

ICS 21.100.20
CCS J 11



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

GB/T 5800.2-2012

Replacing GB/T 5800-2003

**Rolling bearings -- Instrument precision bearings -- Part 2:
Boundary dimensions, tolerances and characteristics of inch
series bearings**

(English Translation)

Issued on: January 1, 1970

Implemented on: January 1, 1970

Issued by: Standardization Administration of China

Table of Contents

Foreword

1 Scope

2 Normative references

3 Terms and Definitions

Foreword

GB/T 5800 "Rolling instrument precision bearings" is divided into two parts.

--- Part 1. Metric series bearing dimensions, tolerances and characteristics;

--- Part 2. Inch series bearings dimensions, tolerances and characteristics.

This is Part 2 GB/T 5800's.

Rules in this section in accordance with GB/T 1.1-2009 given draft.

This Part replaces GB/T 5800-2003 content "Rolling instrument precision bearings" part of the British series, and GB/T 5800-Compared to 2003, in addition to editorial changes outside the main technical changes are as follows.

--- Deleted the contents of metric series bearings (see 2003 edition Table 2);

--- Modify some of the terms and definitions (see 31, 2003, version 3.1.);

--- Modify some symbols (see Chapter 4, 2003 edition of the Table 1);

--- Increasing the angular contact ball bearing structure schematic diagram [see Figure 1b)];

--- Modify the inner side facing the inner bore verticality (S_d) formula (see Tables 2 and 4, 2003, edition of the Tables 5 and 7);

--- Will be in inches dimensions and tolerances moved to Appendix (see Appendix A, 2003 edition of the Table 4 and Table 10, Tables 5 to 8 and 11 Part of the content).

This section uses the translation method identical with ISO 1224-2:2007 "Rolling Instrument precision bearings - Part 2. Inch Series Bearing dimensions, tolerances and characteristics. " Consistency correspondence between this part of international documents and normative references of our files are as follows.

--- GB/T 4199-2003 Rolling defined tolerances (ISO 1132-1:2000, MOD)

--- GB/T 7811-2007 Rolling Parameter Symbol (ISO 15241:2001, IDT) this part made the

following editorial changes.

--- Delete a file ISO 582 and ISO 15 Chapter 2, but was listed in the list of normative references.

This part is proposed by China Machinery Industry Federation.

This part of the National Standardization Technical Committee of Rolling (SAC/TC98) centralized.

This section is drafted. Luoyang Bearing Research Institute Co., Ltd., Zhongshan City, Pacific Century Bearing Manufacturing Co., Ltd.

1 Scope

This section GB/T 5800 provisions of the British series of instruments with precision bearing type, dimensions, tolerances and clearance for the optional Grouping, torque and define test conditions and the bearing limits the yield ratio and other characteristics.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated edition applies to this article Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 6930-2002 Rolling vocabulary (ISO 5593:1997, IDT) ISO 1132-1 Rolling tolerances - Part 1. Terms and definitions (Rollingbearings-Tolerances-Part 1.

Termsanddefinitions) ISO 15241 Rolling Parameter Symbol
(Rollingbearings-Symbolsforquantities)

3 Terms and Definitions

And the following terms and definitions GB/T 6930 and ISO 1132-1 defined apply to this document.

The inner circle of the hole on the end face of verticality
perpendicularityofinnerringborewithrespecttotheface radially inner tangential reference
plane parallel to the end face, the maximum axial single chamfer at both ends from the
inner surface of 1.2 times , Bore the same points total online prime amount of variation in
the relative size of the position.

Assembled bearing outer ring flange on the back of axial runout
axialrunoutofouter ringflangebackfaceofassembledbearing in the radial distance from the
axis of the outer ring at the back of the flange equal to half the average diameter of the
outer ring flange on the back of the outer Circle different angular positions relative to the
inner axial difference between the maximum and minimum distance between a fixed point.

Note: In order to measure the effective inner and outer ring raceway should be in contact with all the balls.

Torque nature torquequality the average torque means the instrument ball bearings and maximum torque.

NOTE: In the low (near zero) or operating restrictions radian commonly expressed when the maximum torque is available at a certain speed torque average judge.

Maximum torque any moment the maximum value of the test cycle record.

The average torque the arithmetic mean of the torque readings obtained in the test cycle.

GB/T 5800.2-2012/ISO 1224-2:2007