



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

GB/T 21559.2-2023

**Rolling bearings - Linear motion rolling bearings - Part 2: Static
load ratings**

Issued on: May 23, 2023

Implemented on: December 1, 2023

Issued by: SAMR; SAC

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Foreword

This document was drafted in accordance with the rules provided in GB/T 1.1-2020 Directives for standardization - Part 1: Rules for the structure and drafting of standardizing documents.

This document is Part 2 of GB/T 21559, Rolling bearings - Linear motion rolling bearings. The following parts have been issued for GB/T 21559:

- Part 1: Dynamic load ratings and rating life;
- Part 2: Static load ratings.

This document replaces GB/T 21559.2-2008, Rolling bearings - Linear motion rolling bearings - Part 2: Static load ratings. Compared with GB/T 21559.2-2008, except for editorial changes, the main technical changes are as follows:

- a) Change some figures (see Figure 2, Figure 4, Figure 8 and Figure 9; Figure 2, Figure 4, Figure 8 and Figure 9 of the 2008 edition);
- b) Change the calculation formula of k_{0i} in Formula (1) (see 5.1.1; 5.1.1 of the 2008 edition).

This document is identical to ISO 14728-2:2017 Rolling bearings - Linear motion rolling bearings - Part 2: Static load ratings.

1 Scope

This document specifies the calculation methods for the basic static load rating, static equivalent load and static load safety factor of linear motion rolling bearings.

This document applies to linear motion rolling bearings manufactured from contemporary, commonly used, high-quality, hardened bearing steel according to good manufacturing methods and basically of conventional design regarding to the shape of the rolling contact surfaces.

This document does not apply to designs in which rolling elements run directly on the smooth surface of mechanical equipment, unless the surface is equivalent in all respects to the raceway of the linear motion rolling bearing component it replaces.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the version corresponding to that date is applicable to this document; for undated references, the latest version (including all amendments) is applicable to this document.

ISO 76, Rolling bearings - Static load ratings

Note: GB/T 4662-2012, Rolling bearings - Static load ratings (ISO 76:2006, IDT)

ISO 5593, Rolling bearings - Vocabulary

Note: GB/T 6930-2002, Rolling bearings - Vocabulary (ISO 5593:1997, IDT)

3 Terms and definitions

For the purpose of this document, the terms and definitions given in ISO 76 and ISO 5593, and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

-- ISO Online browsing platform: <https://www.iso.org/obp>;

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