## INTERNATIONAL STANDARD

ISO 3548-1

First edition 2014-06-15

# Plain bearings — Thin-walled half bearings with or without flange —

### Part 1:

# Tolerances, design features and methods of test

Paliers lisses — Demi-coussinets minces à ou sans collerette —
Partie 1: Tolérances, caractéristiques de conception et méthodes
d'essai



Reference number ISO 3548-1:2014(E)



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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.

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 meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 123, *Plain Bearings*, Subcommittee SC 3 *Dimen*sions, tolerances and constructions details.

This first edition of ISO 3548-1 cancels and replaces the second edition of ISO 3548:1999, which has been technically revised.

ISO 3548 consists of the following parts, under the general title *Plain bearings* — *Thin walled half bearings* with or without flange:

- Part 1: Tolerances, design features and methods of test
- Part 2: Measurement of wall thickness and flange thickness
- Part 3: Measurement of peripheral length

# Plain bearings — Thin-walled half bearings with or without flange —

### Part 1:

### Tolerances, design features and methods of test

### 1 Scope

This part of ISO 3548 specifies tolerances, design features, and test methods for thin-walled half bearings with integral flange up to an outside diameter of  $D_0$  = 250 mm and without flange up to an outside diameter of  $D_0$  = 500 mm. Due to the variety of design, it is, however, not possible to standardize the dimensions of the half bearings.

Half bearings according to this part of ISO 3548 are predominantly used in reciprocating machinery and consist of a steel backing and one or more bearing metal layers on the inside.

In reciprocating machinery, flanged half bearings can be used in connection with half bearings without flange.

Alternatively, to serve as a flanged half bearing, it is possible to use a half bearing without flange together with two separate half thrust washers according to ISO 6526; or a half bearing with assembled flanges.

NOTE All dimensions and tolerances are given in millimetres.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

ISO 6524, Plain bearings — Thin-walled half bearings — Checking of peripheral length

ISO 6526, Plain bearings — Pressed bimetallic half thrust washers — Features and tolerances

#### 3 Symbols

See Figures 1 and 2 and Table 1.

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