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GB/T 273.1-2023 / ISO 355:2019
Replacing GB/T 273.1-2011

Rolling Bearings – Boundary Dimensions General Plan –

Part 1: Tapered Roller Bearings

(ISO 355:2019, Rolling Bearings – Tapered Roller Bearings – Boundary
Dimensions and Series Designations, IDT)

滚动轴承 外形尺寸总方案 第 1 部分：圆锥滚子轴承

Issued on: May 23, 2023

Implemented on: December 1, 2023

Issued by: State Administration for Market Regulation;

Standardization Administration of the People's Republic of China.

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Foreword

This Document was drafted as per the rules specified in GB/T 1.1-2020 *Directives for Standardization – Part 1: Rules for the Structure and Drafting of Standardizing Documents*.

This Document is Part 1 of GB/T 273 *Rolling Bearings – Boundary Dimensions General Plan*. GB/T 273 has issued the following parts:

- Part 1: Tapered Roller Bearings;
- Part 2: Thrust Bearings;
- Part 3: Radial Bearings.

This Document replaced GB/T 273.1-2011 *Rolling Bearings – Boundary Dimensions General Plan – Part 1: Tapered Roller Bearings*. Compared with GB/T 273.1-2011, the major technical changes of this Document are as follows besides the editorial modifications:

- a) Change some symbols (see Clause 4 of this Edition; Clause 4 of the 2011 Edition);
- b) Change the schematic diagram of the tapered roller bearing structure (see Figures 1 to 4 of this Edition; Figures 1 to 4 of the 2011 edition);
- c) Add the minimum chamfer dimensions and contact angles of double-row or paired tapered roller bearings (see Tables 9 to 12 of this Edition);
- d) Add the inner ring inner diameter of single-row tapered roller bearings with flanged outer rings, single-row bearing width and other dimensions (see Tables 13 to 16 of this Edition).

This Document equivalently adopted ISO 355:2019 *Rolling Bearings – Tapered Roller Bearings – Boundary Dimensions and Series Designations*.

This Document made the minimum editorial modifications as follows:

- To be consistent with the existing series standard names, change the document name into *Rolling Bearings – Boundary Dimensions General Plan – Part 1: Tapered Roller Bearings*.

Please note some contents of this Document may involve patents. The issuing agency of this Document shall not assume the responsibility to identify these patents.

This Document was proposed by China Machinery Industry Federation.

This Document shall be under the jurisdiction of National Technical Committee on Rolling Bearings of Standardization Administration of China (SAC/TC 98).

Drafting organizations of this Document: Luoyang Bearing Research Institute Co., Ltd.;

Rolling Bearings – Boundary Dimensions General Plan –

Part 1: Tapered Roller Bearings

1 Scope

This document specifies bearing and subunit boundary dimensions for complete single-row and double-row tapered roller bearings. It also specifies the flange dimensions of flanged outer rings for a selection of these bearings. A series designation for each bearing is also specified.

2 Normative References

The provisions in following documents become the essential provisions of this Document through reference in this Document. For the dated documents, only the versions with the dates indicated are applicable to this Document; for the undated documents, only the latest version (including all the amendments) is applicable to this Document.

ISO 492 Rolling bearings – Radial bearings – Geometrical Product Specifications (GPS) and tolerance values

NOTE: GB/T 307.1-2017 Rolling bearings - Radial bearings - Geometrical product specifications (GPS) and tolerance values (ISO 492:2014, IDT)

ISO 582 Rolling bearings – Chamfer dimensions – Maximum values

NOTE: GB/T 274-2023 Rolling bearings - Chamfer dimension - Maximum values (ISO 582:1995, MOD)

ISO 1132-1 Rolling bearings – Tolerances – Part 1: Terms and definitions

NOTE: GB/T 4199-2003 Rolling bearings - Tolerances – Definitions (ISO 1132-1:2000, MOD)

ISO 5593 Rolling bearings – Vocabulary

NOTE: GB/T 6930-2023 Rolling bearings -Vocabulary (ISO 5593:2019, IDT)

ISO 15241 Rolling bearings – Symbols for physical quantities

NOTE: GB/T 7811-2015 Rolling bearings - Symbols for physical quantities (ISO 15241:2012, IDT)

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