

Irish Standard I.S. EN ISO 10512:2012

Prevailing torque type hexagon regular nuts (with non-metallic insert) with metric fine pitch thread - Property classes 6, 8 and 10 (ISO 10512:2012)

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<i>This document replaces:</i> EN ISO 10512:1997				
<i>This document is based on</i> EN ISO 10512:2012 EN ISO 10512:1997	<i>: Published:</i> 11 January, 2013 11 December, 199	7		
This document was publis under the authority of the and comes into effect on: 11 January, 2013			<u>ICS number:</u> 21.060.20	
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# EUROPEAN STANDARD

# NORME EUROPÉENNE

# EUROPÄISCHE NORM

December 2012

EN ISO 10512

ICS 21.060.20

Supersedes EN ISO 10512:1997

**English Version** 

# Prevailing torque type hexagon regular nuts (with non-metallic insert) with metric fine pitch thread - Property classes 6, 8 and 10 (ISO 10512:2012)

Écrous hexagonaux normaux autofreinés (à anneau non métallique) à filetage métrique à pas fin - Classes de qualité 6, 8 et 10 (ISO 10512:2012) Sechskantmuttern mit Klemmteil (mit nichtmetallischem Einsatz), Typ 1, mit metrischem Feingewinde -Festigkeitsklassen 6, 8 und 10 (ISO 10512:2012)

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EN ISO 10512:2012 (E)

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## Foreword

This document (EN ISO 10512:2012) 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 DIN.

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of an identical text or by endorsement, at the latest by June 2013, and conflicting national standards shall be withdrawn at the latest by June 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 10512:1997.

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#### **Endorsement notice**

The text of ISO 10512:2012 has been approved by CEN as a EN ISO 10512:2012 without any modification.

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ISO 10512

Second edition 2012-12-15

# Prevailing torque type hexagon regular nuts (with non-metallic insert) with metric fine pitch thread — Property classes 6, 8 and 10

Écrous hexagonaux normaux autofreinés (à anneau non métallique) à filetage métrique à pas fin — Classes de qualité 6, 8 et 10



Reference number ISO 10512:2012(E) ISO 10512:2012(E)



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Published in Switzerland

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 10512 was prepared by Technical Committee ISO/TC 2, *Fasteners*, Subcommittee SC 12, *Fasteners with metric internal thread*.

This second edition cancels and replaces the first edition (ISO 10512:1997), of which it constitutes a minor revision.

# Prevailing torque type hexagon regular nuts (with non-metallic insert) with metric fine pitch thread — Property classes 6, 8 and 10

#### 1 Scope

This International Standard specifies the characteristics of prevailing torque type hexagon regular nuts (with non-metallic insert) with metric fine pitch thread with nominal thread diameters, D, from 8 mm up to and including 36 mm, in product grade A for sizes D up to and including 16 mm and product grade B for sizes D above 16 mm, and with property classes 6, 8 and 10.

If other specifications are required, they can be selected from existing International Standards, for example ISO 261, ISO 724, ISO 898-2, ISO 965-2, ISO 2320 and ISO 4759-1.

NOTE 1 The dimensions of the nuts correspond to those given in ISO 8673 plus prevailing torque feature.

NOTE 2 As there is an insufficient nut height due to the fine pitch thread, there is a higher probability of nut thread stripping. Hence, high nuts according to ISO 7041 are preferably used.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable to its application. 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 261, ISO general purpose metric screw threads — General plan

ISO 724, ISO general-purpose metric screw threads — Basic dimensions

ISO 898-2, Mechanical properties of fasteners made of carbon steel and alloy steel — Part 2: Nuts with specified property classes — Coarse thread and fine pitch thread

ISO 965-2, ISO general purpose metric screw threads — Tolerances — Part 2: Limits of sizes for general purpose external and internal screw threads — Medium quality

ISO 2320, Prevailing torque type steel nuts — Mechanical and performance properties

ISO 3269, Fasteners — Acceptance inspection

ISO 4042, Fasteners — Electroplated coatings

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

ISO 10683, Fasteners — Non-electrolytically applied zinc flake coatings

#### 3 Dimensions

See Figure 1 and Table 1.

Symbols and descriptions of dimensions are specified in ISO 225.



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