

SLOVENSKI STANDARD

SIST EN ISO 14581:2023

01-marec-2023

Nadomešča:

SIST EN ISO 14581:2014

Vezni elementi - Notranji šestrogeljni v ugrezni ploski glavi vijaka (običajna oblika glave) z manjšo obremenljivostjo (ISO 14581:2022)

Fasteners - Hexalobular socket countersunk flat head screws (common head style) with reduced loadability (ISO 14581:2022)

Verbindungselemente - Senkschrauben mit Innensechsrund (Einheitskopf) mit reduzierter Belastbarkeit (ISO 14581:2022)

Fixations - Vis à tête fraisée (tête commune) à six lobes internes à capacité de charge réduite (ISO 14581:2022)

Ta slovenski standard je istoveten z: EN ISO 14581:2023

ICS:

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

SIST EN ISO 14581:2023

en,fr,de

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 14581

January 2023

ICS 21.060.10

Supersedes EN ISO 14581:2013

English Version

Fasteners - Hexalobular socket countersunk flat head
screws (common head style) with reduced loadability (ISO
14581:2022)

Fixations - Vis à tête fraisée (tête commune) à six lobes
internes à capacité de charge réduite (ISO 14581:2022)

Verbindungselemente - Senkschrauben mit
Innensechsrund (Einheitskopf) mit reduzierter
Belastbarkeit (ISO 14581:2022)

This European Standard was approved by CEN on 26 November 2022.

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

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Contents	Page
European foreword.....	3

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European foreword

This document (EN ISO 14581:2023) 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of an identical text or by endorsement, at the latest by July 2023, and conflicting national standards shall be withdrawn at the latest by July 2023.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 14581:2022 has been approved by CEN as EN ISO 14581:2023 without any modification.

INTERNATIONAL STANDARD

ISO
14581

Second edition
2022-12

Fasteners — Hexalobular socket countersunk flat head screws (common head style) with reduced loadability

*Fixations — Vis à tête fraisée (tête commune) à six lobes internes à
capacité de charge réduite*

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Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Dimensions and gauging of the head	2
4.1 Dimensions	2
4.2 Gauging of head.....	7
5 Requirements and reference International Standards	7
6 Marking and labelling	8
6.1 Marking on product.....	8
6.2 Labelling on package.....	8
7 Designation	9
Annex A (informative) Minimum ultimate tensile loads for screws M2 and M2,5 with full loadability	10
Bibliography	11

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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 second edition cancels and replaces the first edition (ISO 14581:2013), which has been technically revised.

The main changes are as follows:

- the whole standard (including title) has been improved to clearly point out that these hexalobular socket countersunk flat head screws with common head style have reduced loadability because of their head design (head dimensions and penetration of the hexalobular socket);
- for M2 to M4, partially threaded screws without underhead reinforcement (formerly designated as “shoulder”) and normative reference to ISO 3508 for x_{\max} (see figure footnote e) have been added (see [Figure 1](#) b);
- for M5 to M10, underhead reinforcement has been modified from a radius to a conical shape as adjustment to manufacturing conditions and normative reference to ISO 3508 for x_{\max} (see figure footnote e) has been added (see [Figure 2](#) b);
- detailed head configuration has been added (see [Figure 3](#));
- shank diameter d_s has been added in [Table 1](#);
- minimum head height k_{\min} has been added as reference dimension in [Table 1](#);
- radius r has been specified for all head configurations (see [Figures 1](#) and [2](#)), and r_{\min} has been added in [Table 1](#);
- shortest standard lengths l_{nom} have been increased in [Table 1](#);

- calculations for M2 and M2,5 have been added in [Table 3](#) for steel screws; 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 [Table A.1](#), [Annex A](#));
- the minimum ultimate tensile loads were recalculated and have been changed to more precise values for steel screws with property classes 4.8 (M3 and M6), 8.8 (M5), and for stainless steel screws with property classes 50 (M3, M6 and M8) and 70 (M3, M6, M8 and M10); see [Table 3](#);
- property class 10.9 has been added (see [Table 2](#));
- specifications for labelling have been added as new [subclause 6.2](#);
- reference to ISO 15065 for countersinks has been added.

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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