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

GB/T 271-2017

Replacing GB/T 271-2008

Rolling bearings - Classification

滚动轴承 分类

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Foreword

This Standard was drafted in accordance with the rules given in GB/T 1.1-2009. This Standard replaces GB/T 271-2008 Rolling bearings - Classification. Compared with GB/T 271-2008, the main technical modifications are as follows: - added "long face roller bearings" in classification according to roller type (see

4.2 of this Edition); - modified the name of "open bearing, closed bearing" to "open type bearing, closed type bearing"; and modified the definition of closed type bearing (see

4.7 of this Edition,

4.7 of Edition 2008); - modified the definitions of separable bearing and un-separable bearing (see

4.9 of this Edition,

4.9 of Edition 2008); - added "large bearing" in the classification according to nominal diameter size (see Clause 5 of this Edition); - added structure type of some bearings (see Table B.1 of this Edition). This Standard was proposed by China Machinery Industry Federation. This Standard shall be under the jurisdiction of National Technical Committee on Rolling Bearings of Standardization Administration of China (SAC/TC 98). The drafting organizations of this Standard. Luoyang Bearing Research Institute Co., Ltd., Fujian Yongan Bearing Co., Ltd., National Accreditation Center for Chinese Conformity Assessment, Handan Hongli Bearing Co., Ltd. Main drafters of this Standard. Zhang Bowen, Qian Weihua, Ding Liyong, Qin Zhitao, Wang Lifeng. Versions of standard substituted by this Standard are. - GB 271-1964, GB 271-1987, GB/T 271-1997, GB/T 271-2008. Rolling bearings - Classification

1 Scope

China's national standard for the classification of rolling bearings. It specifies how rolling bearings are classified and applies to the classification management of rolling bearing products. Classification sounds like housekeeping and is not. A bearing catalogue contains tens of thousands of items, the designation system of GB/T 272 is built on the classes defined here, and every technical requirement, tolerance table, load rating method and test standard in the field is scoped by reference to a bearing class. If the classes are not fixed, nothing that refers to them is fixed either. The standard classifies bearings along the axes that matter to the way they are made, specified and used: by the direction of the load they are designed to carry, which separates radial bearings from thrust bearings; by the type of rolling element, which separates ball bearings from the several kinds of roller bearing; by the number of rows; by whether the bearing can be taken apart; by whether it is open or closed by seals or shields; and by nominal size, from miniature through to the large bearings the 2017 edition adds. The revision is modest and precise. It adds long face roller bearings to the classification by roller type, adds the large bearing category to the classification by nominal diameter, renames open and closed bearings and redefines the closed type, redefines separable and non-separable bearings, and adds the structure types of a number of bearings to the annex. Issued on 12 May 2017 and in force since 1 December 2017, it replaces GB/T 271-2008.

This Standard specifies the classification of rolling bearings. This Standard is applicable to the classification management of rolling bearing products.

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 276, Rolling bearings - Deep groove ball bearings - Boundary dimensions

GB/T 281, Rolling bearings - Self-aligning ball bearings - Boundary dimensions

GB/T 283, Rolling bearings - Cylindrical rolling bearings - Boundary dimensions

GB/T 285, Rolling bearings - Double row cylindrical roller bearings - Boundary dimensions

GB/T 288, Rolling bearings - Self-aligning roller bearings - Boundary dimensions

GB/T 290, Rolling bearings - Needle roller bearings, drawn cup without inner rings - Boundary dimensions

GB/T 292, Rolling bearings - Angular contact ball bearings - Boundary dimensions

GB/T 294, Rolling bearings - Three-point and four-point contact ball bearings - Boundary dimensions

GB/T 296, Rolling bearings - Double row angular contact ball bearings - Boundary

dimensions

GB/T 297, Rolling bearings - Tapered roller bearings - Boundary dimensions

GB/T 299, Rolling bearings - Metric double row tapered roller bearings - Boundary dimensions

GB/T 300, Rolling bearings - Four row tapered roller bearings - Boundary dimensions

GB/T 301, Rolling bearings - Thrust ball bearings - Boundary dimensions

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