

### SLOVENSKI STANDARD SIST EN ISO 4017:2022

01-september-2022

Nadomešča:

**SIST EN ISO 4017:2014** 

Vezni elementi - Vijaki s šestrobo glavo z navojem do glave - Razreda izdelave A in B (ISO 4017:2022)

Fasteners - Hexagon head screws - Product grades A and B (ISO 4017:2022)

Sechskantschrauben mit Gewinde bis Kopf - Produktklassen A und B (ISO 4017:2022)

Fixations - Vis à tête hexagonale entièrement filetées - Grades A et B (ISO 4017:2022)

Ta slovenski standard je istoveten z: EN ISO 4017:2022

ICS:

21.060.10 Sorniki, vijaki, stebelni vijaki Bolts, screws, studs

SIST EN ISO 4017:2022 en,fr,de

**SIST EN ISO 4017:2022** 

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EUROPEAN STANDARD NORME EUROPÉENNE **EN ISO 4017** 

**EUROPÄISCHE NORM** 

July 2022

ICS 21.060.10

Supersedes EN ISO 4017:2014

**English Version** 

### Fasteners - Hexagon head screws - Product grades A and B (ISO 4017:2022)

Fixations - Vis à tête hexagonale entièrement filetées - Grades A et B (ISO 4017:2022)

Sechskantschrauben mit Gewinde bis Kopf-Produktklassen A und B (ISO 4017:2022)

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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#### EN ISO 4017:2022 (E)

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### **European foreword**

This document (EN ISO 4017:2022) has been prepared by Technical Committee ISO/TC 2 "Fasteners" in collaboration with Technical Committee CEN/TC 185 "Fasteners" the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2023, and conflicting national standards shall be withdrawn at the latest by January 2023.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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### INTERNATIONAL STANDARD

ISO 4017

Sixth edition 2022-06

### Fasteners — Hexagon head screws — Product grades A and B

Fixations — Vis à tête hexagonale entièrement filetées — Grades A et B

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#### ISO 4017:2022(E)

### **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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

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 <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

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 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 the following URL: <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 2, *Fasteners*, Subcommittee SC 11, *Fasteners with metric external thread*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 185, *Fasteners*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This sixth edition cancels and replaces the fifth edition (ISO 4017:2014), which has been technically revised.

The main changes are as follows:

- tables for dimensions have been entirely restructured, so that the user can find the specified values in a reliable manner (no risk of picking the wrong dimension), see <u>Clause 4</u> and <u>Annex A</u>;
- M7 has been added;
- $d_{w,min}$  has been changed for sizes  $d \le M5$  from  $s_{min}$  IT16 to  $s_{min}$  IT15, in order to have a larger bearing surface area and thus less contact pressure;
- greatest standard lengths (accidentally removed in the fifth edition) have been restored, rules for the shortest and greatest standard lengths have been added, and amended accordingly;
- for steel screws, property classes 4.8 and 12.9/12.9 have been added;
- for stainless steel screws, grades D4 and D6 and property class 80 have been added;
- property class 9.8 and non-ferrous metal screws have been deleted;
- specifications for marking and labelling have been added as Clause 6.

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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

### Fasteners — Hexagon head screws — Product grades A and B

### 1 Scope

This document specifies the characteristics of hexagon head screws, in steel and stainless steel, with metric coarse pitch threads M1,6 to M64, and with product grades A and B.

If in certain cases other specifications are requested, property classes and stainless steel grades can be selected from ISO 898-1 or ISO 3506-1, and dimensional options from ISO 888 or ISO 4753.

#### 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 225, Fasteners — Bolts, screws, studs and nuts — Symbols and descriptions of dimensions

ISO 888, Fasteners — Bolts, screws and studs — Nominal lengths and thread lengths

ISO 898-1, Mechanical properties of fasteners made of carbon steel and alloy steel — Part 1: Bolts, screws and studs with specified property classes — Coarse thread and fine pitch thread

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

ISO 1891-4, Fasteners — Vocabulary — Part 4: Control, inspection, delivery, acceptance and quality

ISO 3269, Fasteners — Acceptance inspection

ISO 3506-1, Fasteners — Mechanical properties of corrosion-resistant stainless steel fasteners — Part 1: Bolts, screws and studs with specified grades and property classes

ISO 4042, Fasteners — Electroplated coating systems

ISO 4753, Fasteners — Ends of parts with external ISO metric thread

ISO 4759-1, Tolerances for fasteners — Part 1: Bolts, screws, studs and nuts — Product grades A, B and C

ISO 6157-1, Fasteners — Surface discontinuities — Part 1: Bolts, screws and studs for general requirements

ISO 6157-3, Fasteners — Surface discontinuities — Part 3: Bolts, screws and studs for special requirements

ISO 8991, Designation system for fasteners

 ${\tt ISO~8992}, \textit{Fasteners} - \textit{General requirements for bolts, screws, study and nuts}$ 

ISO 10683, Fasteners — Non-electrolytically applied zinc flake coating systems

ISO 10684, Fasteners — Hot dip galvanized coatings

#### 3 Terms and definitions

No terms and definitions are listed in this document.