

BS ISO 3228:2013



BSI Standards Publication

Rolling bearings — Cast and pressed housings for insert bearings — Boundary dimensions and tolerances

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National foreword

This British Standard is the UK implementation of ISO 3228:2013. It supersedes BS 6010-3:1994 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MCE/7, Rolling bearings.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Rolling bearings — Cast and pressed housings for insert bearings — Boundary dimensions and tolerances

*Roulements — Logements moulés et emboutis pour roulements
 “insert” — Dimensions d’encombrement et tolérances*



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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 3228 was prepared by Technical Committee ISO/TC 4, *Rolling bearings*, Subcommittee SC 6, *Insert bearings*.

This fourth edition cancels and replaces the third edition (ISO 3228:1993), which has been technically revised. In particular, this fourth edition has been extended. Boundary dimensions and tolerances of cast housings for diameter series 3 have been added in [Tables 2, 4, 6 and 8](#). In addition, boundary dimensions and tolerances of larger size cast flanged housings, oval and cast take-up housings for diameter series 2 have been added in [Tables 5 and 7](#).

Rolling bearings — Cast and pressed housings for insert bearings — Boundary dimensions and tolerances

1 Scope

This International Standard specifies boundary dimensions and tolerances for cast and pressed housings for insert bearings for which boundary dimensions are given in ISO 9628[1].

It applies to plunger block housings, flanged housings and take-up housings.

The inclusion of relubrication features is optional, but when provided it is intended that they intersect the zone specified in ISO 9628[1] in such a way that lubricant satisfactorily feeds from the housing through this zone. The exact design of the relubrication features is not otherwise covered by this International Standard.

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 5593, *Rolling bearings — Vocabulary*

ISO 15241, *Rolling bearings — Symbols for quantities*

3 Terms and definitions

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

4 Symbols

4.1 General

For the purposes of this document, the symbols given in ISO 15241 and those in 4.2 to 4.7 apply.

The symbols (except those for tolerances) shown in Figures 1 to 6, and the values given in Tables 1 to 10 denote nominal dimensions, unless specified otherwise.

NOTE Figures 1 to 6 are drawn schematically and do not necessarily show all design details. The grease nipple positions in Figures 1 to 4 are examples. Other positions are at the discretion of the manufacturer.

4.2 Cast plumber block housing

See [Figure 1](#) and [Tables 1](#) and [2](#).

A	(overall) width of base
D_a	spherical seating diameter of housing
H	distance from mounting base to centreline of spherical seating diameter
H_1	height of feet
J	centre distance between bolt holes
L	(overall) length of base
N	width of bolt hole
N_1	length of bolt hole
Δ_{Hs}	deviation of single distance from mounting base to centreline of spherical seating diameter

4.3 Cast flanged housing, square

See [Figure 2](#) and [Tables 3](#) and [4](#).

A	(overall) width
A_1	width of flange
A_2	distance from mounting face to centreline of spherical seating diameter
D_a	spherical seating diameter of housing
J	centre distance between bolt holes
L	(overall) length
N	diameter of bolt hole
X	position tolerance of bolt holes
Δ_{A2s}	deviation of single distance from mounting face to centreline of spherical seating diameter

4.4 Cast flanged housing, oval

See [Figure 3](#) and [Tables 5](#) and [6](#).

A	(overall) width
A_1	width of flange
A_2	distance from mounting face to centreline of spherical seating diameter
D_a	spherical seating diameter of housing
H	height of flange