
Rolling bearings — Balls —
Part 1:
Steel balls

Roulements — Billes —

Partie 1: Billes de roulement en acier



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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

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.

ISO 3290-1 was prepared by Technical Committee ISO/TC 4, *Rolling bearings*.

This first edition of ISO 3290-1 cancels and replaces ISO 3290:2001, which has been technically revised.

ISO 3290 consists of the following parts, under the general title *Rolling bearings — Balls*:

- *Part 1: Steel balls*
- *Part 2: Ceramic balls*

Rolling bearings — Balls —

Part 1: Steel balls

1 Scope

This part of ISO 3290 specifies requirements for finished steel balls for rolling bearings.

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.

ISO 683-17, *Heat-treated steels, alloy steels and free-cutting steels — Part 17: Ball and roller bearing steels*

ISO 1132-1, *Rolling bearings — Tolerances — Part 1: Terms and definitions*

ISO 4288, *Geometrical Product Specifications (GPS) — Surface texture: Profile method — Rules and procedures for the assessment of surface texture*

ISO 5593, *Rolling bearings — Vocabulary*

ISO/TS 12181-1, *Geometrical Product Specifications (GPS) — Roundness — Part 1: Vocabulary and parameters of roundness*

ISO 15241, *Rolling bearings — Symbols for quantities*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1132-1, ISO 5593 and the following apply.

3.1

nominal ball diameter

diameter value which is used for the general identification of a ball size

[ISO 5593:1997, 05.04.01]

3.2

single ball diameter

distance between two parallel planes tangential to the actual surface of a ball

[ISO 5593:1997, 05.04.02]