

STN	Spojovacie súčiastky Skrutky so šesťhrannou hlavou Výrobné triedy A a B (ISO 4014: 2022)	STN EN ISO 4014 02 1101
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Fasteners - Hexagon head bolts - Product grades A and B (ISO 4014:2022)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 10/22

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EUROPEAN STANDARD

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English Version

**Fasteners - Hexagon head bolts - Product grades A and B
(ISO 4014:2022)**Fixations - Vis à tête hexagonale partiellement filetées -
Grades A et B (ISO 4014:2022)Mechanische Verbindungselemente -
Sechskantschrauben mit Schaft - Produktklassen A und
B (ISO 4014:2022)

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EN ISO 4014:2022 (E)

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European foreword

This document (EN ISO 4014:2022) 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of an identical text or by endorsement, at the latest by January 2023, and conflicting national standards shall be withdrawn at the latest by January 2023.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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Endorsement notice

The text of ISO 4014:2022 has been approved by CEN as EN ISO 4014:2022 without any modification.

INTERNATIONAL STANDARD

ISO 4014

Fifth edition
2022-06

Fasteners — Hexagon head bolts — Product grades A and B

*Fixations — Vis à tête hexagonale partiellement filetées — Grades A
et B*



Reference number
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ISO 4014:2022(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 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 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 fifth edition cancels and replaces the fourth edition (ISO 4014:2011), 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 [Clause 4](#) and [Annex A](#);
- M7 has been added;
- $d_{w,min}$ has been changed for sizes $d \leq M5$ from $s_{min} - IT16$ to $s_{min} - IT15$, in order to have a larger bearing surface area and thus less contact pressure;
- the rules for the shortest and greatest standard lengths have been added, and they have been amended accordingly;
- for steel bolts, property classes 4.8 and 12.9/12.9 have been added;
- for stainless steel bolts, grades D4 and D6 and property class 80 have been added;
- property class 9.8 and non-ferrous metal bolts 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 www.iso.org/members.html.

Fasteners — Hexagon head bolts — Product grades A and B

1 Scope

This document specifies the characteristics of hexagon head bolts, 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*

ISO 8992, *Fasteners — General requirements for bolts, screws, studs and nuts*

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

ISO 10684, *Fasteners — Hot dip galvanized coatings*

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