

SLOVENSKI STANDARD SIST EN ISO 7380-2:2023

01-marec-2023

Nadomešča:

SIST EN ISO 7380-2:2011

Vezni elementi - Vijaki s sploščeno polkrožno glavo z manjšo obremenljivostjo - 2. del: Sploščena polkrožna glava z robom in notranjim šestkotnikom (ISO 7380-2:2022)

Fasteners - Button head screws with reduced loadability - Part 2: Hexagon socket button head screws with collar (ISO 7380-2:2022)

Mechanische Verbindungselemente - Schrauben mit abgeflachtem Halbrundkopf mit reduzierter Belastbarkeit - Teil 2: Schrauben mit abgeflachtem Halbrundkopf mit Innensechskant und Bund (ISO 7380-2:2022)

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Fixations - Vis à tête cylindrique bombée plate à capacité de charge réduite - Partie 2: Tête cylindrique bombée plate à six pans creux et embase plate (ISO 7380-2:2022)

Ta slovenski standard je istoveten z: EN ISO 7380-2:2023

ICS:

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

SIST EN ISO 7380-2:2023

en,fr,de

EUROPEAN STANDARD

EN ISO 7380-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2023

ICS 21.060.10

Supersedes EN ISO 7380-2:2011

English Version

Fasteners - Button head screws with reduced loadability -
Part 2: Hexagon socket button head screws with collar
(ISO 7380-2:2022)

Fixations - Vis à tête cylindrique bombée plate à
capacité de charge réduite - Partie 2: Tête cylindrique
bombée plate à six pans creux et embase plate (ISO
7380-2:2022)

Mechanische Verbindungselemente - Schrauben mit
abgeflachtem Halbrundkopf mit reduzierter
Belastbarkeit - Teil 2: Schrauben mit abgeflachtem
Halbrundkopf mit Innensechskant und Bund (ISO
7380-2:2022)

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

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

Contents	Page
European foreword.....	3

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European foreword

This document (EN ISO 7380-2:2023) 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of an identical text or by endorsement, at the latest by July 2023, and conflicting national standards shall be withdrawn at the latest by July 2023.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.

This document supersedes EN ISO 7380-2:2011.

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Endorsement notice

The text of ISO 7380-2:2022 has been approved by CEN as EN ISO 7380-2:2023 without any modification.

INTERNATIONAL
STANDARD

ISO
7380-2

Second edition
2022-12

**Fasteners — Button head screws with
reduced loadability —**

**Part 2:
Hexagon socket button head screws
with collar**

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*Fixations — Vis à tête cylindrique bombée plate à capacité de charge
réduite —*

*Partie 2: Tête cylindrique bombée plate à six pans creux et à embase
plate*

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Contents

	Page
Foreword.....	iv
1 Scope	1
2 Normative references	1
3 Terms and definition	2
4 Dimensions	2
5 Requirements and reference International Standards	6
6 Marking and labelling	7
6.1 Marking on product.....	7
6.2 Labelling on package.....	7
7 Designation	7
Bibliography	8

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SIST EN ISO 7380-2:2023

<https://standards.iteh.ai/catalog/standards/sist/fdbf3c2e-1b08-4215-a130-299ac6ac8c57/sist-en-iso-7380-2-2023>

ISO 7380-2:2022(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 second edition cancels and replaces the first edition (ISO 7380-2:2011), 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 hexagon socket button head screws have reduced loadability because of their head design (head dimensions and penetration of the hexagon socket);
- the reference thread length b has been increased to $3d$ for partially threaded screws M16 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);
- the reference datum for the outer diameter of the bearing face has been specified (see [Figure 1](#)), and the minimum values have been reduced to $d_{w,\min} = d_{c,\min} \times 0,9$ considering the manufacturing aspects for “button head with collar” (see [Table 1](#));
- e_{\min} values have been rounded to two decimal places (see [Table 1](#));
- the maximum depth of the hexagon socket t_{\max} has been added (see [Table 1](#));
- symbol w has been substituted by the new symbol w_b in order to define the wall thickness between the bottom of the cylindrical broached hole and the bearing face (see [Figure 2](#) and [Table 1](#));
- the definition of r_f in [Figure 1](#) has been changed to allow the offset of the centre of the radius from the thread axis;
- the smallest and greatest standard lengths have been amended (see [Table 2](#));

- the minimum ultimate tensile loads were recalculated and have been changed to more precise values for screws with property classes 8.8 (M5, M12 and M16) and 10.9 (M3, M6 and M10), see [Table 4](#);
- specifications for marking and labelling have been added as new [Clause 6](#).

A list of all parts in the ISO 7380 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.

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