International Standard

ISO 965-4

Third edition
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ISO general purpose metric screw threads — Tolerances —

Part 4: Limits of sizes for hot-dip galvanized external threads to mate with internal threads made to tolerance position H or G after galvanizing

Filetages métriques ISO pour usages généraux — Tolérances —

Partie 4: Dimensions limites pour filetages extérieurs galvanisés à chaud pour assemblages avec des filetages intérieurs en position de tolérance H ou G après galvanisation

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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 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).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 1, *Screw threads*.

This third edition cancels and replaces the second edition (ISO 965-4:2021), which has been technically revised.

The main changes are as follows:

— in Clauses 1 and 5, including Table 1, “limit deviations” has been replaced by “fundamental deviations” (Clauses 1 and 6, including Table 1, in the previous edition of this document);

— in Table 1, a small pitch 1 has been added;

— in Table 2, the large nominal diameters (from 68 mm to 100 mm) and the two small nominal diameters (6 mm and 7 mm) have been added.

A list of all parts in the ISO 965 series can be found on the ISO website.

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.

ISO general purpose metric screw threads — Tolerances —

Part 4: Limits of sizes for hot-dip galvanized external threads to mate with internal threads made to tolerance position H or G after galvanizing

1 Scope

This document specifies the fundamental deviations and limits of sizes for the pitch and major diameters of the hot-dip galvanized metric external threads (M) conforming to ISO 262 (M6 to M68 with the coarse pitches and M72 to M100 with pitch 6) having basic and design profiles in accordance with ISO 68-1.

This document is applicable to the hot-dip galvanized metric external threads undersized to tolerance class 6az before galvanizing to mate with the internal threads made to tolerance position H or G after galvanizing.

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 965-1, *ISO general purpose metric screw threads — Tolerances — Part 1: Principles and basic data*

ISO 965-5, *ISO general purpose metric screw threads — Tolerances — Part 5: Limits of sizes for internal threads to mate with hot-dip galvanized external threads with maximum size of tolerance position h before galvanizing*

ISO 5408, *Screw threads — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5408 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/

4 General

External threads undersized to tolerance class 6az before galvanizing according to this document shall not be mated with internal threads oversized to tolerance class 6AZ or 6AX in accordance with ISO 965-5. Such combinations create high probability for screw thread stripping.

For hot-dip galvanized external threads, the tolerance class 6az shall be applied to the parts before galvanizing.

After galvanizing, the actual screw thread profile should not, at any point, transgress the maximum material limit for tolerance position h. Specific requirements for coated screw threads are given in the relevant coating standards.