INTERNATIONAL STANDARD

ISO 15

Fourth edition
2017-07

Rolling bearings — Radial bearings — Boundary dimensions, general plan

Roulements — Roulements radiaux — Dimensions d'encombrement, plan général

Reference number
ISO 15:2017(E)

© ISO 2017



COPYRIGHT PROTECTED DOCUMENT

© ISO 2017, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword ..... **iv**
Introduction ..... **v**
1 Scope **1**
2 Normative references **1**
3 Terms and definitions **1**
4 Symbols **1**
5 Boundary dimensions **2**
Annex A (informative) **Guidelines for the extension of this document for radial bearings** **22**
Bibliography **24**

© ISO 2017 – All rights reserved

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 4, *Rolling bearings*.

This fourth edition cancels and replaces the third edition (ISO 15:2011), which has been technically revised. The tables have been extended to incorporate dimensions of very large bearings.

© ISO 2017 – All rights reserved

Introduction

The objective of this document is to restrict the number of radial bearing sizes just enough to ensure economic production, yet provide a sufficient number of sizes to satisfy present and future needs of bearing users.

These needs are comprehensive and varying. Therefore, this document needs to embrace a wide range of numerically determined sizes and proportions and can even be extended according to the guidelines given in Annex A.

Tapered roller bearings, insert bearings and some types of needle roller bearings and instrument precision bearings standardized by ISO do not conform to this document because the dimensions given are not found to be optimal for the bearings in question.

© ISO 2017 – All rights reserved

Rolling bearings — Radial bearings — Boundary dimensions, general plan

1 Scope

This document specifies preferred boundary dimensions for radial bearings of the diameter series 7, 8, 9, 0, 1, 2, 3 and 4.

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 edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 464, *Rolling bearings — Radial bearings with locating snap ring — Dimensions, geometrical product specifications (GPS) and tolerance values*

ISO 5593, *Rolling bearings — Vocabulary*

ISO 12043, *Rolling bearings — Single-row cylindrical roller bearings — Chamfer dimensions for loose rib and non-rib sides*

ISO 12044, *Rolling bearings — Single-row angular contact ball bearings — Chamfer dimensions for outer ring non-thrust side*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5593 apply.

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

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

4 Symbols

For the purposes of this document, the symbols given in ISO 15241[3] and the following apply.

The symbols shown in Figure 1 and given in Tables 1 to 8 denote nominal dimensions, unless specified otherwise.

© ISO 2017 – All rights reserved