

ICS 21.100.20

CCS J 11



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

GB/T 19673.2-2025

Replacing GB/T 19673.2-2013

**Rolling bearings - Accessories for sleeve type linear ball
bearings - Part 2: Boundary dimensions; geometrical product
specifications(GPS) and tolerances for series 5**

滚动轴承 套筒型直线球轴承附件 第2部分：5系列外形尺寸、产品几何技术规范
(GPS) 和公差

(English Translation)

Issued on: October 31, 2025

Implemented on: February 1, 2026

Issued by: State Administration for Market Regulation

Table of Contents

- Foreword
- Introduction
- 1 Scope
- 2 Normative references
- 3 Terms and Definitions

Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is Part 2 of GB/T 19673 "Rolling Bearings - Sleeve Type Linear Ball Bearings - Accessories". GB/T 19673 has been published.

The following parts were included.

---Part 1: Dimensions, Geometric Specifications (GPS), and Tolerances for Series 1 and 3;

---Part 2.5 Series Dimensions, Product Geometry Specifications (GPS) and Tolerances this document replaces GB/T 19673.2-2013 "Rolling Bearing Sleeve Type Linear Ball Bearing Accessories Part 2: Series 5 External Dimensions" Compared with GB/T 19673.2-2013, the main technical changes in "Dimensions and Tolerances" are as follows, except for structural adjustments and editorial modifications.

a) The scope has been changed (see Chapter 1, Chapter 1 of the 2013 edition);

b) The application of GPS has been added, and some symbols and tolerance markings have been changed (see Chapters 4-9; 2013 edition).

Chapters 4 through 9);

c) Increased positional tolerances for bearing housing bores, threaded holes or mounting holes, and shaft centerlines (see Tables 2, 4, 6, and 8);

d) The value of shaft diameter tolerance was changed (see Table 9, Table 5 in the 2013 edition).

This document is equivalent to ISO 13012-2:2018 "Rolling bearings, sleeve type, linear ball bearings, accessories - Part 2.5 series, external dimensions".

Dimensions, product geometry specifications (GPS), and tolerances.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China Machinery Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Standardization of Rolling Bearings (SAC/TC98).

Introduction

This document specifies the geometric elements of mechanical parts as defined in the Product Geometry Specification (GPS) system (see ISO 14638[9] matrix model) standard.

Unless otherwise specified, the basic principles of ISO/GPS given in ISO 8015[5] apply to this document, and the principles given in ISO 14253-1[6] apply to this document.

The default principle applies to the technical specifications developed in accordance with this document.

The relationship between functional requirements and measurement methods and measurement uncertainty should be considered, and attention should be paid to measurement uncertainty.

ISO 14253-2[7].

By correctly selecting the bearing housing, shaft, shaft support block, and shaft support guide rail, the use of sleeve-type linear ball bearings can be made more convenient.

The above-mentioned bearing accessories help sleeve-type linear ball bearings achieve the required smooth, precise, and low-friction linear motion during use without...

Tremors or crawling may occur.

The correct selection of bearing housing type, shaft, and shaft support components should be determined through consultation between the manufacturer and the user.

GB/T 19673 "Rolling Bearing Sleeve Type Linear Ball Bearing Accessories" consists of two parts.

---Part 1: Dimensions, Product Geometry Specifications (GPS), and Tolerances for Series 1 and 3. This section aims to specify the dimensions, product geometry specifications (GPS), and tolerances for sleeve-type linear ball bearings.

The dimensions and tolerances of the 1st and 3rd series accessories provide guidance for product selection.

---Part 2.5 Series External Dimensions, Product Geometry Specifications (GPS), and Tolerances. This section aims to specify the dimensions, product geometry specifications

(GPS), and tolerances for sleeve-type linear ball bearings.

The dimensions and tolerances of the 5 series accessories provide guidance for product selection.

Rolling bearing sleeve type linear ball bearing accessories Part 2.5 Series Dimensions and Geometry Technical Specifications (GPS) and Tolerances

1 Scope

This document specifies the external dimensions, other relevant dimensions, and tolerances of accessories for sleeve-type linear ball bearings conforming to ISO 10285.

This document applies to.

---The following seats.

- Enclosed flangeless housings and adjustable flangeless housings for 5 series sleeve-type linear ball bearings;
- Open flangeless seats and open adjustable flangeless seats for 5 series sleeve type linear ball bearings.

---Standard center high shaft support guide for 5 series sleeve type linear ball bearings.

---Flanged shaft support block for 5 series sleeve-type linear ball bearings.

--- Solid and hollow shafts for 5 series sleeve-type linear ball bearings.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

ISO 1132-1 Rolling bearings - Tolerances - Part 1: Terms and definitions Note. GB/T 4199-2003 Definition of Tolerances for Rolling Bearings (ISO 1132-1:2000, MOD) ISO 5593 Rolling Bearings Vocabulary Note. GB/T 6930-2024 Rolling Bearings Vocabulary (ISO 5593:2023, IDT) ISO 10285 Dimensions and tolerances of rolling bearings - sleeve type linear ball bearings Note. GB/T 16940-2012 Dimensions and tolerances of rolling bearings, sleeve type linear ball bearings (ISO 10285:2007, IDT) Note. GB/T 7811-2015 Symbols for rolling bearing parameters (ISO 15241:2012, IDT) (enhanced layers) (ings-Vocabulary) Note. GB/T 29719-2013 Rolling bearings - Linear motion - Rolling support terminology (ISO 24393:2008, IDT)

3 Terms and Definitions

The terms and definitions defined in ISO 1132-1, ISO 5593, ISO 10285 and ISO 24393, as well as the following terms and definitions, apply to this document.