

Fasteners - Prevailing torque hexagon nuts - Regular
nuts (with non-metallic insert) (ISO 7040:2025)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 7040:2025 sisaldab Euroopa standardi EN ISO 7040:2025 ingliskeelset teksti. Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas. Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 25.06.2025. Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	This Estonian standard EVS-EN ISO 7040:2025 consists of the English text of the European standard EN ISO 7040:2025. This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation. Date of Availability of the European standard is 25.06.2025. The standard is available from the Estonian Centre for Standardisation and Accreditation.
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English Version

Fasteners - Prevailing torque hexagon nuts - Regular nuts
(with non-metallic insert) (ISO 7040:2025)

Fixations - Écrous hexagonaux autofreinés - Écrous
normaux (à anneau non métallique) (ISO 7040:2025)

Verbindungselemente - Sechskantmuttern mit
Klemmteil - Normalhohe Muttern (mit
nichtmetallischem Einsatz) (ISO 7040:2025)

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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN ISO 7040:2025) 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of an identical text or by endorsement, at the latest by December 2025, and conflicting national standards shall be withdrawn at the latest by December 2025.

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 7040:2012.

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Endorsement notice

The text of ISO 7040:2025 has been approved by CEN as EN ISO 7040:2025 without any modification.

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Foreword

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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 document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <https://www.iso.org/directives-and-policies.html>).

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This document was prepared by Technical Committee ISO/TC 2, *Fasteners*, Subcommittee SC 12, *Fasteners with metric internal 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 fourth edition cancels and replaces the third edition (ISO 7040:2012) which has been technically revised.

The main changes are as follows:

- the design principles of these nuts have been clarified in scope (see Note);
- for nuts with $D < M5$, appropriate nut design in accordance with ISO/TR 16224, style 1, has been added in [Annex A](#) (historical nuts not conforming to ISO 898-2 because of their height $m_{\min}$ less than $0,8D$ have been deleted);
- style, relevant property classes and related quenching and tempering conditions for steel nuts have been specified in [Clause 5](#) in accordance with ISO 898-2 (see [Table 3](#));
- stainless steel nuts have been added in accordance with ISO 3506-2;
- M7, M18, M22, M27, M33 and M39 have been added;
- $d_{a,\max}$ has been specified with two decimal places;
- $d_{w,\min}$ for sizes $D \leq M5$ has been changed from $s_{\min} - IT16$ to $s_{\min} - IT15$ in order to have a larger bearing surface area and thus less contact pressure;
- $h_{\max}$ for M5 and M20 has been increased so that regular, high and thin nuts have an identical room for the prevailing torque feature ($h_{\max} - m_{\min}$) to accommodate the non-metallic insert; $h_{\min}$ has therefore been increased in accordance with the specified tolerance (see [Tables 1](#) and [2](#));
- 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.

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Fasteners — Prevailing torque hexagon nuts — Regular nuts (with non-metallic insert)

1 Scope

This document specifies the characteristics of prevailing torque hexagon regular nuts (with non-metallic insert), in steel and stainless steel, with metric coarse pitch thread M3 to M39, and with product grades A and B.

NOTE These nuts are designed with an overall height equal to $m_{\min}$ (as specified in ISO 898-2 and ISO 4032 for style 1) plus the prevailing torque feature. The height of the prevailing torque feature ($h_{\max} - m_{\min}$) for the non-metallic insert is identical for regular, high and thin nuts for a given diameter.

Nuts with sizes $D < M5$ and design principles in accordance with style 1 are specified in [Annex A](#).

If in certain cases other specifications are requested, property classes and stainless steel grades can be selected from ISO 898-2 or ISO 3506-2.

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 898-2, *Fasteners — Mechanical properties of fasteners made of carbon steel and alloy steel — Part 2: Nuts with specified property classes*

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 2320, *Fasteners — Prevailing torque steel nuts — Functional properties*

ISO 3269, *Fasteners — Acceptance inspection*

ISO 3506-2, *Fasteners — Mechanical properties of corrosion-resistant stainless steel fasteners — Part 2: Nuts with specified grades and property classes*

ISO 4042, *Fasteners — Electroplated coating systems*

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

ISO 6157-2, *Fasteners — Surface discontinuities — Part 2: Nuts*

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*

3 Terms and definitions

No terms and definitions are listed in this document.