

---

---

**ISO general purpose metric screw  
threads — Tolerances —**

Part 5:  
**Limits of sizes for internal screw  
threads to mate with hot-dip  
galvanized external screw threads  
with maximum size of tolerance  
position h before galvanizing**

**AMENDMENT 1**

*Filetages métriques ISO pour usages généraux — Tolérances —*

*Partie 5: Dimensions limites pour filetages intérieurs pour  
assemblages avec des filetages extérieurs galvanisés à chaud de  
position de tolérance maximale h avant galvanisation*

*AMENDEMENT 1*





**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2021

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland

## 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](http://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](http://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 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](http://www.iso.org/iso/foreword.html).

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

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](http://www.iso.org/members.html).

STANDARDSISO.COM : Click to view the full PDF of ISO 965-5:1998/Amd 1:2021

# ISO general purpose metric screw threads — Tolerances —

Part 5:

**Limits of sizes for internal screw threads to mate with hot-dip galvanized external screw threads with maximum size of tolerance position h before galvanizing**

## AMENDMENT 1

*Scope, first paragraph*

Replace “deviations” with “limit deviations”.

Replace “ISO 262” with “the coarse thread series of ISO 262 (from M8 to M64)”.

*Scope, third to fifth paragraphs*

Replace the third to fifth paragraphs, including the two formulae for fundamental deviations AZ and AX, with the following:

"Internal threads shall be tapped after the hot-dip galvanizing process has been completed, therefore no galvanizing coating is present on the surface of internal threads."

*Normative references*

Change all the references to be undated.

Move ISO 68-1, ISO 262 and ISO 898-2 into the Bibliography.

Update the title of ISO 5408 as follows:

"ISO 5408, *Screw threads — Vocabulary*"

*Clause 5*

Change the clause title to "Limit deviations".

Replace the first paragraph with the following:

"The limit deviations for internal screw threads as specified in [Table 1](#) are derived from the formulae for fundamental deviations below and from tolerances specified in ISO 965-1."

*Clause 5, Table 1*

Change the table title to "Limit deviations".

Add the limit deviations for M8 as follows:

**Table 1 — Limit deviations**

| Thread | Pitch<br><i>P</i><br><br>mm | Internal thread |                 |                 |                 |                 |
|--------|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|        |                             | Tolerance class | Pitch diameter  |                 | Minor diameter  |                 |
|        |                             |                 | <i>ES</i><br>μm | <i>EI</i><br>μm | <i>ES</i><br>μm | <i>EI</i><br>μm |
| M8     | 1,25                        | 6AZ             | + 485           | + 325           | + 590           | + 325           |
|        |                             | 6AX             | + 415           | + 255           | + 520           | + 255           |

*Clause 6*

Add the following new fourth paragraph:

"The actual root contour shall not at any point transgress the basic profile and fundamental deviation."

Add the limits for M8 in [Table 2](#) as follows:

**Table 2 — Internal screw thread limits of sizes for tolerance class 6AZ**

Dimensions in millimetres

| Thread | Length of thread engagement |                     | Major diameter <sup>a</sup><br>min. <sup>b</sup> | Pitch diameter <sup>a</sup> |       | Minor diameter <sup>c</sup> |       |
|--------|-----------------------------|---------------------|--------------------------------------------------|-----------------------------|-------|-----------------------------|-------|
|        | over                        | up to and including |                                                  | max.                        | min.  | max.                        | min.  |
| M8     | 4                           | 12                  | 8,325                                            | 7,673                       | 7,513 | 7,237                       | 6,972 |

Add the limits for M8 in [Table 3](#) as follows:

**Table 3 — Internal screw thread limits of sizes for tolerance class 6AX**

Dimensions in millimetres

| Thread | Length of thread engagement |                     | Major diameter <sup>a</sup><br>min. <sup>b</sup> | Pitch diameter <sup>a</sup> |       | Minor diameter <sup>c</sup> |       |
|--------|-----------------------------|---------------------|--------------------------------------------------|-----------------------------|-------|-----------------------------|-------|
|        | over                        | up to and including |                                                  | max.                        | min.  | max.                        | min.  |
| M8     | 4                           | 12                  | 8,255                                            | 7,603                       | 7,443 | 7,167                       | 6,902 |