



SLOVENSKI STANDARD SIST EN ISO 10642:2020

01-januar-2020

Nadomešča:

SIST EN ISO 10642:2004

SIST EN ISO 10642:2004/A1:2013

Vezni elementi - Vijaki z ugrezno glavo in notranjim šestkotnikom (imbus) z manjšo obremenljivostjo (ISO 10642:2019)

Fasteners - Hexagon socket countersunk head screws with reduced loadability (ISO 10642:2019)

Mechanische Verbindungselemente - Senkschrauben mit Innensechskant mit reduzierter Belastbarkeit (ISO 10642:2019)

Fixations - Vis à tête fraisée à six pans creux à capacité de charge réduite (ISO 10642:2019)

Ta slovenski standard je istoveten z: EN ISO 10642:2019

ICS:

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

SIST EN ISO 10642:2020

en,fr,de

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EUROPEAN STANDARD

EN ISO 10642

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2019

ICS 21.060.10

Supersedes EN ISO 10642:2004

English Version

Fasteners - Hexagon socket countersunk head screws with reduced loadability (ISO 10642:2019)

Fixations - Vis à tête fraisée à six pans creux à capacité de charge réduite (ISO 10642:2019)

Mechanische Verbindungselemente - Senkschrauben mit Innensechskant mit reduzierter Belastbarkeit (ISO 10642:2019)

This European Standard was approved by CEN on 17 August 2019.

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN ISO 10642:2019) 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of an identical text or by endorsement, at the latest by April 2020, and conflicting national standards shall be withdrawn at the latest by April 2020.

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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INTERNATIONAL
STANDARD

ISO
10642

Third edition
2019-09

**Fasteners — Hexagon socket
countersunk head screws with
reduced loadability**

*Fixations — Vis à tête fraisée à six pans creux à capacité de charge
réduite*

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ISO 10642:2019(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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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 2, *Fasteners*, Subcommittee SC 11, *Fasteners with metric external thread*.

This third edition cancels and replaces the second edition (ISO 10642:2004), which has been technically revised. It also incorporates the Amendment ISO 10642:2004/Amd.1:2012. The main changes compared to the previous edition are as follows:

- the whole standard has been improved to clearly point out that these hexagon socket countersunk head screws have reduced loadability because of their head design (head dimensions and penetration of the hexagon socket);
- screws made of stainless steel have been added;
- detailed head configuration has been added (see [Figure 4](#));
- M2 and M2,5 have been added; as their minimum ultimate tensile loads for full loadability are not specified in ISO 898-1 and ISO 3506-1, they have been calculated with the same formulae accordingly (see [Annex A](#));
- the reference threaded length b has been increased to $3d$ for partially threaded screws M14 to M20, so that these screws can be tensile tested in accordance with ISO 3506-1 ($b \geq 3d$ is required to tensile test screws with reduced loadability);
- head height k_{\min} has been added as reference dimension in [Tables 1](#) and [2](#);
- wall thickness between driving feature and bearing face w_{\min} has been replaced by the depth of the internal driving feature t_{\max} (same method as for hexalobular internal drive);
- D_a , D_k and F are pointed out as gauge dimensions in [Table 3](#) (see also [Figure 5](#));
- the minimum nominal lengths of the standardized range have been determined in accordance with footnote g of [Tables 1](#) and [2](#) and therefore the shorter lengths for M4 to M20 were deleted.

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.

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