter sleeve inner diameter
 - D1. eccentric outer diameter
 - D2. eccentric sleeve eccentric small end diameter (at the theoretical sharp corner)
 - D3. big end diameter of the inner circle eccentric surface (at the theoretical sharp corner)
 - H. eccentricity of inner ring eccentric and eccentric sleeve
 - R1. inner circle eccentric chamfer size
 - R1smin. minimum single chamfer size of the inner circle eccentric surface
 - R2. inner circle eccentric surface fillet radius
 - R2smax. maximum single corner radius of the inner circle eccentric surface
 - R3. eccentric sleeve eccentric surface fillet radius
 - R3smax. eccentric sleeve eccentric surface maximum single fillet radius
 - R4. eccentric sleeve eccentric chamfer size
 - R4smin. eccentric sleeve eccentric surface minimum single chamfer size
 - S. the distance from the end face of the inner end of the fastening device to the center of the raceway
 - S1. the same end of the fastening device, the inner ring end face of the total width of the bearing or the distance from the end face of the eccentric sleeve to the center of the raceway
- Fig.1 Outer spherical ball bearing with eccentric sleeve (UEL type) Fig. 2 Lightweight eccentric spherical ball bearing with eccentric sleeve (UE type)