

ICS 01.100.20

CCS J 04



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

GB/T 4459.7-2017

**Technical drawings -- The detailed simplified representation of
rolling bearings**

Issued on: July 2, 2017

Implemented on: February 1, 2018

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China, Standardization
Administration of the People's Republic of China**

Table of Contents

Foreword

1 Scope

2 Normative references

3 Terms and definitions

4 basic rules

4.1 graph line

4.2 size and ratio

4.3 section symbols

Foreword

GB/T 4459 "Mechanical Drawing" is divided into the following eight sections.

--- GB/T 4459.1-1995 Mechanical drawing thread and threaded fastener representation;

--- GB/T 4459.2-2003 mechanical drawing gear representation;

--- GB/T 4459.3-2000 mechanical drawing spline representation;

--- GB/T 4459.4-2003 mechanical drawing spring representation;

--- GB/T 4459.5-1999 mechanical drawing center hole representation;

--- GB/T 4459.8-2009 Mechanical drawing dynamic seal - Part 1. Generic simplified notation;

Mechanical drawings - Dynamic seals - Part 2. Simplified representation of characteristics.

This section GB/T 4459 Part 7.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This Part replaces GB/T 4459.7-1998 "Mechanical Drawing Rolling Representation", compared with GB/T 4459.7-1998, the main

Technical changes are as follows.

--- Increasing the normative references;

--- In accordance with ISO 8826-2:1994 "Technical drawings of rolling bearings Part 2. Detailed and simplified representation" in Table 1 to correct

"Element symbol" choice note, an increase of footnote b;

--- In order to make the three kinds of painting (generalized, characteristic and prescriptive painting) as a separate side by side, the original "5 simplified painting method" in this chapter

There are two chapters, "General Picture" (formerly 5.1) and "Special Picture" (formerly 5.2)

Painting method ", and subsequently adjust the relevant chapter number;

--- A number of words and illustrations made the necessary changes, the text is modified as shown in Table 1, Table 2 will be "adjustable" standard "self-aligning", "not

Adjustable heart "norms" non-self-aligning ", the legend modified in Table 3, the figure 3.6;

--- The original "Appendix B (hint of appendix)" to "Appendix A (normative)";

--- The original "Appendix A (informative) reference document" to "references."

This section is based on ISO 8826-1.1989 "Technical drawings rolling bearings Part 1. General and simplified notation" and

ISO 8826-2.1994 "Technical drawings rolling bearings Part 2. Carefully simplified notation" integrated preparation, with two international standards

The degree of consistency is not equivalent.

This part of the National Technical Product Documentation Standardization Technical Committee (SAC/TC146) centralized.

The main drafting units in this section. Wanxiang Qianchao Co., Ltd., machine Productivity Promotion Center, Changshu world Coal Machinery Co., Ltd..

1 Scope

GB/T 4459 provisions of this part of the general method of rolling bearings, characteristic drawing and the provisions of painting.

This section applies to assembly drawings do not need to accurately indicate the shape and structure of the standard rolling bearings. Non-standard rolling bearings are also available

Reference to adopt.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 4457.4 Mechanical Drawing Diagrams

GB/T 6930 rolling bearing vocabulary

GB/T 16675.1 Technical drawings Simplified representation Part 1. Pattern drawing

3 Terms and definitions

GB/T 6930 and GB/T 16675.1 defined terms and definitions apply to this document.

4.1 graph line

General drawing, character drawing and the provisions of the painting of the various symbols, rectangular wireframes and contour lines are specified in GB/T 4457.4 coarse

Solid line drawing.

4.2 size and ratio

4.2.1 When drawing a rolling bearing, the size of its rectangular wireframe or outline should be the same as that of the rolling bearing,

Using the same ratio.

4.2.2 General method, characteristic method and the definition of the size of the painting method example see Appendix A.

4.3 section symbols

4.3.1 In the cross-sectional view, the use of generalized or characteristic drawing method of rolling bearings, are always painted cross-section symbols (hatching).

4.3.2 Drawings drawn in accordance with the provisions of the rolling bearing cross-sectional view, the bearing rolling body does not draw hatching, the rings should generally be drawn

Direction and spacing of the same section line (see Figure 1). When not causing misunderstanding, it is also allowed to omit the non-painting (see Figure 5, Table 3 ~ Table 6).

If other parts or accessories (eccentric sleeve, adapter sleeve, retaining ring, etc.) and supporting the use of rolling bearings, the cross-section of the bearing ring should be cut

Noodles in different directions or different intervals (see Figure 2). When not causing misunderstandings, it is allowed to omit not drawing (see Figure 6).