



**AMERICAN NATIONAL STANDARD**  
**ABMA Standard**

# Rolling bearings -- Spherical plain bearings — Part 1: Radial spherical plain bearings

Sponsor

**American Bearing  
Manufacturers Association**

**ANSI/ABMA/ISO 12240-1-S2010  
(Identical Adoption of ISO 12240-1:1998)**

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 **ABMA**  
*American Bearing Manufacturers Association*

ABMA  
2025 M Street, NW  
Suite 800  
Washington, DC 20036  
Ph: 202-367-1155  
Fax: 202-367-2155  
E-mail: [info@americanbearings.org](mailto:info@americanbearings.org)  
[www.americanbearings.org](http://www.americanbearings.org)

**ABMA FOREWORD** (This foreword is not part of ANSI/ABMA/ISO 12240-1-S2010.)

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The text is approved as an International Standard if a two-thirds majority of the P (participating)-members of the TC/SC are in favor and not more than one-quarter of the total number of votes cast are negative.

International Standard 12240-1:1998 was prepared by Technical Committee ISO/TC 4, Rolling Bearings.

This standard was processed and approved for submittal to ANSI for national adoption by Accredited Standards Committee B3. Committee approval of the national adoption of this standard does not necessarily mean that all committee members voted for its adoption.

Suggestions for the improvement of this standard gained through experience with its use will be welcomed. These suggestions should be sent to:

ASC B3 Secretariat  
American Bearing Manufacturers Association  
2025 M Street, N.W., Suite 800  
Washington, DC 20036

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**Spherical plain bearings —**  
**Part 1:**  
**Radial spherical plain bearings**

*Rotules lisses —*

*Partie 1: Rotules lisses radiales*



Reference number  
ISO 12240-1:1998(E)

## Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 12240-1 was prepared by Technical Committee ISO/TC 4, *Rolling bearings*, Subcommittee SC 7, *Spherical plain bearings*.

This first edition cancels and replaces ISO 6124-1:1987, ISO 6124-2:1982, ISO 6124-3:1982 and ISO 6125:1982 of which it constitutes a technical revision.

ISO 12240 consists of the following parts, under the general title *Spherical plain bearings*:

- *Part 1: Radial spherical plain bearings*
- *Part 2: Angular contact radial spherical plain bearings*
- *Part 3: Thrust spherical plain bearings*
- *Part 4: Spherical plain bearing rod ends*

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International Organization for Standardization  
Case postale 56 • CH-1211 Genève 20 • Switzerland  
Internet iso@iso.ch

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## Spherical plain bearings —

### Part 1: Radial spherical plain bearings

#### 1 Scope

This part of ISO 12240 specifies dimension series, tolerances and radial internal clearances for radial spherical plain bearings.

The dimensions and tolerances specified in this part of ISO 12240 have been selected to permit the design of radial spherical plain bearings using a wide choice of sliding material combinations.

The specified tolerance values apply to finished, radial spherical plain bearings before any coating, plating, ring splitting or ring fracturing.

In the case of surface treated radial spherical plain bearings, there may be slight deviations from the specified tolerance values.

Radial spherical plain bearings need not conform to the designs illustrated but compliance is required as regards the dimensions, tolerances and radial internal clearances specified.

NOTE — Spherical plain bearings for airframe applications are not covered by this part of ISO 12240.

#### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 12240. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 12240 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 582:1995, *Rolling bearings – Chamfer dimensions – Maximum values*.

ISO 1132-1:—<sup>1)</sup>, *Rolling bearings – Tolerances – Part 1: Terms and definitions*.

ISO 6811:1998, *Spherical plain bearings – Vocabulary*.

ISO 12240-4:1998, *Spherical plain bearings – Part 4: Spherical plain bearing rod ends*.

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1) To be published. (Revision of ISO 1132:1980)