

ICS 21.100.10

CCS J 11



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

**GB/T 304.2-2015**

---

**Spherical plain bearings - Identification code**

关节轴承 代号方法

**Issued on: December 31, 2015**

**Implemented on: April 1, 2016**

---

**Issued by: General Administration of Quality Supervision, Inspection and  
Quarantine;  
Standardization Administration of the PRC**

## Table of Contents

|                                              |   |
|----------------------------------------------|---|
| Foreword...                                  | 3 |
| 1 Scope...                                   | 5 |
| 2 Normative references...                    | 5 |
| 3 Composition of spherical plain bearings... | 5 |

### Foreword

GB/T 304 Spherical plain bearings consists of the following 4 parts. - Part 1. Classification; - Part 2. Identification code; - Part 3. Fits; - Part 4. General technical rules. This Part is the 2nd part of GB/T 304. This Part was drafted in accordance with the rules given in GB/T 1.1-2009. This Part replaces GB/T 304.2-2002 Spherical plain bearings - Identification code. Compared with GB/T 304.2-2002, the main technical changes are as follows: - modified "EW" and "EM" of size series codes to "W(EW)" and "M(EM)" (see Table 2 of this Edition, Table 3 of Edition 2002); - added Commonly used joint bearing combination codes (see Table 3); - added Code method for ball joints of ball - end rods (see 3.2.2); - added B inner hole lining structure and its code B in structure type codes (see Table 5); - added the ring sliding surface having a cross-lubrication groove structure and its code "J" and ring lubrication groove structure and its code "H" in supplementary codes (see Table 6); - simplified the preparation of supplementary code rules (see

3.3.3.3 of this Edition,

3.2.2 of Edition 2002). This Part was proposed by China Machinery Industry Federation. This Part shall be under the jurisdiction of National Technical Committee on Rolling bearings of Standardization Administration of China (SAC.TC 98). Drafting organizations of this Part. Luoyang Bearing Research Institute Co., Ltd., Fujian Longxi Bearing (Group) Co., Ltd., Taizhou Kejin Bearing Co., Ltd., Zhejiang Jingjiu Bearing Co., Ltd. Main drafters of this Part. Zhu Yuqin, Lu Jinzhong, Zhan Songhua, Song Yucong, Yao Yongwei, Chen Zhixiong, Kong Jingjing, He Guohui, Zhang Yiqing. Spherical plain bearings - Identification code

### 1 Scope

China's national standard for the designation of spherical plain bearings, and the current edition of GB/T 304.2, replacing the 2002 edition. It specifies how the identification code of a spherical plain bearing is constructed, and it applies to spherical plain bearings for general purposes. The code is what a designer writes on a drawing and a buyer writes on an order, and it has to carry, in a few characters, everything that distinguishes one bearing from another of the same nominal size: the structure type, the bore diameter, the dimension

series, the internal construction, the material of the sliding surfaces, the presence of lubrication holes or grooves, the sealing arrangement and the clearance group. It is built as a basic code followed by a post code. The basic code gives the type, structure and size; the post code carries everything else, with the clearance group written last and separated by a hyphen - so GE15ES-C2 identifies a radial spherical plain bearing of 15 mm nominal bore, single-split outer ring, with a lubrication hole, in clearance group 2. The 2015 revision changes the size series codes EW and EM to W(EW) and M(EM), adds a table of commonly used combination codes, adds a coding method for the ball joints of ball-end rods, adds the B code for an inner-bore lining structure, adds the supplementary codes J and H for cross lubrication grooves and ring lubrication grooves on the sliding surface, and simplifies the rules for constructing supplementary codes. Issued on 31 December 2015 and in force since 1 April 2016.

This Part of GB/T 304 specifies the preparation method for identification code of spherical plain bearings. This Part is applicable to spherical plain bearings of general purpose.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 9161-2001, Spherical plain bearings--Spherical plain bearings rod ends

GB/T 9162-2001, Spherical plain bearings--Thrust spherical plain bearings

GB/T 9163-2001, Spherical plain bearings--Radial spherical plain bearings

GB/T 9164-2001, Spherical plain bearings--Angular contact radial spherical plain bearings

JB/T 5306-2007, Spherical Plain Bearings - Self-lubricated Spherical Plain Bearing Rod End with Ball Stud Integral Design - Dimensions and Tolerances

## 3 Composition of spherical plain bearings

3.1 General The identification code of spherical plain bearing consists of the basic code and the post code. The order is as follows: Basic code Post code

3.2 Basic code The basic code indicates the basic type structure and size of spherical plain bearing. The clearance group code of spherical plain bearing is marked at the rightmost of the spherical plain bearing code, separated with the short line "-". The clearance group code of spherical plain bearing is represented by letter and number, according to the provisions of Table 7. Table

7 Code Meaning C2 2 groups of which the clearance complies with the standard provisions - N groups of which the clearance complies with the standard provisions C3 3 groups of

which the clearance complies with the standard provisions C

chinastandards.org - PREVIEW