# INTERNATIONAL STANDARD

## ISO 965-3

# ISO general purpose metric screw threads — Tolerances —

## Part 3:
## Limit deviations for screw threads

*Filetages métriques ISO pour usages généraux — Tolérances —
Partie 3: Écarts limites pour filetages*

# Contents

# 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 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 fourth edition cancels and replaces the third edition (ISO 965-3:1998), which has been technically revised.

The main changes compared to the previous edition are as follows:

— in the document title, "constructional" has been deleted;

— in Clause 1, the third paragraph has been added;

— in Clause 4, the phrase "basic profiles" has been replaced by "basic profile and fundamental deviation" (first paragraph of ISO 965-3:1998; second paragraph of ISO 965-3:2020);

— in Clause 4 and Table 1, the deviation formula and values for the minor diameter of external threads have been deleted;

— in Table 1 four tolerance classes (4g, 5g4g, 8e and 9e8e) 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 3:
## Limit deviations for screw threads

## 1 Scope

This document specifies limit deviations for pitch and crest diameters for ISO general purpose metric screw threads (M) conforming to ISO 261 having basic profile in accordance with ISO 68-1.

The limit deviations specified are derived from the fundamental deviations and tolerances specified in ISO 965-1.

This document is applicable to ISO general purpose metric screw threads with the recommended tolerance classes.

## 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 5408, *Screw threads — Vocabulary*

## 3 Terms and definitions

For the purposes of this part of document, the terms and definitions given in ISO 5408 apply.

ISO and IEC maintain terminological 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 Limit deviations

Limit deviations are given in Table 1.

For internal threads as well as external threads, the actual root contour shall not in any point transgress the basic profile and fundamental deviation.

For coated threads, the tolerances apply to the parts before coating, unless otherwise stated. After coating the actual thread profile shall not in any point transgress the maximum material limits for position H or h respectively.

NOTE    These provisions are intended for thin coatings, for example those obtained by electroplating.

### Table 1 — Limit deviations

| Basic major diameter | | Pitch | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | | Tolerance class | Pitch diameter | | Minor diameter | | Tolerance class | Pitch diameter | | Major diameter | |
| | | | | ES | EI | ES | EI | | es | ei | es | ei |
| mm | mm | mm | | µm | µm | µm | µm | | µm | µm | µm | µm |
| 0,99 | 1,4 | 0,2 | – | – | – | – | – | 3h4h | 0 | -24 | 0 | -36 |
| | | | – | – | – | – | – | 4g | -17 | -47 | -17 | -53 |
| | | | 4H | 40 | 0 | 38 | 0 | 4h | 0 | -30 | 0 | -36 |
| | | | – | – | – | – | – | 5g4g | -17 | -55 | -17 | -53 |
| | | | 5G | – | – | – | – | 5g6g | -17 | -55 | -17 | -73 |
| | | | 5H | – | – | – | – | 5h4h | 0 | -38 | 0 | -36 |
| | | | – | – | – | – | – | 5h6h | 0 | -38 | 0 | -56 |
| | | | – | – | – | – | – | 6e | – | – | – | – |
| | | | – | – | – | – | – | 6f | – | – | – | – |
| | | | 6G | – | – | – | – | 6g | -17 | -65 | -17 | -73 |
| | | | 6H | – | – | – | – | 6h | 0 | -48 | 0 | -56 |
| | | | – | – | – | – | – | 7e6e | – | – | – | – |
| | | | 7G | – | – | – | – | 7g6g | – | – | – | – |
| | | | 7H | – | – | – | – | 7h6h | – | – | – | – |
| | | | – | – | – | – | – | 8e | – | – | – | – |
| | | | 8G | – | – | – | – | 8g | – | – | – | – |
| | | | – | – | – | – | – | 9e8e | – | – | – | – |
| | | | 8H | – | – | – | – | 9g8g | – | – | – | – |
| 0,99 | 1,4 | 0,25 | – | – | – | – | – | 3h4h | 0 | -26 | 0 | -42 |
| | | | – | – | – | – | – | 4g | -18 | -52 | -18 | -60 |
| | | | 4H | 45 | 0 | 45 | 0 | 4h | 0 | -34 | 0 | -42 |
| | | | – | – | – | – | – | 5g4g | -18 | -60 | -18 | -60 |
| | | | 5G | 74 | 18 | 74 | 18 | 5g6g | -18 | -60 | -18 | -85 |
| | | | 5H | 56 | 0 | 56 | 0 | 5h4h | 0 | -42 | 0 | -42 |
| | | | – | – | – | – | – | 5h6h | 0 | -42 | 0 | -67 |
| | | | – | – | – | – | – | 6e | – | – | – | – |
| | | | – | – | – | – | – | 6f | – | – | – | – |
| | | | 6G | – | – | – | – | 6g | -18 | -71 | -18 | -85 |
| | | | 6H | – | – | – | – | 6h | 0 | -53 | 0 | -67 |
| | | | – | – | – | – | – | 7e6e | – | – | – | – |
| | | | 7G | – | – | – | – | 7g6g | – | – | – | – |
| | | | 7H | – | – | – | – | 7h6h | – | – | – | – |
| | | | – | – | – | – | – | 8e | – | – | – | – |
| | | | 8G | – | – | – | – | 8g | – | – | – | – |
| | | | – | – | – | – | – | 9e8e | – | – | – | – |
| | | | 8H | – | – | – | – | 9g8g | – | – | – | – |

NOTE "*ES*" and "*es*" are the symbols of "upper deviation"; "*EI*" and "*ei*" are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter | | Pitch | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | | Toler-ance class | Pitch diameter | | Minor diameter | | Toler-ance class | Pitch diameter | | Major diameter | |
| | | | | *ES* | *EI* | *ES* | *EI* | | *es* | *ei* | *es* | *ei* |
| mm | mm | mm | | µm | µm | µm | µm | | µm | µm | µm | µm |
| 0,99 | 1,4 | 0,3 | – | – | – | – | – | 3h4h | 0 | -28 | 0 | -48 |
| | | | – | – | – | – | – | 4g | -18 | -54 | -18 | -66 |
| | | | 4H | 48 | 0 | 53 | 0 | 4h | 0 | -36 | 0 | -48 |
| | | | – | – | – | – | – | 5g4g | -18 | -63 | -18 | -66 |
| | | | 5G | 78 | 18 | 85 | 18 | 5g6g | -18 | -63 | -18 | -93 |
| | | | 5H | 60 | 0 | 67 | 0 | 5h4h | 0 | -45 | 0 | -48 |
| | | | – | – | – | – | – | 5h6h | 0 | -45 | 0 | -75 |
| | | | – | – | – | – | – | 6e | – | – | – | – |
| | | | – | – | – | – | – | 6f | – | – | – | – |
| | | | 6G | 93 | 18 | 103 | 18 | 6g | -18 | -74 | -18 | -93 |
| | | | 6H | 75 | 0 | 85 | 0 | 6h | 0 | -56 | 0 | -75 |
| | | | – | – | – | – | – | 7e6e | – | – | – | – |
| | | | 7G | – | – | – | – | 7g6g | – | – | – | – |
| | | | 7H | – | – | – | – | 7h6h | – | – | – | – |
| | | | – | – | – | – | – | 8e | – | – | – | – |
| | | | 8G | – | – | – | – | 8g | – | – | – | – |
| | | | – | – | – | – | – | 9e8e | – | – | – | – |
| | | | 8H | – | – | – | – | 9g8g | – | – | – | – |
| 1,4 | 2,8 | 0,2 | – | – | – | – | – | 3h4h | 0 | -25 | 0 | -36 |
| | | | – | – | – | – | – | 4g | -17 | -49 | -17 | -53 |
| | | | 4H | 42 | 0 | 38 | 0 | 4h | 0 | -32 | 0 | -36 |
| | | | – | – | – | – | – | 5g4g | -17 | -57 | -17 | -53 |
| | | | 5G | – | – | – | – | 5g6g | -17 | -57 | -17 | -73 |
| | | | 5H | – | – | – | – | 5h4h | 0 | -40 | 0 | -36 |
| | | | – | – | – | – | – | 5h6h | 0 | -40 | 0 | -56 |
| | | | – | – | – | – | – | 6e | – | – | – | – |
| | | | – | – | – | – | – | 6f | – | – | – | – |
| | | | 6G | – | – | – | – | 6g | -17 | -67 | -17 | -73 |
| | | | 6H | – | – | – | – | 6h | 0 | -50 | 0 | -56 |
| | | | – | – | – | – | – | 7e6e | – | – | – | – |
| | | | 7G | – | – | – | – | 7g6g | – | – | – | – |
| | | | 7H | – | – | – | – | 7h6h | – | – | – | – |
| | | | – | – | – | – | – | 8e | – | – | – | – |
| | | | 8G | – | – | – | – | 8g | – | – | – | – |
| | | | – | – | – | – | – | 9e8e | – | – | – | – |
| | | | 8H | – | – | – | – | 9g8g | – | – | – | – |

NOTE *"ES"* and *"es"* are the symbols of "upper deviation"; *"EI"* and *"ei"* are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter over (mm) | up to (mm) | Pitch (mm) | Internal thread Tolerance class | Pitch diameter ES (µm) | EI (µm) | Minor diameter ES (µm) | EI (µm) | External thread Tolerance class | Pitch diameter es (µm) | ei (µm) | Major diameter es (µm) | ei (µm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,4 | 2,8 | 0,25 | – | – | – | – | – | 3h4h | 0 | -28 | 0 | -42 |
|  |  |  | – | – | – | – | – | 4g | -18 | -54 | -18 | -60 |
|  |  |  | 4H | 48 | 0 | 45 | 0 | 4h | 0 | -36 | 0 | -42 |
|  |  |  | – | – | – | – | – | 5g4g | -18 | -63 | -18 | -60 |
|  |  |  | 5G | 78 | 18 | 74 | 18 | 5g6g | -18 | -63 | -18 | -85 |
|  |  |  | 5H | 60 | 0 | 56 | 0 | 5h4h | 0 | -45 | 0 | -42 |
|  |  |  | – | – | – | – | – | 5h6h | 0 | -45 | 0 | -67 |
|  |  |  | – | – | – | – | – | 6e | – | – | – | – |
|  |  |  | – | – | – | – | – | 6f | – | – | – | – |
|  |  |  | 6G | – | – | – | – | 6g | -18 | -74 | -18 | -85 |
|  |  |  | 6H | – | – | – | – | 6h | 0 | -56 | 0 | -67 |
|  |  |  | – | – | – | – | – | 7e6e | – | – | – | – |
|  |  |  | 7G | – | – | – | – | 7g6g | – | – | – | – |
|  |  |  | 7H | – | – | – | – | 7h6h | – | – | – | – |
|  |  |  | – | – | – | – | – | 8e | – | – | – | – |
|  |  |  | 8G | – | – | – | – | 8g | – | – | – | – |
|  |  |  | – | – | – | – | – | 9e8e | – | – | – | – |
|  |  |  | 8H | – | – | – | – | 9g8g | – | – | – | – |
| 1,4 | 2,8 | 0,35 | – | – | – | – | – | 3h4h | 0 | -32 | 0 | -53 |
|  |  |  | – | – | – | – | – | 4g | -19 | -59 | -19 | -72 |
|  |  |  | 4H | 53 | 0 | 63 | 0 | 4h | 0 | -40 | 0 | -53 |
|  |  |  | – | – | – | – | – | 5g4g | -19 | -69 | -19 | -72 |
|  |  |  | 5G | 86 | 19 | 99 | 19 | 5g6g | -19 | -69 | -19 | -104 |
|  |  |  | 5H | 67 | 0 | 80 | 0 | 5h4h | 0 | -50 | 0 | -53 |
|  |  |  | – | – | – | – | – | 5h6h | 0 | -50 | 0 | -85 |
|  |  |  | – | – | – | – | – | 6e | – | – | – | – |
|  |  |  | – | – | – | – | – | 6f | -34 | -97 | -34 | -119 |
|  |  |  | 6G | 104 | 19 | 119 | 19 | 6g | -19 | -82 | -19 | -104 |
|  |  |  | 6H | 85 | 0 | 100 | 0 | 6h | 0 | -63 | 0 | -85 |
|  |  |  | – | – | – | – | – | 7e6e | – | – | – | – |
|  |  |  | 7G | – | – | – | – | 7g6g | -19 | -99 | -19 | -104 |
|  |  |  | 7H | – | – | – | – | 7h6h | 0 | -80 | 0 | -85 |
|  |  |  | – | – | – | – | – | 8e | – | – | – | – |
|  |  |  | 8G | – | – | – | – | 8g | – | – | – | – |
|  |  |  | – | – | – | – | – | 9e8e | – | – | – | – |
|  |  |  | 8H | – | – | – | – | 9g8g | – | – | – | – |

NOTE "*ES*" and "*es*" are the symbols of "upper deviation"; "*EI*" and "*ei*" are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter | | Pitch | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | | Toler-ance class | Pitch diameter | | Minor diameter | | Toler-ance class | Pitch diameter | | Major diameter | |
| | | | | ES | EI | ES | EI | | es | ei | es | ei |
| mm | mm | mm | | µm | µm | µm | µm | | µm | µm | µm | µm |
| 1,4 | 2,8 | 0,4 | – | – | – | – | – | 3h4h | 0 | -34 | 0 | -60 |
| | | | – | – | – | – | – | 4g | -19 | -61 | -19 | -79 |
| | | | 4H | 56 | 0 | 71 | 0 | 4h | 0 | -42 | 0 | -60 |
| | | | – | – | – | – | – | 5g4g | -19 | -72 | -19 | -79 |
| | | | 5G | 90 | 19 | 109 | 19 | 5g6g | -19 | -72 | -19 | -114 |
| | | | 5H | 71 | 0 | 90 | 0 | 5h4h | 0 | -53 | 0 | -60 |
| | | | – | – | – | – | – | 5h6h | 0 | -53 | 0 | -95 |
| | | | – | – | – | – | – | 6e | – | – | – | – |
| | | | – | – | – | – | – | 6f | -34 | -101 | -34 | -129 |
| | | | 6G | 109 | 19 | 131 | 19 | 6g | -19 | -86 | -19 | -114 |
| | | | 6H | 90 | 0 | 112 | 0 | 6h | 0 | -67 | 0 | -95 |
| | | | – | – | – | – | – | 7e6e | – | – | – | – |
| | | | 7G | – | – | – | – | 7g6g | -19 | -104 | -19 | -114 |
| | | | 7H | – | – | – | – | 7h6h | 0 | -85 | 0 | -95 |
| | | | – | – | – | – | – | 8e | – | – | – | – |
| | | | 8G | – | – | – | – | 8g | – | – | – | – |
| | | | – | – | – | – | – | 9e8e | – | – | – | – |
| | | | 8H | – | – | – | – | 9g8g | – | – | – | – |
| 1,4 | 2,8 | 0,45 | – | – | – | – | – | 3h4h | 0 | -36 | 0 | -63 |
| | | | – | – | – | – | – | 4g | -20 | -65 | -20 | -83 |
| | | | 4H | 60 | 0 | 80 | 0 | 4h | 0 | -45 | 0 | -63 |
| | | | – | – | – | – | – | 5g4g | -20 | -76 | -20 | -83 |
| | | | 5G | 95 | 20 | 120 | 20 | 5g6g | -20 | -76 | -20 | -120 |
| | | | 5H | 75 | 0 | 100 | 0 | 5h4h | 0 | -56 | 0 | -63 |
| | | | – | – | – | – | – | 5h6h | 0 | -56 | 0 | -100 |
| | | | – | – | – | – | – | 6e | – | – | – | – |
| | | | – | – | – | – | – | 6f | -35 | -106 | -35 | -135 |
| | | | 6G | 115 | 20 | 145 | 20 | 6g | -20 | -91 | -20 | -120 |
| | | | 6H | 95 | 0 | 125 | 0 | 6h | 0 | -71 | 0 | -100 |
| | | | – | – | – | – | – | 7e6e | – | – | – | – |
| | | | 7G | – | – | – | – | 7g6g | -20 | -110 | -20 | -120 |
| | | | 7H | – | – | – | – | 7h6h | 0 | -90 | 0 | -100 |
| | | | – | – | – | – | – | 8e | – | – | – | – |
| | | | 8G | – | – | – | – | 8g | – | – | – | – |
| | | | – | – | – | – | – | 9e8e | – | – | – | – |
| | | | 8H | – | – | – | – | 9g8g | – | – | – | – |

NOTE *"ES"* and *"es"* are the symbols of "upper deviation"; *"EI"* and *"ei"* are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter | | Pitch | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | | Tolerance class | Pitch diameter | | Minor diameter | | Tolerance class | Pitch diameter | | Major diameter | |
| | | | | ES | EI | ES | EI | | es | ei | es | ei |
| mm | mm | mm | | µm | µm | µm | µm | | µm | µm | µm | µm |
| 2,8 | 5,6 | 0,35 | – | – | – | – | – | 3h4h | 0 | -34 | 0 | -53 |
| | | | – | – | – | – | – | 4g | -19 | -61 | -19 | -72 |
| | | | 4H | 56 | 0 | 63 | 0 | 4h | 0 | -42 | 0 | -53 |
| | | | – | – | – | – | – | 5g4g | -19 | -72 | -19 | -72 |
| | | | 5G | 90 | 19 | 99 | 19 | 5g6g | -19 | -72 | -19 | -104 |
| | | | 5H | 71 | 0 | 80 | 0 | 5h4h | 0 | -53 | 0 | -53 |
| | | | – | – | – | – | – | 5h6h | 0 | -53 | 0 | -85 |
| | | | – | – | – | – | – | 6e | – | – | – | – |
| | | | – | – | – | – | – | 6f | -34 | -101 | -34 | -119 |
| | | | 6G | 109 | 19 | 119 | 19 | 6g | -19 | -86 | -19 | -104 |
| | | | 6H | 90 | 0 | 100 | 0 | 6h | 0 | -67 | 0 | -85 |
| | | | – | – | – | – | – | 7e6e | – | – | – | – |
| | | | 7G | – | – | – | – | 7g6g | -19 | -104 | -19 | -104 |
| | | | 7H | – | – | – | – | 7h6h | 0 | -85 | 0 | -85 |
| | | | – | – | – | – | – | 8e | – | – | – | – |
| | | | 8G | – | – | – | – | 8g | – | – | – | – |
| | | | – | – | – | – | – | 9e8e | – | – | – | – |
| | | | 8H | – | – | – | – | 9g8g | – | – | – | – |
| 2,8 | 5,6 | 0,5 | – | – | – | – | – | 3h4h | 0 | -38 | 0 | -67 |
| | | | – | – | – | – | – | 4g | -20 | -68 | -20 | -87 |
| | | | 4H | 63 | 0 | 90 | 0 | 4h | 0 | -48 | 0 | -67 |
| | | | – | – | – | – | – | 5g4g | -20 | -80 | -20 | -87 |
| | | | 5G | 100 | 20 | 132 | 20 | 5g6g | -20 | -80 | -20 | -126 |
| | | | 5H | 80 | 0 | 112 | 0 | 5h4h | 0 | -60 | 0 | -67 |
| | | | – | – | – | – | – | 5h6h | 0 | -60 | 0 | -106 |
| | | | – | – | – | – | – | 6e | -50 | -125 | -50 | -156 |
| | | | – | – | – | – | – | 6f | -36 | -111 | -36 | -142 |
| | | | 6G | 120 | 20 | 160 | 20 | 6g | -20 | -95 | -20 | -126 |
| | | | 6H | 100 | 0 | 140 | 0 | 6h | 0 | -75 | 0 | -106 |
| | | | – | – | – | – | – | 7e6e | -50 | -145 | -50 | -156 |
| | | | 7G | 145 | 20 | 200 | 20 | 7g6g | -20 | -115 | -20 | -126 |
| | | | 7H | 125 | 0 | 180 | 0 | 7h6h | 0 | -95 | 0 | -106 |
| | | | – | – | – | – | – | 8e | – | – | – | – |
| | | | 8G | – | – | – | – | 8g | – | – | – | – |
| | | | – | – | – | – | – | 9e8e | – | – | – | – |
| | | | 8H | – | – | – | – | 9g8g | – | – | – | – |

NOTE "*ES*" and "*es*" are the symbols of "upper deviation"; "*EI*" and "*ei*" are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter | | | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | Pitch | Toler-ance class | Pitch diameter | | Minor diameter | | Toler-ance class | Pitch diameter | | Major diameter | |
| | | | | ES | EI | ES | EI | | es | ei | es | ei |
| mm | mm | mm | | µm | µm | µm | µm | | µm | µm | µm | µm |
| 2,8 | 5,6 | 0,6 | – | – | – | – | – | 3h4h | 0 | -42 | 0 | -80 |
| | | | – | – | – | – | – | 4g | -21 | -74 | -21 | -101 |
| | | | 4H | 71 | 0 | 100 | 0 | 4h | 0 | -53 | 0 | -80 |
| | | | – | – | – | – | – | 5g4g | -21 | -88 | -21 | -101 |
| | | | 5G | 111 | 21 | 146 | 21 | 5g6g | -21 | -88 | -21 | -146 |
| | | | 5H | 90 | 0 | 125 | 0 | 5h4h | 0 | -67 | 0 | -80 |
| | | | – | – | – | – | – | 5h6h | 0 | -67 | 0 | -125 |
| | | | – | – | – | – | – | 6e | -53 | -138 | -53 | -178 |
| | | | – | – | – | – | – | 6f | -36 | -121 | -36 | -161 |
| | | | 6G | 133 | 21 | 181 | 21 | 6g | -21 | -106 | -21 | -146 |
| | | | 6H | 112 | 0 | 160 | 0 | 6h | 0 | -85 | 0 | -125 |
| | | | – | – | – | – | – | 7e6e | -53 | -159 | -53 | -178 |
| | | | 7G | 161 | 21 | 221 | 21 | 7g6g | -21 | -127 | -21 | -146 |
| | | | 7H | 140 | 0 | 200 | 0 | 7h6h | 0 | -106 | 0 | -125 |
| | | | – | – | – | – | – | 8e | – | – | – | – |
| | | | 8G | – | – | – | – | 8g | – | – | – | – |
| | | | – | – | – | – | – | 9e8e | – | – | – | – |
| | | | 8H | – | – | – | – | 9g8g | – | – | – | – |
| 2,8 | 5,6 | 0,7 | – | – | – | – | – | 3h4h | 0 | -45 | 0 | -90 |
| | | | – | – | – | – | – | 4g | -22 | -78 | -22 | -112 |
| | | | 4H | 75 | 0 | 112 | 0 | 4h | 0 | -56 | 0 | -90 |
| | | | – | – | – | – | – | 5g4g | -22 | -93 | -22 | -112 |
| | | | 5G | 117 | 22 | 162 | 22 | 5g6g | -22 | -93 | -22 | -162 |
| | | | 5H | 95 | 0 | 140 | 0 | 5h4h | 0 | -71 | 0 | -90 |
| | | | – | – | – | – | – | 5h6h | 0 | -71 | 0 | -140 |
| | | | – | – | – | – | – | 6e | -56 | -146 | -56 | -196 |
| | | | – | – | – | – | – | 6f | -38 | -128 | -38 | -178 |
| | | | 6G | 140 | 22 | 202 | 22 | 6g | -22 | -112 | -22 | -162 |
| | | | 6H | 118 | 0 | 180 | 0 | 6h | 0 | -90 | 0 | -140 |
| | | | – | – | – | – | – | 7e6e | -56 | -168 | -56 | -196 |
| | | | 7G | 172 | 22 | 246 | 22 | 7g6g | -22 | -134 | -22 | -162 |
| | | | 7H | 150 | 0 | 224 | 0 | 7h6h | 0 | -112 | 0 | -140 |
| | | | – | – | – | – | – | 8e | – | – | – | – |
| | | | 8G | – | – | – | – | 8g | – | – | – | – |
| | | | – | – | – | – | – | 9e8e | – | – | – | – |
| | | | 8H | – | – | – | – | 9g8g | – | – | – | – |

NOTE *"ES"* and *"es"* are the symbols of "upper deviation"; *"EI"* and *"ei"* are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter over | up to | Pitch | Internal thread Tolerance class | Pitch diameter ES | EI | Minor diameter ES | EI | External thread Tolerance class | Pitch diameter es | ei | Major diameter es | ei |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| mm | mm | mm | | µm | µm | µm | µm | | µm | µm | µm | µm |
| 2,8 | 5,6 | 0,75 | – | – | – | – | – | 3h4h | 0 | -45 | 0 | -90 |
| | | | – | – | – | – | – | 4g | -22 | -78 | -22 | -112 |
| | | | 4H | 75 | 0 | 118 | 0 | 4h | 0 | -56 | 0 | -90 |
| | | | – | – | – | – | – | 5g4g | -22 | -93 | -22 | -112 |
| | | | 5G | 117 | 22 | 172 | 22 | 5g6g | -22 | -93 | -22 | -162 |
| | | | 5H | 95 | 0 | 150 | 0 | 5h4h | 0 | -71 | 0 | -90 |
| | | | – | – | – | – | – | 5h6h | 0 | -71 | 0 | -140 |
| | | | – | – | – | – | – | 6e | -56 | -146 | -56 | -196 |
| | | | – | – | – | – | – | 6f | -38 | -128 | -38 | -178 |
| | | | 6G | 140 | 22 | 212 | 22 | 6g | -22 | -112 | -22 | -162 |
| | | | 6H | 118 | 0 | 190 | 0 | 6h | 0 | -90 | 0 | -140 |
| | | | – | – | – | – | – | 7e6e | -56 | -168 | -56 | -196 |
| | | | 7G | 172 | 22 | 258 | 22 | 7g6g | -22 | -134 | -22 | -162 |
| | | | 7H | 150 | 0 | 236 | 0 | 7h6h | 0 | -112 | 0 | -140 |
| | | | – | – | – | – | – | 8e | – | – | – | – |
| | | | 8G | – | – | – | – | 8g | – | – | – | – |
| | | | – | – | – | – | – | 9e8e | – | – | – | – |
| | | | 8H | – | – | – | – | 9g8g | – | – | – | – |
| 2,8 | 5,6 | 0,8 | – | – | – | – | – | 3h4h | 0 | -48 | 0 | -95 |
| | | | – | – | – | – | – | 4g | -24 | -84 | -24 | -119 |
| | | | 4H | 80 | 0 | 125 | 0 | 4h | 0 | -60 | 0 | -95 |
| | | | – | – | – | – | – | 5g4g | -24 | -99 | -24 | -119 |
| | | | 5G | 124 | 24 | 184 | 24 | 5g6g | -24 | -99 | -24 | -174 |
| | | | 5H | 100 | 0 | 160 | 0 | 5h4h | 0 | -75 | 0 | -95 |
| | | | – | – | – | – | – | 5h6h | 0 | -75 | 0 | -150 |
| | | | – | – | – | – | – | 6e | -60 | -155 | -60 | -210 |
| | | | – | – | – | – | – | 6f | -38 | -133 | -38 | -188 |
| | | | 6G | 149 | 24 | 224 | 24 | 6g | -24 | -119 | -24 | -174 |
| | | | 6H | 125 | 0 | 200 | 0 | 6h | 0 | -95 | 0 | -150 |
| | | | – | – | – | – | – | 7e6e | -60 | -178 | -60 | -210 |
| | | | 7G | 184 | 24 | 274 | 24 | 7g6g | -24 | -142 | -24 | -174 |
| | | | 7H | 160 | 0 | 250 | 0 | 7h6h | 0 | -118 | 0 | -150 |
| | | | – | – | – | – | – | 8e | -60 | -210 | -60 | -296 |
| | | | 8G | 224 | 24 | 339 | 24 | 8g | -24 | -174 | -24 | -260 |
| | | | – | – | – | – | – | 9e8e | -60 | -250 | -60 | -296 |
| | | | 8H | 200 | 0 | 315 | 0 | 9g8g | -24 | -214 | -24 | -260 |

NOTE "ES" and "es" are the symbols of "upper deviation"; "EI" and "ei" are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter | | Pitch | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | | Toler-ance class | Pitch diameter | | Minor diameter | | Toler-ance class | Pitch diameter | | Major diameter | |
| | | | | *ES* | *EI* | *ES* | *EI* | | *es* | *ei* | *es* | *ei* |
| mm | mm | mm | | μm | μm | μm | μm | | μm | μm | μm | μm |
| 5,6 | 11,2 | 0,75 | – | – | – | – | – | 3h4h | 0 | -50 | 0 | -90 |
| | | | – | – | – | – | – | 4g | -22 | -85 | -22 | -112 |
| | | | 4H | 85 | 0 | 118 | 0 | 4h | 0 | -63 | 0 | -90 |
| | | | – | – | – | – | – | 5g4g | -22 | -102 | -22 | -112 |
| | | | 5G | 128 | 22 | 172 | 22 | 5g6g | -22 | -102 | -22 | -162 |
| | | | 5H | 106 | 0 | 150 | 0 | 5h4h | 0 | -80 | 0 | -90 |
| | | | – | – | – | – | – | 5h6h | 0 | -80 | 0 | -140 |
| | | | – | – | – | – | – | 6e | -56 | -156 | -56 | -196 |
| | | | – | – | – | – | – | 6f | -38 | -138 | -38 | -178 |
| | | | 6G | 154 | 22 | 212 | 22 | 6g | -22 | -122 | -22 | -162 |
| | | | 6H | 132 | 0 | 190 | 0 | 6h | 0 | -100 | 0 | -140 |
| | | | – | – | – | – | – | 7e6e | -56 | -181 | -56 | -196 |
| | | | 7G | 192 | 22 | 258 | 22 | 7g6g | -22 | -147 | -22 | -162 |
| | | | 7H | 170 | 0 | 236 | 0 | 7h6h | 0 | -125 | 0 | -140 |
| | | | – | – | – | – | – | 8e | – | – | – | – |
| | | | 8G | – | – | – | – | 8g | – | – | – | – |
| | | | – | – | – | – | – | 9e8e | – | – | – | – |
| | | | 8H | – | – | – | – | 9g8g | – | – | – | – |
| 5,6 | 11,2 | 1 | – | – | – | – | – | 3h4h | 0 | -56 | 0 | -112 |
| | | | – | – | – | – | – | 4g | -26 | -97 | -26 | -138 |
| | | | 4H | 95 | 0 | 150 | 0 | 4h | 0 | -71 | 0 | -112 |
| | | | – | – | – | – | – | 5g4g | -26 | -116 | -26 | -138 |
| | | | 5G | 144 | 26 | 216 | 26 | 5g6g | -26 | -116 | -26 | -206 |
| | | | 5H | 118 | 0 | 190 | 0 | 5h4h | 0 | -90 | 0 | -112 |
| | | | – | – | – | – | – | 5h6h | 0 | -90 | 0 | -180 |
| | | | – | – | – | – | – | 6e | -60 | -172 | -60 | -240 |
| | | | – | – | – | – | – | 6f | -40 | -152 | -40 | -220 |
| | | | 6G | 176 | 26 | 262 | 26 | 6g | -26 | -138 | -26 | -206 |
| | | | 6H | 150 | 0 | 236 | 0 | 6h | 0 | -112 | 0 | -180 |
| | | | – | – | – | – | – | 7e6e | -60 | -200 | -60 | -240 |
| | | | 7G | 216 | 26 | 326 | 26 | 7g6g | -26 | -166 | -26 | -206 |
| | | | 7H | 190 | 0 | 300 | 0 | 7h6h | 0 | -140 | 0 | -180 |
| | | | – | – | – | – | – | 8e | -60 | -240 | -60 | -340 |
| | | | 8G | 262 | 26 | 401 | 26 | 8g | -26 | -206 | -26 | -306 |
| | | | – | – | – | – | – | 9e8e | -60 | -284 | -60 | -340 |
| | | | 8H | 236 | 0 | 375 | 0 | 9g8g | -26 | -250 | -26 | -306 |

NOTE *"ES"* and *"es"* are the symbols of "upper deviation"; *"EI"* and *"ei"* are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter | | | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | Pitch | Tolerance class | Pitch diameter | | Minor diameter | | Tolerance class | Pitch diameter | | Major diameter | |
| | | | | *ES* | *EI* | *ES* | *EI* | | *es* | *ei* | *es* | *ei* |
| mm | mm | mm | | μm | μm | μm | μm | | μm | μm | μm | μm |
| 5,6 | 11,2 | 1,25 | – | – | – | – | – | 3h4h | 0 | -60 | 0 | -132 |
| | | | – | – | – | – | – | 4g | -28 | -103 | -28 | -160 |
| | | | 4H | 100 | 0 | 170 | 0 | 4h | 0 | -75 | 0 | -132 |
| | | | – | – | – | – | – | 5g4g | -28 | -123 | -28 | -160 |
| | | | 5G | 153 | 28 | 240 | 28 | 5g6g | -28 | -123 | -28 | -240 |
| | | | 5H | 125 | 0 | 212 | 0 | 5h4h | 0 | -95 | 0 | -132 |
| | | | – | – | – | – | – | 5h6h | 0 | -95 | 0 | -212 |
| | | | – | – | – | – | – | 6e | -63 | -181 | -63 | -275 |
| | | | – | – | – | – | – | 6f | -42 | -160 | -42 | -254 |
| | | | 6G | 188 | 28 | 293 | 28 | 6g | -28 | -146 | -28 | -240 |
| | | | 6H | 160 | 0 | 265 | 0 | 6h | 0 | -118 | 0 | -212 |
| | | | – | – | – | – | – | 7e6e | -63 | -213 | -63 | -275 |
| | | | 7G | 228 | 28 | 363 | 28 | 7g6g | -28 | -178 | -28 | -240 |
| | | | 7H | 200 | 0 | 335 | 0 | 7h6h | 0 | -150 | 0 | -212 |
| | | | – | – | – | – | – | 8e | -63 | -253 | -63 | -398 |
| | | | 8G | 278 | 28 | 453 | 28 | 8g | -28 | -218 | -28 | -363 |
| | | | – | – | – | – | – | 9e8e | -63 | -299 | -63 | -398 |
| | | | 8H | 250 | 0 | 425 | 0 | 9g8g | -28 | -264 | -28 | -363 |
| 5,6 | 11,2 | 1,5 | – | – | – | – | – | 3h4h | 0 | -67 | 0 | -150 |
| | | | – | – | – | – | – | 4g | -32 | -117 | -32 | -182 |
| | | | 4H | 112 | 0 | 190 | 0 | 4h | 0 | -85 | 0 | -150 |
| | | | – | – | – | – | – | 5g4g | -32 | -138 | -32 | -182 |
| | | | 5G | 172 | 32 | 268 | 32 | 5g6g | -32 | -138 | -32 | -268 |
| | | | 5H | 140 | 0 | 236 | 0 | 5h4h | 0 | -106 | 0 | -150 |
| | | | – | – | – | – | – | 5h6h | 0 | -106 | 0 | -236 |
| | | | – | – | – | – | – | 6e | -67 | -199 | -67 | -303 |
| | | | – | – | – | – | – | 6f | -45 | -177 | -45 | -281 |
| | | | 6G | 212 | 32 | 332 | 32 | 6g | -32 | -164 | -32 | -268 |
| | | | 6H | 180 | 0 | 300 | 0 | 6h | 0 | -132 | 0 | -236 |
| | | | – | – | – | – | – | 7e6e | -67 | -237 | -67 | -303 |
| | | | 7G | 256 | 32 | 407 | 32 | 7g6g | -32 | -202 | -32 | -268 |
| | | | 7H | 224 | 0 | 375 | 0 | 7h6h | 0 | -170 | 0 | -236 |
| | | | – | – | – | – | – | 8e | -67 | -279 | -67 | -442 |
| | | | 8G | 312 | 32 | 507 | 32 | 8g | -32 | -244 | -32 | -407 |
| | | | – | – | – | – | – | 9e8e | -67 | -332 | -67 | -442 |
| | | | 8H | 280 | 0 | 475 | 0 | 9g8g | -32 | -297 | -32 | -407 |

NOTE "*ES*" and "*es*" are the symbols of "upper deviation"; "*EI*" and "*ei*" are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter | | Pitch | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | | Toler-ance class | Pitch diameter | | Minor diameter | | Toler-ance class | Pitch diameter | | Major diameter | |
| | | | | $ES$ | $EI$ | $ES$ | $EI$ | | $es$ | $ei$ | $es$ | $ei$ |
| mm | mm | mm | | µm | µm | µm | µm | | µm | µm | µm | µm |
| 11,2 | 22,4 | 1 | – | – | – | – | – | 3h4h | 0 | -60 | 0 | -112 |
| | | | – | – | – | – | – | 4g | -26 | -101 | -26 | -138 |
| | | | 4H | 100 | 0 | 150 | 0 | 4h | 0 | -75 | 0 | -112 |
| | | | – | – | – | – | – | 5g4g | -26 | -121 | -26 | -138 |
| | | | 5G | 151 | 26 | 216 | 26 | 5g6g | -26 | -121 | -26 | -206 |
| | | | 5H | 125 | 0 | 190 | 0 | 5h4h | 0 | -95 | 0 | -112 |
| | | | – | – | – | – | – | 5h6h | 0 | -95 | 0 | -180 |
| | | | – | – | – | – | – | 6e | -60 | -178 | -60 | -240 |
| | | | – | – | – | – | – | 6f | -40 | -158 | -40 | -220 |
| | | | 6G | 186 | 26 | 262 | 26 | 6g | -26 | -144 | -26 | -206 |
| | | | 6H | 160 | 0 | 236 | 0 | 6h | 0 | -118 | 0 | -180 |
| | | | – | – | – | – | – | 7e6e | -60 | -210 | -60 | -240 |
| | | | 7G | 226 | 26 | 326 | 26 | 7g6g | -26 | -176 | -26 | -206 |
| | | | 7H | 200 | 0 | 300 | 0 | 7h6h | 0 | -150 | 0 | -180 |
| | | | – | – | – | – | – | 8e | -60 | -250 | -60 | -340 |
| | | | 8G | 276 | 26 | 401 | 26 | 8g | -26 | -216 | -26 | -306 |
| | | | – | – | – | – | – | 9e8e | -60 | -296 | -60 | -340 |
| | | | 8H | 250 | 0 | 375 | 0 | 9g8g | -26 | -262 | -26 | -306 |
| 11,2 | 22,4 | 1,25 | – | – | – | – | – | 3h4h | 0 | -67 | 0 | -132 |
| | | | – | – | – | – | – | 4g | -28 | -113 | -28 | -160 |
| | | | 4H | 112 | 0 | 170 | 0 | 4h | 0 | -85 | 0 | -132 |
| | | | – | – | – | – | – | 5g4g | -28 | -134 | -28 | -160 |
| | | | 5G | 168 | 28 | 240 | 28 | 5g6g | -28 | -134 | -28 | -240 |
| | | | 5H | 140 | 0 | 212 | 0 | 5h4h | 0 | -106 | 0 | -132 |
| | | | – | – | – | – | – | 5h6h | 0 | -106 | 0 | -212 |
| | | | – | – | – | – | – | 6e | -63 | -195 | -63 | -275 |
| | | | – | – | – | – | – | 6f | -42 | -174 | -42 | -254 |
| | | | 6G | 208 | 28 | 293 | 28 | 6g | -28 | -160 | -28 | -240 |
| | | | 6H | 180 | 0 | 265 | 0 | 6h | 0 | -132 | 0 | -212 |
| | | | – | – | – | – | – | 7e6e | -63 | -233 | -63 | -275 |
| | | | 7G | 252 | 28 | 363 | 28 | 7g6g | -28 | -198 | -28 | -240 |
| | | | 7H | 224 | 0 | 335 | 0 | 7h6h | 0 | -170 | 0 | -212 |
| | | | – | – | – | – | – | 8e | -63 | -275 | -63 | -398 |
| | | | 8G | 308 | 28 | 453 | 28 | 8g | -28 | -240 | -28 | -363 |
| | | | – | – | – | – | – | 9e8e | -63 | -328 | -63 | -398 |
| | | | 8H | 280 | 0 | 425 | 0 | 9g8g | -28 | -293 | -28 | -363 |

NOTE *"ES"* and *"es"* are the symbols of "upper deviation"; *"EI"* and *"ei"* are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter | | | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | Pitch | Toler-ance class | Pitch diameter | | Minor diameter | | Toler-ance class | Pitch diameter | | Major diameter | |
| | | | | *ES* | *EI* | *ES* | *EI* | | *es* | *ei* | *es* | *ei* |
| mm | mm | mm | | µm | µm | µm | µm | | µm | µm | µm | µm |
| 11,2 | 22,4 | 1,5 | – | – | – | – | – | 3h4h | 0 | -71 | 0 | -150 |
| | | | – | – | – | – | – | 4g | -32 | -122 | -32 | -182 |
| | | | 4H | 118 | 0 | 190 | 0 | 4h | 0 | -90 | 0 | -150 |
| | | | – | – | – | – | – | 5g4g | -32 | -144 | -32 | -182 |
| | | | 5G | 182 | 32 | 268 | 32 | 5g6g | -32 | -144 | -32 | -268 |
| | | | 5H | 150 | 0 | 236 | 0 | 5h4h | 0 | -112 | 0 | -150 |
| | | | – | – | – | – | – | 5h6h | 0 | -112 | 0 | -236 |
| | | | – | – | – | – | – | 6e | -67 | -207 | -67 | -303 |
| | | | – | – | – | – | – | 6f | -45 | -185 | -45 | -281 |
| | | | 6G | 222 | 32 | 332 | 32 | 6g | -32 | -172 | -32 | -268 |
| | | | 6H | 190 | 0 | 300 | 0 | 6h | 0 | -140 | 0 | -236 |
| | | | – | – | – | – | – | 7e6e | -67 | -247 | -67 | -303 |
| | | | 7G | 268 | 32 | 407 | 32 | 7g6g | -32 | -212 | -32 | -268 |
| | | | 7H | 236 | 0 | 375 | 0 | 7h6h | 0 | -180 | 0 | -236 |
| | | | – | – | – | – | – | 8e | -67 | -291 | -67 | -442 |
| | | | 8G | 332 | 32 | 507 | 32 | 8g | -32 | -256 | -32 | -407 |
| | | | – | – | – | – | – | 9e8e | -67 | -347 | -67 | -442 |
| | | | 8H | 300 | 0 | 475 | 0 | 9g8g | -32 | -312 | -32 | -407 |
| 11,2 | 22,4 | 1,75 | – | – | – | – | – | 3h4h | 0 | -75 | 0 | -170 |
| | | | – | – | – | – | – | 4g | -34 | -129 | -34 | -204 |
| | | | 4H | 125 | 0 | 212 | 0 | 4h | 0 | -95 | 0 | -170 |
| | | | – | – | – | – | – | 5g4g | -34 | -152 | -34 | -204 |
| | | | 5G | 194 | 34 | 299 | 34 | 5g6g | -34 | -152 | -34 | -299 |
| | | | 5H | 160 | 0 | 265 | 0 | 5h4h | 0 | -118 | 0 | -170 |
| | | | – | – | – | – | – | 5h6h | 0 | -118 | 0 | -265 |
| | | | – | – | – | – | – | 6e | -71 | -221 | -71 | -336 |
| | | | – | – | – | – | – | 6f | -48 | -198 | -48 | -313 |
| | | | 6G | 234 | 34 | 369 | 34 | 6g | -34 | -184 | -34 | -299 |
| | | | 6H | 200 | 0 | 335 | 0 | 6h | 0 | -150 | 0 | -265 |
| | | | – | – | – | – | – | 7e6e | -71 | -261 | -71 | -336 |
| | | | 7G | 284 | 34 | 459 | 34 | 7g6g | -34 | -224 | -34 | -299 |
| | | | 7H | 250 | 0 | 425 | 0 | 7h6h | 0 | -190 | 0 | -265 |
| | | | – | – | – | – | – | 8e | -71 | -307 | -71 | -496 |
| | | | 8G | 349 | 34 | 564 | 34 | 8g | -34 | -270 | -34 | -459 |
| | | | – | – | – | – | – | 9e8e | -71 | -371 | -71 | -496 |
| | | | 8H | 315 | 0 | 530 | 0 | 9g8g | -34 | -334 | -34 | -459 |

NOTE "*ES*" and "*es*" are the symbols of "upper deviation"; "*EI*" and "*ei*" are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter | | Pitch | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | | Toler-ance class | Pitch diameter | | Minor diameter | | Toler-ance class | Pitch diameter | | Major diameter | |
| | | | | *ES* | *EI* | *ES* | *EI* | | *es* | *ei* | *es* | *ei* |
| mm | mm | mm | | µm | µm | µm | µm | | µm | µm | µm | µm |
| 11,2 | 22,4 | 2 | – | – | – | – | – | 3h4h | 0 | -80 | 0 | -180 |
| | | | – | – | – | – | – | 4g | -38 | -138 | -38 | -218 |
| | | | 4H | 132 | 0 | 236 | 0 | 4h | 0 | -100 | 0 | -180 |
| | | | – | – | – | – | – | 5g4g | -38 | -163 | -38 | -218 |
| | | | 5G | 208 | 38 | 338 | 38 | 5g6g | -38 | -163 | -38 | -318 |
| | | | 5H | 170 | 0 | 300 | 0 | 5h4h | 0 | -125 | 0 | -180 |
| | | | – | – | – | – | – | 5h6h | 0 | -125 | 0 | -280 |
| | | | – | – | – | – | – | 6e | -71 | -231 | -71 | -351 |
| | | | – | – | – | – | – | 6f | -52 | -212 | -52 | -332 |
| | | | 6G | 250 | 38 | 413 | 38 | 6g | -38 | -198 | -38 | -318 |
| | | | 6H | 212 | 0 | 375 | 0 | 6h | 0 | -160 | 0 | -280 |
| | | | – | – | – | – | – | 7e6e | -71 | -271 | -71 | -351 |
| | | | 7G | 303 | 38 | 513 | 38 | 7g6g | -38 | -238 | -38 | -318 |
| | | | 7H | 265 | 0 | 475 | 0 | 7h6h | 0 | -200 | 0 | -280 |
| | | | – | – | – | – | – | 8e | -71 | -321 | -71 | -521 |
| | | | 8G | 373 | 38 | 638 | 38 | 8g | -38 | -288 | -38 | -488 |
| | | | – | – | – | – | – | 9e8e | -71 | -386 | -71 | -521 |
| | | | 8H | 335 | 0 | 600 | 0 | 9g8g | -38 | -353 | -38 | -488 |
| 11,2 | 22,4 | 2,5 | – | – | – | – | – | 3h4h | 0 | -85 | 0 | -212 |
| | | | – | – | – | – | – | 4g | -42 | -148 | -42 | -254 |
| | | | 4H | 140 | 0 | 280 | 0 | 4h | 0 | -106 | 0 | -212 |
| | | | – | – | – | – | – | 5g4g | -42 | -174 | -42 | -254 |
| | | | 5G | 222 | 42 | 397 | 42 | 5g6g | -42 | -174 | -42 | -377 |
| | | | 5H | 180 | 0 | 355 | 0 | 5h4h | 0 | -132 | 0 | -212 |
| | | | – | – | – | – | – | 5h6h | 0 | -132 | 0 | -335 |
| | | | – | – | – | – | – | 6e | -80 | -250 | -80 | -415 |
| | | | – | – | – | – | – | 6f | -58 | -228 | -58 | -393 |
| | | | 6G | 266 | 42 | 492 | 42 | 6g | -42 | -212 | -42 | -377 |
| | | | 6H | 224 | 0 | 450 | 0 | 6h | 0 | -170 | 0 | -335 |
| | | | – | – | – | – | – | 7e6e | -80 | -292 | -80 | -415 |
| | | | 7G | 322 | 42 | 602 | 42 | 7g6g | -42 | -254 | -42 | -377 |
| | | | 7H | 280 | 0 | 560 | 0 | 7h6h | 0 | -212 | 0 | -335 |
| | | | – | – | – | – | – | 8e | -80 | -345 | -80 | -610 |
| | | | 8G | 397 | 42 | 752 | 42 | 8g | -42 | -307 | -42 | -572 |
| | | | – | – | – | – | – | 9e8e | -80 | -415 | -80 | -610 |
| | | | 8H | 355 | 0 | 710 | 0 | 9g8g | -42 | -377 | -42 | -572 |

NOTE *"ES"* and *"es"* are the symbols of "upper deviation"; *"EI"* and *"ei"* are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter over | up to | Pitch | Internal thread Tolerance class | Pitch diameter ES | EI | Minor diameter ES | EI | External thread Tolerance class | Pitch diameter es | ei | Major diameter es | ei |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| mm | mm | mm | | μm | μm | μm | μm | | μm | μm | μm | μm |
| 22,4 | 45 | 1 | – | – | – | – | – | 3h4h | 0 | -63 | 0 | -112 |
| | | | – | – | – | – | – | 4g | -26 | -106 | -26 | -138 |
| | | | 4H | 106 | 0 | 150 | 0 | 4h | 0 | -80 | 0 | -112 |
| | | | – | – | – | – | – | 5g4g | -26 | -126 | -26 | -138 |
| | | | 5G | 158 | 26 | 216 | 26 | 5g6g | -26 | -126 | -26 | -206 |
| | | | 5H | 132 | 0 | 190 | 0 | 5h4h | 0 | -100 | 0 | -112 |
| | | | – | – | – | – | – | 5h6h | 0 | -100 | 0 | -180 |
| | | | – | – | – | – | – | 6e | -60 | -185 | -60 | -240 |
| | | | – | – | – | – | – | 6f | -40 | -165 | -40 | -220 |
| | | | 6G | 196 | 26 | 262 | 26 | 6g | -26 | -151 | -26 | -206 |
| | | | 6H | 170 | 0 | 236 | 0 | 6h | 0 | -125 | 0 | -180 |
| | | | – | – | – | – | – | 7e6e | -60 | -220 | -60 | -240 |
| | | | 7G | 238 | 26 | 326 | 26 | 7g6g | -26 | -186 | -26 | -206 |
| | | | 7H | 212 | 0 | 300 | 0 | 7h6h | 0 | -160 | 0 | -180 |
| | | | – | – | – | – | – | 8e | -60 | -260 | -60 | -340 |
| | | | 8G | – | – | – | – | 8g | -26 | -226 | -26 | -306 |
| | | | – | – | – | – | – | 9e8e | -60 | -310 | -60 | -340 |
| | | | 8H | - | - | - | - | 9g8g | -26 | -276 | -26 | -306 |
| 22,4 | 45 | 1,5 | – | – | – | – | – | 3h4h | 0 | -75 | 0 | -150 |
| | | | – | – | – | – | – | 4g | -32 | -127 | -32 | -182 |
| | | | 4H | 125 | 0 | 190 | 0 | 4h | 0 | -95 | 0 | -150 |
| | | | – | – | – | – | – | 5g4g | -32 | -150 | -32 | -182 |
| | | | 5G | 192 | 32 | 268 | 32 | 5g6g | -32 | -150 | -32 | -268 |
| | | | 5H | 160 | 0 | 236 | 0 | 5h4h | 0 | -118 | 0 | -150 |
| | | | – | – | – | – | – | 5h6h | 0 | -118 | 0 | -236 |
| | | | – | – | – | – | – | 6e | -67 | -217 | -67 | -303 |
| | | | – | – | – | – | – | 6f | -45 | -195 | -45 | -281 |
| | | | 6G | 232 | 32 | 332 | 32 | 6g | -32 | -182 | -32 | -268 |
| | | | 6H | 200 | 0 | 300 | 0 | 6h | 0 | -150 | 0 | -236 |
| | | | – | – | – | – | – | 7e6e | -67 | -257 | -67 | -303 |
| | | | 7G | 282 | 32 | 407 | 32 | 7g6g | -32 | -222 | -32 | -268 |
| | | | 7H | 250 | 0 | 375 | 0 | 7h6h | 0 | -190 | 0 | -236 |
| | | | – | – | – | – | – | 8e | -67 | -303 | -67 | -442 |
| | | | 8G | 347 | 32 | 507 | 32 | 8g | -32 | -268 | -32 | -407 |
| | | | – | – | – | – | – | 9e8e | -67 | -367 | -67 | -442 |
| | | | 8H | 315 | 0 | 475 | 0 | 9g8g | -32 | -332 | -32 | -407 |

NOTE "ES" and "es" are the symbols of "upper deviation"; "EI" and "ei" are the symbols of "lower deviation".

**Table 1** (continued)

| Basic major diameter | | | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | Pitch | Toler-ance class | Pitch diameter | | Minor diameter | | Toler-ance class | Pitch diameter | | Major diameter | |
| | | | | $ES$ | $EI$ | $ES$ | $EI$ | | $es$ | $ei$ | $es$ | $ei$ |
| mm | mm | mm | | µm | µm | µm | µm | | µm | µm | µm | µm |
| 22,4 | 45 | 2 | – | – | – | – | – | 3h4h | 0 | -85 | 0 | -180 |
| | | | – | – | – | – | – | 4g | -38 | -144 | -38 | -218 |
| | | | 4H | 140 | 0 | 236 | 0 | 4h | 0 | -106 | 0 | -180 |
| | | | – | – | – | – | – | 5g4g | -38 | -170 | -38 | -218 |
| | | | 5G | 218 | 38 | 338 | 38 | 5g6g | -38 | -170 | -38 | -318 |
| | | | 5H | 180 | 0 | 300 | 0 | 5h4h | 0 | -132 | 0 | -180 |
| | | | – | – | – | – | – | 5h6h | 0 | -132 | 0 | -280 |
| | | | – | – | – | – | – | 6e | -71 | -241 | -71 | -351 |
| | | | – | – | – | – | – | 6f | -52 | -222 | -52 | -332 |
| | | | 6G | 262 | 38 | 413 | 38 | 6g | -38 | -208 | -38 | -318 |
| | | | 6H | 224 | 0 | 375 | 0 | 6h | 0 | -170 | 0 | -280 |
| | | | – | – | – | – | – | 7e6e | -71 | -283 | -71 | -351 |
| | | | 7G | 318 | 38 | 513 | 38 | 7g6g | -38 | -250 | -38 | -318 |
| | | | 7H | 280 | 0 | 475 | 0 | 7h6h | 0 | -212 | 0 | -280 |
| | | | – | – | – | – | – | 8e | -71 | -336 | -71 | -521 |
| | | | 8G | 393 | 38 | 638 | 38 | 8g | -38 | -303 | -38 | -488 |
| | | | – | – | – | – | – | 9e8e | -71 | -406 | -71 | -521 |
| | | | 8H | 355 | 0 | 600 | 0 | 9g8g | -38 | -373 | -38 | -488 |
| 22,4 | 45 | 3 | – | – | – | – | – | 3h4h | 0 | -100 | 0 | -236 |
| | | | – | – | – | – | – | 4g | -48 | -173 | -48 | -284 |
| | | | 4H | 170 | 0 | 315 | 0 | 4h | 0 | -125 | 0 | -236 |
| | | | – | – | – | – | – | 5g4g | -48 | -208 | -48 | -284 |
| | | | 5G | 260 | 48 | 448 | 48 | 5g6g | -48 | -208 | -48 | -423 |
| | | | 5H | 212 | 0 | 400 | 0 | 5h4h | 0 | -160 | 0 | -236 |
| | | | – | – | – | – | – | 5h6h | 0 | -160 | 0 | -375 |
| | | | – | – | – | – | – | 6e | -85 | -285 | -85 | -460 |
| | | | – | – | – | – | – | 6f | -63 | -263 | -63 | -438 |
| | | | 6G | 313 | 48 | 548 | 48 | 6g | -48 | -248 | -48 | -423 |
| | | | 6H | 265 | 0 | 500 | 0 | 6h | 0 | -200 | 0 | -375 |
| | | | – | – | – | – | – | 7e6e | -85 | -335 | -85 | -460 |
| | | | 7G | 383 | 48 | 678 | 48 | 7g6g | -48 | -298 | -48 | -423 |
| | | | 7H | 335 | 0 | 630 | 0 | 7h6h | 0 | -250 | 0 | -375 |
| | | | – | – | – | – | – | 8e | -85 | -400 | -85 | -685 |
| | | | 8G | 473 | 48 | 848 | 48 | 8g | -48 | -363 | -48 | -648 |
| | | | – | – | – | – | – | 9e8e | -85 | -485 | -85 | -685 |
| | | | 8H | 425 | 0 | 800 | 0 | 9g8g | -48 | -448 | -48 | -648 |

NOTE "$ES$" and "$es$" are the symbols of "upper deviation"; "$EI$" and "$ei$" are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter over (mm) | up to (mm) | Pitch (mm) | Internal thread Tolerance class | Pitch diameter ES (µm) | EI (µm) | Minor diameter ES (µm) | EI (µm) | External thread Tolerance class | Pitch diameter es (µm) | ei (µm) | Major diameter es (µm) | ei (µm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22,4 | 45 | 3,5 | – | – | – | – | – | 3h4h | 0 | -106 | 0 | -265 |
| | | | – | – | – | – | – | 4g | -53 | -185 | -53 | -318 |
| | | | 4H | 180 | 0 | 355 | 0 | 4h | 0 | -132 | 0 | -265 |
| | | | – | – | – | – | – | 5g4g | -53 | -223 | -53 | -318 |
| | | | 5G | 277 | 53 | 503 | 53 | 5g6g | -53 | -223 | -53 | -478 |
| | | | 5H | 224 | 0 | 450 | 0 | 5h4h | 0 | -170 | 0 | -265 |
| | | | – | – | – | – | – | 5h6h | 0 | -170 | 0 | -425 |
| | | | – | – | – | – | – | 6e | -90 | -302 | -90 | -515 |
| | | | – | – | – | – | – | 6f | -70 | -282 | -70 | -495 |
| | | | 6G | 333 | 53 | 613 | 53 | 6g | -53 | -265 | -53 | -478 |
| | | | 6H | 280 | 0 | 560 | 0 | 6h | 0 | -212 | 0 | -425 |
| | | | – | – | – | – | – | 7e6e | -90 | -355 | -90 | -515 |
| | | | 7G | 408 | 53 | 763 | 53 | 7g6g | -53 | -318 | -53 | -478 |
| | | | 7H | 355 | 0 | 710 | 0 | 7h6h | 0 | -265 | 0 | -425 |
| | | | – | – | – | – | – | 8e | -90 | -425 | -90 | -760 |
| | | | 8G | 503 | 53 | 953 | 53 | 8g | -53 | -388 | -53 | -723 |
| | | | – | – | – | – | – | 9e8e | -90 | -515 | -90 | -760 |
| | | | 8H | 450 | 0 | 900 | 0 | 9g8g | -53 | -478 | -53 | -723 |
| 22,4 | 45 | 4 | – | – | – | – | – | 3h4h | 0 | -112 | 0 | -300 |
| | | | – | – | – | – | – | 4g | -60 | -200 | -60 | -360 |
| | | | 4H | 190 | 0 | 375 | 0 | 4h | 0 | -140 | 0 | -300 |
| | | | – | – | – | – | – | 5g4g | -60 | -240 | -60 | -360 |
| | | | 5G | 296 | 60 | 535 | 60 | 5g6g | -60 | -240 | -60 | -535 |
| | | | 5H | 236 | 0 | 475 | 0 | 5h4h | 0 | -180 | 0 | -300 |
| | | | – | – | – | – | – | 5h6h | 0 | -180 | 0 | -475 |
| | | | – | – | – | – | – | 6e | -95 | -319 | -95 | -570 |
| | | | – | – | – | – | – | 6f | -75 | -299 | -75 | -550 |
| | | | 6G | 360 | 60 | 660 | 60 | 6g | -60 | -284 | -60 | -535 |
| | | | 6H | 300 | 0 | 600 | 0 | 6h | 0 | -224 | 0 | -475 |
| | | | – | – | – | – | – | 7e6e | -95 | -375 | -95 | -570 |
| | | | 7G | 435 | 60 | 810 | 60 | 7g6g | -60 | -340 | -60 | -535 |
| | | | 7H | 375 | 0 | 750 | 0 | 7h6h | 0 | -280 | 0 | -475 |
| | | | – | – | – | – | – | 8e | -95 | -450 | -95 | -845 |
| | | | 8G | 535 | 60 | 1 010 | 60 | 8g | -60 | -415 | -60 | -810 |
| | | | – | – | – | – | – | 9e8e | -95 | -545 | -95 | -845 |
| | | | 8H | 475 | 0 | 950 | 0 | 9g8g | -60 | -510 | -60 | -810 |

NOTE "*ES*" and "*es*" are the symbols of "upper deviation"; "*EI*" and "*ei*" are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter | | Pitch | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | | Toler-ance class | Pitch diameter | | Minor diameter | | Toler-ance class | Pitch diameter | | Major diameter | |
| | | | | ES | EI | ES | EI | | es | ei | es | ei |
| mm | mm | mm | | μm | μm | μm | μm | | μm | μm | μm | μm |
| 22,4 | 45 | 4,5 | – | – | – | – | – | 3h4h | 0 | -118 | 0 | -315 |
| | | | – | – | – | – | – | 4g | -63 | -213 | -63 | -378 |
| | | | 4H | 200 | 0 | 425 | 0 | 4h | 0 | -150 | 0 | -315 |
| | | | – | – | – | – | – | 5g4g | -63 | -253 | -63 | -378 |
| | | | 5G | 313 | 63 | 593 | 63 | 5g6g | -63 | -253 | -63 | -563 |
| | | | 5H | 250 | 0 | 530 | 0 | 5h4h | 0 | -190 | 0 | -315 |
| | | | – | – | – | – | – | 5h6h | 0 | -190 | 0 | -500 |
| | | | – | – | – | – | – | 6e | -100 | -336 | -100 | -600 |
| | | | – | – | – | – | – | 6f | -80 | -316 | -80 | -580 |
| | | | 6G | 378 | 63 | 733 | 63 | 6g | -63 | -299 | -63 | -563 |
| | | | 6H | 315 | 0 | 670 | 0 | 6h | 0 | -236 | 0 | -500 |
| | | | – | – | – | – | – | 7e6e | -100 | -400 | -100 | -600 |
| | | | 7G | 463 | 63 | 913 | 63 | 7g6g | -63 | -363 | -63 | -563 |
| | | | 7H | 400 | 0 | 850 | 0 | 7h6h | 0 | -300 | 0 | -500 |
| | | | – | – | – | – | – | 8e | -100 | -475 | -100 | -900 |
| | | | 8G | 563 | 63 | 1 123 | 63 | 8g | -63 | -438 | -63 | -863 |
| | | | – | – | – | – | – | 9e8e | -100 | -575 | -100 | -900 |
| | | | 8H | 500 | 0 | 1 060 | 0 | 9g8g | -63 | -538 | -63 | -863 |
| 45 | 90 | 1,5 | – | – | – | – | – | 3h4h | 0 | -80 | 0 | -150 |
| | | | – | – | – | – | – | 4g | -32 | -132 | -32 | -182 |
| | | | 4H | 132 | 0 | 190 | 0 | 4h | 0 | -100 | 0 | -150 |
| | | | – | – | – | – | – | 5g4g | -32 | -157 | -32 | -182 |
| | | | 5G | 202 | 32 | 268 | 32 | 5g6g | -32 | -157 | -32 | -268 |
| | | | 5H | 170 | 0 | 236 | 0 | 5h4h | 0 | -125 | 0 | -150 |
| | | | – | – | – | – | – | 5h6h | 0 | -125 | 0 | -236 |
| | | | – | – | – | – | – | 6e | -67 | -227 | -67 | -303 |
| | | | – | – | – | – | – | 6f | -45 | -205 | -45 | -281 |
| | | | 6G | 244 | 32 | 332 | 32 | 6g | -32 | -192 | -32 | -268 |
| | | | 6H | 212 | 0 | 300 | 0 | 6h | 0 | -160 | 0 | -236 |
| | | | – | – | – | – | – | 7e6e | -67 | -267 | -67 | -303 |
| | | | 7G | 297 | 32 | 407 | 32 | 7g6g | -32 | -232 | -32 | -268 |
| | | | 7H | 265 | 0 | 375 | 0 | 7h6h | 0 | -200 | 0 | -236 |
| | | | – | – | – | – | – | 8e | -67 | -317 | -67 | -442 |
| | | | 8G | 367 | 32 | 507 | 32 | 8g | -32 | -282 | -32 | -407 |
| | | | – | – | – | – | – | 9e8e | -67 | -382 | -67 | -442 |
| | | | 8H | 335 | 0 | 475 | 0 | 9g8g | -32 | -347 | -32 | -407 |

NOTE "*ES*" and "*es*" are the symbols of "upper deviation"; "*EI*" and "*ei*" are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter | | Pitch | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | | Toler-ance class | Pitch diameter | | Minor diameter | | Toler-ance class | Pitch diameter | | Major diameter | |
| | | | | *ES* | *EI* | *ES* | *EI* | | *es* | *ei* | *es* | *ei* |
| mm | mm | mm | | µm | µm | µm | µm | | µm | µm | µm | µm |
| 45 | 90 | 2 | – | – | – | – | – | 3h4h | 0 | -90 | 0 | -180 |
| | | | – | – | – | – | – | 4g | -38 | -150 | -38 | -218 |
| | | | 4H | 150 | 0 | 236 | 0 | 4h | 0 | -112 | 0 | -180 |
| | | | – | – | – | – | – | 5g4g | -38 | -178 | -38 | -218 |
| | | | 5G | 228 | 38 | 338 | 38 | 5g6g | -38 | -178 | -38 | -318 |
| | | | 5H | 190 | 0 | 300 | 0 | 5h4h | 0 | -140 | 0 | -180 |
| | | | – | – | – | – | – | 5h6h | 0 | -140 | 0 | -280 |
| | | | – | – | – | – | – | 6e | -71 | -251 | -71 | -351 |
| | | | – | – | – | – | – | 6f | -52 | -232 | -52 | -332 |
| | | | 6G | 274 | 38 | 413 | 38 | 6g | -38 | -218 | -38 | -318 |
| | | | 6H | 236 | 0 | 375 | 0 | 6h | 0 | -180 | 0 | -280 |
| | | | – | – | – | – | – | 7e6e | -71 | -295 | -71 | -351 |
| | | | 7G | 338 | 38 | 513 | 38 | 7g6g | -38 | -262 | -38 | -318 |
| | | | 7H | 300 | 0 | 475 | 0 | 7h6h | 0 | -224 | 0 | -280 |
| | | | – | – | – | – | – | 8e | -71 | -351 | -71 | -521 |
| | | | 8G | 413 | 38 | 638 | 38 | 8g | -38 | -318 | -38 | -488 |
| | | | – | – | – | – | – | 9e8e | -71 | -426 | -71 | -521 |
| | | | 8H | 375 | 0 | 600 | 0 | 9g8g | -38 | -393 | -38 | -488 |
| 45 | 90 | 3 | – | – | – | – | – | 3h4h | 0 | -106 | 0 | -236 |
| | | | – | – | – | – | – | 4g | -48 | -180 | -48 | -284 |
| | | | 4H | 180 | 0 | 315 | 0 | 4h | 0 | -132 | 0 | -236 |
| | | | – | – | – | – | – | 5g4g | -48 | -218 | -48 | -284 |
| | | | 5G | 272 | 48 | 448 | 48 | 5g6g | -48 | -218 | -48 | -423 |
| | | | 5H | 224 | 0 | 400 | 0 | 5h4h | 0 | -170 | 0 | -236 |
| | | | – | – | – | – | – | 5h6h | 0 | -170 | 0 | -375 |
| | | | – | – | – | – | – | 6e | -85 | -297 | -85 | -460 |
| | | | – | – | – | – | – | 6f | -63 | -275 | -63 | -438 |
| | | | 6G | 328 | 48 | 548 | 48 | 6g | -48 | -260 | -48 | -423 |
| | | | 6H | 280 | 0 | 500 | 0 | 6h | 0 | -212 | 0 | -375 |
| | | | – | – | – | – | – | 7e6e | -85 | -350 | -85 | -460 |
| | | | 7G | 403 | 48 | 678 | 48 | 7g6g | -48 | -313 | -48 | -423 |
| | | | 7H | 355 | 0 | 630 | 0 | 7h6h | 0 | -265 | 0 | -375 |
| | | | – | – | – | – | – | 8e | -85 | -420 | -85 | -685 |
| | | | 8G | 498 | 48 | 848 | 48 | 8g | -48 | -383 | -48 | -648 |
| | | | – | – | – | – | – | 9e8e | -85 | -510 | -85 | -685 |
| | | | 8H | 450 | 0 | 800 | 0 | 9g8g | -48 | -473 | -48 | -648 |

NOTE "*ES*" and "*es*" are the symbols of "upper deviation"; "*EI*" and "*ei*" are the symbols of "lower deviation".

**Table 1** (continued)

| Basic major diameter | | | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | Pitch | Toler-ance class | Pitch diameter | | Minor diameter | | Toler-ance class | Pitch diameter | | Major diameter | |
| | | | | ES | EI | ES | EI | | es | ei | es | ei |
| mm | mm | mm | | μm | μm | μm | μm | | μm | μm | μm | μm |
| 45 | 90 | 4 | – | – | – | – | – | 3h4h | 0 | -118 | 0 | -300 |
| | | | – | – | – | – | – | 4g | -60 | -210 | -60 | -360 |
| | | | 4H | 200 | 0 | 375 | 0 | 4h | 0 | -150 | 0 | -300 |
| | | | – | – | – | – | – | 5g4g | -60 | -250 | -60 | -360 |
| | | | 5G | 310 | 60 | 535 | 60 | 5g6g | -60 | -250 | -60 | -535 |
| | | | 5H | 250 | 0 | 475 | 0 | 5h4h | 0 | -190 | 0 | -300 |
| | | | – | – | – | – | – | 5h6h | 0 | -190 | 0 | -475 |
| | | | – | – | – | – | – | 6e | -95 | -331 | -95 | -570 |
| | | | – | – | – | – | – | 6f | -75 | -311 | -75 | -550 |
| | | | 6G | 375 | 60 | 660 | 60 | 6g | -60 | -296 | -60 | -535 |
| | | | 6H | 315 | 0 | 600 | 0 | 6h | 0 | -236 | 0 | -475 |
| | | | – | – | – | – | – | 7e6e | -95 | -395 | -95 | -570 |
| | | | 7G | 460 | 60 | 810 | 60 | 7g6g | -60 | -360 | -60 | -535 |
| | | | 7H | 400 | 0 | 750 | 0 | 7h6h | 0 | -300 | 0 | -475 |
| | | | – | – | – | – | – | 8e | -95 | -470 | -95 | -845 |
| | | | 8G | 560 | 60 | 1 010 | 60 | 8g | -60 | -435 | -60 | -810 |
| | | | – | – | – | – | – | 9e8e | -95 | -570 | -95 | -845 |
| | | | 8H | 500 | 0 | 950 | 0 | 9g8g | -60 | -535 | -60 | -810 |
| 45 | 90 | 5 | – | – | – | – | – | 3h4h | 0 | -125 | 0 | -335 |
| | | | – | – | – | – | – | 4g | -71 | -231 | -71 | -406 |
| | | | 4H | 212 | 0 | 450 | 0 | 4h | 0 | -160 | 0 | -335 |
| | | | – | – | – | – | – | 5g4g | -71 | -271 | -71 | -406 |
| | | | 5G | 336 | 71 | 631 | 71 | 5g6g | -71 | -271 | -71 | -601 |
| | | | 5H | 265 | 0 | 560 | 0 | 5h4h | 0 | -200 | 0 | -335 |
| | | | – | – | – | – | – | 5h6h | 0 | -200 | 0 | -530 |
| | | | – | – | – | – | – | 6e | -106 | -356 | -106 | -636 |
| | | | – | – | – | – | – | 6f | -85 | -335 | -85 | -615 |
| | | | 6G | 406 | 71 | 781 | 71 | 6g | -71 | -321 | -71 | -601 |
| | | | 6H | 335 | 0 | 710 | 0 | 6h | 0 | -250 | 0 | -530 |
| | | | – | – | – | – | – | 7e6e | -106 | -421 | -106 | -636 |
| | | | 7G | 496 | 71 | 971 | 71 | 7g6g | -71 | -386 | -71 | -601 |
| | | | 7H | 425 | 0 | 900 | 0 | 7h6h | 0 | -315 | 0 | -530 |
| | | | – | – | – | – | – | 8e | -106 | -506 | -106 | -956 |
| | | | 8G | 601 | 71 | 1 191 | 71 | 8g | -71 | -471 | -71 | -921 |
| | | | – | – | – | – | – | 9e8e | -106 | -606 | -106 | -956 |
| | | | 8H | 530 | 0 | 1 120 | 0 | 9g8g | -71 | -571 | -71 | -921 |

NOTE *"ES"* and *"es"* are the symbols of "upper deviation"; *"EI"* and *"ei"* are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter | | | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | Pitch | Tolerance class | Pitch diameter | | Minor diameter | | Tolerance class | Pitch diameter | | Major diameter | |
| | | | | *ES* | *EI* | *ES* | *EI* | | *es* | *ei* | *es* | *ei* |
| mm | mm | mm | | μm | μm | μm | μm | | μm | μm | μm | μm |
| 45 | 90 | 5,5 | – | – | – | – | – | 3h4h | 0 | -132 | 0 | -355 |
| | | | – | – | – | – | – | 4g | -75 | -245 | -75 | -430 |
| | | | 4H | 224 | 0 | 475 | 0 | 4h | 0 | -170 | 0 | -355 |
| | | | – | – | – | – | – | 5g4g | -75 | -287 | -75 | -430 |
| | | | 5G | 355 | 75 | 675 | 75 | 5g6g | -75 | -287 | -75 | -635 |
| | | | 5H | 280 | 0 | 600 | 0 | 5h4h | 0 | -212 | 0 | -355 |
| | | | – | – | – | – | – | 5h6h | 0 | -212 | 0 | -560 |
| | | | – | – | – | – | – | 6e | -112 | -377 | -112 | -672 |
| | | | – | – | – | – | – | 6f | -90 | -355 | -90 | -650 |
| | | | 6G | 430 | 75 | 825 | 75 | 6g | -75 | -340 | -75 | -635 |
| | | | 6H | 355 | 0 | 750 | 0 | 6h | 0 | -265 | 0 | -560 |
| | | | – | – | – | – | – | 7e6e | -112 | -447 | -112 | -672 |
| | | | 7G | 525 | 75 | 1 025 | 75 | 7g6g | -75 | -410 | -75 | -635 |
| | | | 7H | 450 | 0 | 950 | 0 | 7h6h | 0 | -335 | 0 | -560 |
| | | | – | – | – | – | – | 8e | -112 | -537 | -112 | -1 012 |
| | | | 8G | 635 | 75 | 1 255 | 75 | 8g | -75 | -500 | -75 | -975 |
| | | | – | – | – | – | – | 9e8e | -112 | -642 | -112 | -1 012 |
| | | | 8H | 560 | 0 | 1 180 | 0 | 9g8g | -75 | -605 | -75 | -975 |
| 45 | 90 | 6 | – | – | – | – | – | 3h4h | 0 | -140 | 0 | -375 |
| | | | – | – | – | – | – | 4g | -80 | -260 | -80 | -455 |
| | | | 4H | 236 | 0 | 500 | 0 | 4h | 0 | -180 | 0 | -375 |
| | | | – | – | – | – | – | 5g4g | -80 | -304 | -80 | -455 |
| | | | 5G | 380 | 80 | 710 | 80 | 5g6g | -80 | -304 | -80 | -680 |
| | | | 5H | 300 | 0 | 630 | 0 | 5h4h | 0 | -224 | 0 | -375 |
| | | | – | – | – | – | – | 5h6h | 0 | -224 | 0 | -600 |
| | | | – | – | – | – | – | 6e | -118 | -398 | -118 | -718 |
| | | | – | – | – | – | – | 6f | -95 | -375 | -95 | -695 |
| | | | 6G | 455 | 80 | 880 | 80 | 6g | -80 | -360 | -80 | -680 |
| | | | 6H | 375 | 0 | 800 | 0 | 6h | 0 | -280 | 0 | -600 |
| | | | – | – | – | – | – | 7e6e | -118 | -473 | -118 | -718 |
| | | | 7G | 555 | 80 | 1 080 | 80 | 7g6g | -80 | -435 | -80 | -680 |
| | | | 7H | 475 | 0 | 1 000 | 0 | 7h6h | 0 | -355 | 0 | -600 |
| | | | – | – | – | – | – | 8e | -118 | -568 | -118 | -1 068 |
| | | | 8G | 680 | 80 | 1 330 | 80 | 8g | -80 | -530 | -80 | -1 030 |
| | | | – | – | – | – | – | 9e8e | -118 | -678 | -118 | -1 068 |
| | | | 8H | 600 | 0 | 1 250 | 0 | 9g8g | -80 | -640 | -80 | -1 030 |

NOTE "*ES*" and "*es*" are the symbols of "upper deviation"; "*EI*" and "*ei*" are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter | | Pitch | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | | Toler-ance class | Pitch diameter | | Minor diameter | | Toler-ance class | Pitch diameter | | Major diameter | |
| | | | | $ES$ | $EI$ | $ES$ | $EI$ | | $es$ | $ei$ | $es$ | $ei$ |
| mm | mm | mm | | µm | µm | µm | µm | | µm | µm | µm | µm |
| 90 | 180 | 2 | – | – | – | – | – | 3h4h | 0 | -95 | 0 | -180 |
| | | | – | – | – | – | – | 4g | -38 | -156 | -38 | -218 |
| | | | 4H | 160 | 0 | 236 | 0 | 4h | 0 | -118 | 0 | -180 |
| | | | – | – | – | – | – | 5g4g | -38 | -188 | -38 | -218 |
| | | | 5G | 238 | 38 | 338 | 38 | 5g6g | -38 | -188 | -38 | -318 |
| | | | 5H | 200 | 0 | 300 | 0 | 5h4h | 0 | -150 | 0 | -180 |
| | | | – | – | – | – | – | 5h6h | 0 | -150 | 0 | -280 |
| | | | – | – | – | – | – | 6e | -71 | -261 | -71 | -351 |
| | | | – | – | – | – | – | 6f | -52 | -242 | -52 | -332 |
| | | | 6G | 288 | 38 | 413 | 38 | 6g | -38 | -228 | -38 | -318 |
| | | | 6H | 250 | 0 | 375 | 0 | 6h | 0 | -190 | 0 | -280 |
| | | | – | – | – | – | – | 7e6e | -71 | -307 | -71 | -351 |
| | | | 7G | 353 | 38 | 513 | 38 | 7g6g | -38 | -274 | -38 | -318 |
| | | | 7H | 315 | 0 | 475 | 0 | 7h6h | 0 | -236 | 0 | -280 |
| | | | – | – | – | – | – | 8e | -71 | -371 | -71 | -521 |
| | | | 8G | 438 | 38 | 638 | 38 | 8g | -38 | -338 | -38 | -488 |
| | | | – | – | – | – | – | 9e8e | -71 | -446 | -71 | -521 |
| | | | 8H | 400 | 0 | 600 | 0 | 9g8g | -38 | -413 | -38 | -488 |
| 90 | 180 | 3 | – | – | – | – | – | 3h4h | 0 | -112 | 0 | -236 |
| | | | – | – | – | – | – | 4g | -48 | -188 | -48 | -284 |
| | | | 4H | 190 | 0 | 315 | 0 | 4h | 0 | -140 | 0 | -236 |
| | | | – | – | – | – | – | 5g4g | -48 | -228 | -48 | -284 |
| | | | 5G | 284 | 48 | 448 | 48 | 5g6g | -48 | -228 | -48 | -423 |
| | | | 5H | 236 | 0 | 400 | 0 | 5h4h | 0 | -180 | 0 | -236 |
| | | | – | – | – | – | – | 5h6h | 0 | -180 | 0 | -375 |
| | | | – | – | – | – | – | 6e | -85 | -309 | -85 | -460 |
| | | | – | – | – | – | – | 6f | -63 | -287 | -63 | -438 |
| | | | 6G | 348 | 48 | 548 | 48 | 6g | -48 | -272 | -48 | -423 |
| | | | 6H | 300 | 0 | 500 | 0 | 6h | 0 | -224 | 0 | -375 |
| | | | – | – | – | – | – | 7e6e | -85 | -365 | -85 | -460 |
| | | | 7G | 423 | 48 | 678 | 48 | 7g6g | -48 | -328 | -48 | -423 |
| | | | 7H | 375 | 0 | 630 | 0 | 7h6h | 0 | -280 | 0 | -375 |
| | | | – | – | – | – | – | 8e | -85 | -440 | -85 | -685 |
| | | | 8G | 523 | 48 | 848 | 48 | 8g | -48 | -403 | -48 | -648 |
| | | | – | – | – | – | – | 9e8e | -85 | -535 | -85 | -685 |
| | | | 8H | 475 | 0 | 800 | 0 | 9g8g | -48 | -498 | -48 | -648 |

NOTE *"ES"* and *"es"* are the symbols of "upper deviation"; *"EI"* and *"ei"* are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter | | | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | Pitch | Toler-ance class | Pitch diameter | | Minor diameter | | Toler-ance class | Pitch diameter | | Major diameter | |
| | | | | *ES* | *EI* | *ES* | *EI* | | *es* | *ei* | *es* | *ei* |
| mm | mm | mm | | μm | μm | μm | μm | | μm | μm | μm | μm |
| 90 | 180 | 4 | – | – | – | – | – | 3h4h | 0 | -125 | 0 | -300 |
| | | | – | – | – | – | – | 4g | -60 | -220 | -60 | -360 |
| | | | 4H | 212 | 0 | 375 | 0 | 4h | 0 | -160 | 0 | -300 |
| | | | – | – | – | – | – | 5g4g | -60 | -260 | -60 | -360 |
| | | | 5G | 325 | 60 | 535 | 60 | 5g6g | -60 | -260 | -60 | -535 |
| | | | 5H | 265 | 0 | 475 | 0 | 5h4h | 0 | -200 | 0 | -300 |
| | | | – | – | – | – | – | 5h6h | 0 | -200 | 0 | -475 |
| | | | – | – | – | – | – | 6e | -95 | -345 | -95 | -570 |
| | | | – | – | – | – | – | 6f | -75 | -325 | -75 | -550 |
| | | | 6G | 395 | 60 | 660 | 60 | 6g | -60 | -310 | -60 | -535 |
| | | | 6H | 335 | 0 | 600 | 0 | 6h | 0 | -250 | 0 | -475 |
| | | | – | – | – | – | – | 7e6e | -95 | -410 | -95 | -570 |
| | | | 7G | 485 | 60 | 810 | 60 | 7g6g | -60 | -375 | -60 | -535 |
| | | | 7H | 425 | 0 | 750 | 0 | 7h6h | 0 | -315 | 0 | -475 |
| | | | – | – | – | – | – | 8e | -95 | -495 | -95 | -845 |
| | | | 8G | 590 | 60 | 1 010 | 60 | 8g | -60 | -460 | -60 | -810 |
| | | | – | – | – | – | – | 9e8e | -95 | -595 | -95 | -845 |
| | | | 8H | 530 | 0 | 950 | 0 | 9g8g | -60 | -560 | -60 | -810 |
| 90 | 180 | 6 | – | – | – | – | – | 3h4h | 0 | -150 | 0 | -375 |
| | | | – | – | – | – | – | 4g | -80 | -270 | -80 | -455 |
| | | | 4H | 250 | 0 | 500 | 0 | 4h | 0 | -190 | 0 | -375 |
| | | | – | – | – | – | – | 5g4g | -80 | -316 | -80 | -455 |
| | | | 5G | 395 | 80 | 710 | 80 | 5g6g | -80 | -316 | -80 | -680 |
| | | | 5H | 315 | 0 | 630 | 0 | 5h4h | 0 | -236 | 0 | -375 |
| | | | – | – | – | – | – | 5h6h | 0 | -236 | 0 | -600 |
| | | | – | – | – | – | – | 6e | -118 | -418 | -118 | -718 |
| | | | – | – | – | – | – | 6f | -95 | -395 | -95 | -695 |
| | | | 6G | 480 | 80 | 880 | 80 | 6g | -80 | -380 | -80 | -680 |
| | | | 6H | 400 | 0 | 800 | 0 | 6h | 0 | -300 | 0 | -600 |
| | | | – | – | – | – | – | 7e6e | -118 | -493 | -118 | -718 |
| | | | 7G | 580 | 80 | 1 080 | 80 | 7g6g | -80 | -455 | -80 | -680 |
| | | | 7H | 500 | 0 | 1 000 | 0 | 7h6h | 0 | -375 | 0 | -600 |
| | | | – | – | – | – | – | 8e | -118 | -593 | -118 | -1 068 |
| | | | 8G | 710 | 80 | 1 330 | 80 | 8g | -80 | -555 | -80 | -1 030 |
| | | | – | – | – | – | – | 9e8e | -118 | -718 | -118 | -1 068 |
| | | | 8H | 630 | 0 | 1 250 | 0 | 9g8g | -80 | -680 | -80 | -1 030 |

NOTE "*ES*" and "*es*" are the symbols of "upper deviation"; "*EI*" and "*ei*" are the symbols of "lower deviation".

**Table 1** (continued)

| Basic major diameter | | Pitch | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | | Tolerance class | Pitch diameter | | Minor diameter | | Tolerance class | Pitch diameter | | Major diameter | |
| | | | | ES | EI | ES | EI | | es | ei | es | ei |
| mm | mm | mm | | µm | µm | µm | µm | | µm | µm | µm | µm |
| 90 | 180 | 8 | – | – | – | – | – | 3h4h | 0 | -170 | 0 | -450 |
| | | | – | – | – | – | – | 4g | -100 | -312 | -100 | -550 |
| | | | 4H | 280 | 0 | 630 | 0 | 4h | 0 | -212 | 0 | -450 |
| | | | – | – | – | – | – | 5g4g | -100 | -365 | -100 | -550 |
| | | | 5G | 455 | 100 | 900 | 100 | 5g6g | -100 | -365 | -100 | -810 |
| | | | 5H | 355 | 0 | 800 | 0 | 5h4h | 0 | -265 | 0 | -450 |
| | | | – | – | – | – | – | 5h6h | 0 | -265 | 0 | -710 |
| | | | – | – | – | – | – | 6e | -140 | -475 | -140 | -850 |
| | | | – | – | – | – | – | 6f | -118 | -453 | -118 | -828 |
| | | | 6G | 550 | 100 | 1 100 | 100 | 6g | -100 | -435 | -100 | -810 |
| | | | 6H | 450 | 0 | 1 000 | 0 | 6h | 0 | -335 | 0 | -710 |
| | | | – | – | – | – | – | 7e6e | -140 | -565 | -140 | -850 |
| | | | 7G | 660 | 100 | 1 350 | 100 | 7g6g | -100 | -525 | -100 | -810 |
| | | | 7H | 560 | 0 | 1 250 | 0 | 7h6h | 0 | -425 | 0 | -710 |
| | | | – | – | – | – | – | 8e | -140 | -670 | -140 | -1 320 |
| | | | 8G | 810 | 100 | 1 700 | 100 | 8g | -100 | -630 | -100 | -1 280 |
| | | | – | – | – | – | – | 9e8e | -140 | -810 | -140 | -1 320 |
| | | | 8H | 710 | 0 | 1 600 | 0 | 9g8g | -100 | -770 | -100 | -1 280 |
| 180 | 355 | 3 | – | – | – | – | – | 3h4h | 0 | -125 | 0 | -236 |
| | | | – | – | – | – | – | 4g | -48 | -208 | -48 | -284 |
| | | | 4H | 212 | 0 | 315 | 0 | 4h | 0 | -160 | 0 | -236 |
| | | | – | – | – | – | – | 5g4g | -48 | -248 | -48 | -284 |
| | | | 5G | 313 | 48 | 448 | 48 | 5g6g | -48 | -248 | -48 | -423 |
| | | | 5H | 265 | 0 | 400 | 0 | 5h4h | 0 | -200 | 0 | -236 |
| | | | – | – | – | – | – | 5h6h | 0 | -200 | 0 | -375 |
| | | | – | – | – | – | – | 6e | -85 | -335 | -85 | -460 |
| | | | – | – | – | – | – | 6f | -63 | -313 | -63 | -438 |
| | | | 6G | 383 | 48 | 548 | 48 | 6g | -48 | -298 | -48 | -423 |
| | | | 6H | 335 | 0 | 500 | 0 | 6h | 0 | -250 | 0 | -375 |
| | | | – | – | – | – | – | 7e6e | -85 | -400 | -85 | -460 |
| | | | 7G | 473 | 48 | 678 | 48 | 7g6g | -48 | -363 | -48 | -423 |
| | | | 7H | 425 | 0 | 630 | 0 | 7h6h | 0 | -315 | 0 | -375 |
| | | | – | – | – | – | – | 8e | -85 | -485 | -85 | -685 |
| | | | 8G | 578 | 48 | 848 | 48 | 8g | -48 | -448 | -48 | -648 |
| | | | – | – | – | – | – | 9e8e | -85 | -585 | -85 | -685 |
| | | | 8H | 530 | 0 | 800 | 0 | 9g8g | -48 | -548 | -48 | -648 |

NOTE "ES" and "es" are the symbols of "upper deviation"; "EI" and "ei" are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter | | | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | Pitch | Toler-ance class | Pitch diameter | | Minor diameter | | Toler-ance class | Pitch diameter | | Major diameter | |
| | | | | *ES* | *EI* | *ES* | *EI* | | *es* | *ei* | *es* | *ei* |
| mm | mm | mm | | μm | μm | μm | μm | | μm | μm | μm | μm |
| 180 | 355 | 4 | – | – | – | – | – | 3h4h | 0 | -140 | 0 | -300 |
| | | | – | – | – | – | – | 4g | -60 | -240 | -60 | -360 |
| | | | 4H | 236 | 0 | 375 | 0 | 4h | 0 | -180 | 0 | -300 |
| | | | – | – | – | – | – | 5g4g | -60 | -284 | -60 | -360 |
| | | | 5G | 360 | 60 | 535 | 60 | 5g6g | -60 | -284 | -60 | -535 |
| | | | 5H | 300 | 0 | 475 | 0 | 5h4h | 0 | -224 | 0 | -300 |
| | | | – | – | – | – | – | 5h6h | 0 | -224 | 0 | -475 |
| | | | – | – | – | – | – | 6e | -95 | -375 | -95 | -570 |
| | | | – | – | – | – | – | 6f | -75 | -355 | -75 | -550 |
| | | | 6G | 435 | 60 | 660 | 60 | 6g | -60 | -340 | -60 | -535 |
| | | | 6H | 375 | 0 | 600 | 0 | 6h | 0 | -280 | 0 | -475 |
| | | | – | – | – | – | – | 7e6e | -95 | -450 | -95 | -570 |
| | | | 7G | 535 | 60 | 810 | 60 | 7g6g | -60 | -415 | -60 | -535 |
| | | | 7H | 475 | 0 | 750 | 0 | 7h6h | 0 | -355 | 0 | -475 |
| | | | – | – | – | – | – | 8e | -95 | -545 | -95 | -845 |
| | | | 8G | 660 | 60 | 1 010 | 60 | 8g | -60 | -510 | -60 | -810 |
| | | | – | – | – | – | – | 9e8e | -95 | -655 | -95 | -845 |
| | | | 8H | 600 | 0 | 950 | 0 | 9g8g | -60 | -620 | -60 | -810 |
| 180 | 355 | 6 | – | – | – | – | – | 3h4h | 0 | -160 | 0 | -375 |
| | | | – | – | – | – | – | 4g | -80 | -280 | -80 | -455 |
| | | | 4H | 265 | 0 | 500 | 0 | 4h | 0 | -200 | 0 | -375 |
| | | | – | – | – | – | – | 5g4g | -80 | -330 | -80 | -455 |
| | | | 5G | 415 | 80 | 710 | 80 | 5g6g | -80 | -330 | -80 | -680 |
| | | | 5H | 335 | 0 | 630 | 0 | 5h4h | 0 | -250 | 0 | -375 |
| | | | – | – | – | – | – | 5h6h | 0 | -250 | 0 | -600 |
| | | | – | – | – | – | – | 6e | -118 | -433 | -118 | -718 |
| | | | – | – | – | – | – | 6f | -95 | -410 | -95 | -695 |
| | | | 6G | 505 | 80 | 880 | 80 | 6g | -80 | -395 | -80 | -680 |
| | | | 6H | 425 | 0 | 800 | 0 | 6h | 0 | -315 | 0 | -600 |
| | | | – | – | – | – | – | 7e6e | -118 | -518 | -118 | -718 |
| | | | 7G | 610 | 80 | 1 080 | 80 | 7g6g | -80 | -480 | -80 | -680 |
| | | | 7H | 530 | 0 | 1 000 | 0 | 7h6h | 0 | -400 | 0 | -600 |
| | | | – | – | – | – | – | 8e | -118 | -618 | -118 | -1 068 |
| | | | 8G | 750 | 80 | 1 330 | 80 | 8g | -80 | -580 | -80 | -1 030 |
| | | | – | – | – | – | – | 9e8e | -118 | -748 | -118 | -1 068 |
| | | | 8H | 670 | 0 | 1 250 | 0 | 9g8g | -80 | -710 | -80 | -1 030 |

NOTE "*ES*" and "*es*" are the symbols of "upper deviation"; "*EI*" and "*ei*" are the symbols of "lower deviation".

**Table 1** *(continued)*

| Basic major diameter | | Pitch | Internal thread | | | | | External thread | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| over | up to | | Toler-ance class | Pitch diameter | | Minor diameter | | Toler-ance class | Pitch diameter | | Major diameter | |
| | | | | *ES* | *EI* | *ES* | *EI* | | *es* | *ei* | *es* | *ei* |
| mm | mm | mm | | µm | µm | µm | µm | | µm | µm | µm | µm |
| 180 | 355 | 8 | – | – | – | – | – | 3h4h | 0 | -180 | 0 | -450 |
| | | | – | – | – | – | – | 4g | -100 | -324 | -100 | -550 |
| | | | 4H | 300 | 0 | 630 | 0 | 4h | 0 | -224 | 0 | -450 |
| | | | – | – | – | – | – | 5g4g | -100 | -380 | -100 | -550 |
| | | | 5G | 475 | 100 | 900 | 100 | 5g6g | -100 | -380 | -100 | -810 |
| | | | 5H | 375 | 0 | 800 | 0 | 5h4h | 0 | -280 | 0 | -450 |
| | | | – | – | – | – | – | 5h6h | 0 | -280 | 0 | -710 |
| | | | – | – | – | – | – | 6e | -140 | -495 | -140 | -850 |
| | | | – | – | – | – | – | 6f | -118 | -473 | -118 | -828 |
| | | | 6G | 575 | 100 | 1 100 | 100 | 6g | -100 | -455 | -100 | -810 |
| | | | 6H | 475 | 0 | 1 000 | 0 | 6h | 0 | -355 | 0 | -710 |
| | | | – | – | – | – | – | 7e6e | -140 | -590 | -140 | -850 |
| | | | 7G | 700 | 100 | 1 350 | 100 | 7g6g | -100 | -550 | -100 | -810 |
| | | | 7H | 600 | 0 | 1 250 | 0 | 7h6h | 0 | -450 | 0 | -710 |
| | | | – | – | – | – | – | 8e | -140 | -700 | -140 | -1 320 |
| | | | 8G | 850 | 100 | 1 700 | 100 | 8g | -100 | -660 | -100 | -1 280 |
| | | | – | – | – | – | – | 9e8e | -140 | -850 | -140 | -1 320 |
| | | | 8H | 750 | 0 | 1 600 | 0 | 9g8g | -100 | -810 | -100 | -1 280 |

NOTE "*ES*" and "*es*" are the symbols of "upper deviation"; "*EI*" and "*ei*" are the symbols of "lower deviation".

# Bibliography

[1]     ISO 68-1, *ISO general purpose screw threads — Basic profile — Part 1: Metric screw threads*

[2]     ISO 261, *ISO general purpose metric screw threads — General plan*

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