International Standard

ISO 582

Rolling bearings — Chamfer dimensions — Geometrical product specifications (GPS) and values

Roulements — Dimensions des arrondis — Spécifications géométriques des produits (GPS)

Fourth edition
2026-02

Reference number
ISO 582:2026(en)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

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Foreword

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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 document 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).

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This document was prepared by Technical Committee ISO/TC *4, Rolling bearings*, Subcommittee SC 4, *Rolling bearings - Vocabulary, boundary dimensions and geometrical product specifications.*

This fourth edition cancels and replaces the third edition (ISO 582:1995), which has been technically revised. It also incorporates the Amendment ISO 582:1995/Amd 1:2013.

The main changes are as follows:

— implementation of ISO 21204;

— symbols have been revised;

— Annexes A and B have been added.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The purpose of this document is to achieve interchangeability of rolling bearings, by specifying the chamfer dimensions, and to minimize the risk of incompatibility in bearing applications as well as to facilitate the mounting process.

The specification of the chamfer dimensions also assures a sufficient support surface for the bearing rings.

Rolling bearings — Chamfer dimensions — Geometrical product specifications (GPS) and values

1 Scope

This document specifies the chamfer least material boundary for ring and washer chamfers of metric series rolling bearings for the corresponding radius maximum material boundaries. The radius maximum material boundaries are given in references [1],[2],[3],[4],[5],[6],[7].

Recommendations are given for the corresponding housing and shaft fillet radii.

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 5593, *Rolling bearings — Vocabulary*

ISO 8015, *Geometrical product specifications (GPS) — Fundamentals — Concepts, principles and rules*

ISO 21204:2020, *Geometrical product specifications (GPS) — Transition specification*

ISO 22872:2024, *Rolling bearings — Geometrical product specifications (GPS) — Vocabulary and representation of symbols*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5593, ISO 8015, ISO 21204, ISO 22872 and the following apply.

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

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

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

3.1
transition feature
single integral feature connecting two or more adjacent integral surfaces

[SOURCE: ISO 21204:2020, 3.1]

3.2
ring chamfer
transition feature (3.1) connecting the bore or outside surface and one of the faces of the ring

3.3
washer chamfer
transition feature (3.1) connecting the bore or outside surface and one of the faces of the washer