



SLOVENSKI STANDARD
oSIST prEN ISO 4034:2016
01-junij-2016

Šestrobe matice (tip 1) - Razred izdelave C (ISO/DIS 4034:2016)

Hexagon regular nuts (style 1) - Product grade C (ISO/DIS 4034:2016)

Sechskantmuttern (Typ 1) - Produktklasse C (ISO/DIS 4034:2016)

Écrous hexagonaux normaux (style 1) - Grade C (ISO/DIS 4034:2016)

Ta slovenski standard je istoveten z: prEN ISO 4034

[oSIST prEN ISO 4034:2016](https://standards.iteh.ai/catalog/standards/sist/b5c47af9-2385-46c4-acac-a527ddc2e4d2/osist-pren-iso-4034-2016)

<https://standards.iteh.ai/catalog/standards/sist/b5c47af9-2385-46c4-acac-a527ddc2e4d2/osist-pren-iso-4034-2016>

ICS:

21.060.20 Matice Nuts

oSIST prEN ISO 4034:2016 **en,fr,de**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[oSIST prEN ISO 4034:2016](https://standards.iteh.ai/catalog/standards/sist/b5c47af9-2385-46c4-acac-a527ddc2e4d2/osist-pren-iso-4034-2016)

<https://standards.iteh.ai/catalog/standards/sist/b5c47af9-2385-46c4-acac-a527ddc2e4d2/osist-pren-iso-4034-2016>

DRAFT INTERNATIONAL STANDARD

ISO/DIS 4034

ISO/TC 2/SC 12

Secretariat: DIN

Voting begins on:
2016-03-31Voting terminates on:
2016-06-29

Hexagon regular nuts (style 1) — Product grade C

Écrous hexagonaux normaux (style 1) — Grade C

ICS: 21.060.20

iTeh STANDARD PREVIEW (standards.iteh.ai)

[oSIST prEN ISO 4034:2016](https://standards.iteh.ai/catalog/standards/sist/b5c47af9-2385-46c4-acac-a527ddc2e4d2/osist-pren-iso-4034-2016)

<https://standards.iteh.ai/catalog/standards/sist/b5c47af9-2385-46c4-acac-a527ddc2e4d2/osist-pren-iso-4034-2016>

THIS DOCUMENT IS A DRAFT CIRCULATED FOR COMMENT AND APPROVAL. IT IS THEREFORE SUBJECT TO CHANGE AND MAY NOT BE REFERRED TO AS AN INTERNATIONAL STANDARD UNTIL PUBLISHED AS SUCH.

IN ADDITION TO THEIR EVALUATION AS BEING ACCEPTABLE FOR INDUSTRIAL, TECHNOLOGICAL, COMMERCIAL AND USER PURPOSES, DRAFT INTERNATIONAL STANDARDS MAY ON OCCASION HAVE TO BE CONSIDERED IN THE LIGHT OF THEIR POTENTIAL TO BECOME STANDARDS TO WHICH REFERENCE MAY BE MADE IN NATIONAL REGULATIONS.

RECIPIENTS OF THIS DRAFT ARE INVITED TO SUBMIT, WITH THEIR COMMENTS, NOTIFICATION OF ANY RELEVANT PATENT RIGHTS OF WHICH THEY ARE AWARE AND TO PROVIDE SUPPORTING DOCUMENTATION.

ISO/CEN PARALLEL PROCESSING

This draft has been developed within the International Organization for Standardization (ISO), and processed under the **ISO lead** mode of collaboration as defined in the Vienna Agreement.

This draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel three month enquiry.

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.



Reference number
ISO/DIS 4034:2016(E)

© ISO 2016

iTeh STANDARD PREVIEW (standards.iteh.ai)

[oSIST prEN ISO 4034:2016](https://standards.iteh.ai/catalog/standards/sist/b5c47af9-2385-46c4-acac-a527ddc2e4d2/osist-pren-iso-4034-2016)

<https://standards.iteh.ai/catalog/standards/sist/b5c47af9-2385-46c4-acac-a527ddc2e4d2/osist-pren-iso-4034-2016>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2016, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 2, *Fasteners*, Subcommittee SC 12, *Fasteners with metric internal thread*.

This fifth edition cancels and replaces the fourth edition (ISO 4034:2012).

This standard differs from ISO 4034:2012 as follows:

- the Scope has been updated;
- the thread M7 has been added;
- errors for m_{\min} have been corrected for M27 (22,5 instead of 22,6) and M64 (49,1 instead of 49,4);
- errors in calculation of $m_{w, \min}$ values have been corrected for M6 (3,9 instead of 3,7), M27 (18,0 instead of 18,1), M36 (23,5 instead of 23,2) and M64 (39,3 instead of 39,5);
- the property class 6 has been added;
- the reference to ISO/TR 16224 for nut design has been added.

Hexagon regular nuts (style 1) — Product grade C

1 Scope

This International Standard specifies the characteristics of hexagon regular nuts (style 1) with coarse pitch thread from nominal diameters M5 through M64, with product grade C.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 262, *ISO general purpose metric screw threads — Selected sizes for screws, bolts and nuts*

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 965-5, *ISO general-purpose metric screw threads — Tolerances — Part 5: Limits of sizes for internal screw threads to mate with hot-dip galvanized external screw threads with maximum size of tolerance position h before galvanizing*

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*

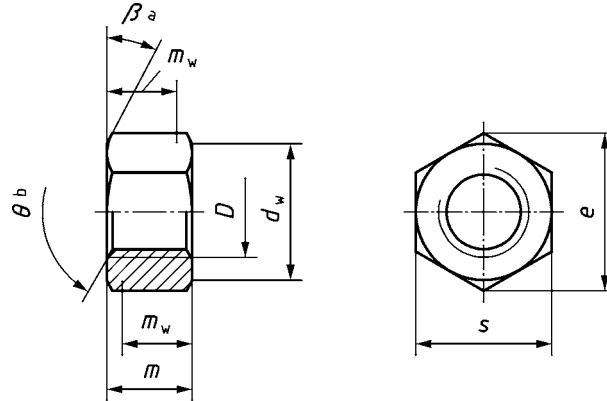
ISO 10683, *Fasteners — Non-electrolytically applied zinc flake coatings*

ISO 10684, *Fasteners — Hot dip galvanized coatings*

3 Dimensions

See Figure 1 and Tables 1 and 2.

Symbols and descriptions of dimensions are specified in ISO 225.



- a $\beta = 15^\circ$ to 30°
- b $\theta = 90^\circ$ to 120°

Figure 1 - Dimensions

Table 1 — Preferred threads
(standards.iteh.ai)

Dimensions in millimetres

Thread, D		M5	M6	M8	M10	M12	M16	M20
p^a		0,8	1,0	1,25	1,5	1,75	2	2,5
d_w	min.	6,7	8,7	11,5	14,5	16,5	22,0	27,7
e	min.	8,63	10,89	14,20	17,59	19,85	26,17	32,95
m	max.	5,6	6,4	7,9	9,5	12,2	15,9	19,0
	min.	4,4	4,9	6,4	8,0	10,4	14,1	16,9
m_w	min.	3,5	3,9	5,1	6,4	8,3	11,3	13,5
s	nom. = max.	8,00	10,00	13,00	16,00	18,00	24,00	30,00
	min.	7,64	9,64	12,57	15,57	17,57	23,16	29,16
Thread, D		M24	M30	M36	M42	M48	M56	M64
p^a		3	3,5	4	4,5	5	5,5	6
d_w	min.	33,3	42,8	51,1	60,0	69,5	78,7	88,2
e	min.	39,55	50,85	60,79	71,30	82,60	93,56	104,86
m	max.	22,3	26,4	31,9	34,9	38,9	45,9	52,4
	min.	20,2	24,3	29,4	32,4	36,4	43,4	49,1
m_w	min.	16,2	19,4	23,5	25,9	29,1	34,7	39,3
s	nom. = max.	36,00	46,00	55,00	65,00	75,00	85,00	95,00
	min.	35,00	45,00	53,80	63,10	73,10	82,80	92,80
<p>^a P is the pitch of the thread.</p>								

Table 2 — Non-preferred threads

Dimensions in millimetres

Thread, D	M7	M14	M18	M22	M27	M33	M39	M45	M52	M60
p^a	1	2	2,5	2,5	3	3,5	4	4,5	5	5,5
d_w min.	9,5	19,2	24,9	31,4	38,0	46,6	55,9	64,7	74,2	83,4
e min.	11,94	22,78	29,56	37,29	45,20	55,37	66,44	76,95	88,25	99,21
m	max.	8,30	13,9	16,9	20,2	24,7	29,5	34,3	36,9	42,9
	min.	6,10	12,1	15,1	18,1	22,5	27,4	31,8	34,4	40,4
m_w min.	5,50	9,7	12,1	14,5	18,0	21,9	25,4	27,5	32,3	37,1
s	nom. = max.	11,00	21,00	27,00	34,00	41,00	50,00	60,00	70,00	80,00
	min.	10,57	20,16	26,16	33,00	40,00	49,00	58,80	68,10	78,10

^a P is the pitch of the thread.

4 Requirements and reference International Standards

See Table 3.

Table 3 — Requirements and reference International Standards

Material	Steel
General requirements International Standard	ISO 8992
Thread Tolerance class	7H ^a
International Standards	ISO 262, ISO 724, ISO 965-2, ISO 965-5
Mechanical properties Property class	$M5 \leq D \leq M39$ 5, 6
	$D < M5$ and $D > M39$ Mechanical properties as agreed ^b
International Standard	ISO 898-2
Tolerance Product grade	C
	International Standard
Finish — Coating	As processed Requirements for electroplating are specified in ISO 4042. Requirements for non-electrolytically applied zinc flake coatings are specified in ISO 10683. Requirements for hot dip galvanized coatings are specified in ISO 10684. Additional requirements or other finishes or coatings shall be agreed between the supplier and the purchaser.
Surface integrity	Limits for surface discontinuities are specified in ISO 6157-2.
Acceptability	Acceptance inspection is specified in ISO 3269.

^a Other tolerance classes may be specified prior to coating, depending on the type of coating to be applied. For coated nuts, see relevant coating standards, e.g. ISO 4042, ISO 10683 and ISO 10684.
^b See ISO/TR 16224 for information.

5 Designation

EXAMPLE A hexagon regular nut (style 1) with nominal diameter M12 and property class 5 is designated as follows:

Hexagon regular nut ISO 4034 – M12 – 5

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[oSIST prEN ISO 4034:2016
https://standards.iteh.ai/catalog/standards/sist/b5c47af9-2385-46c4-acac-a527ddc2e4d2/osist-pren-iso-4034-2016](https://standards.iteh.ai/catalog/standards/sist/b5c47af9-2385-46c4-acac-a527ddc2e4d2/osist-pren-iso-4034-2016)

ISO/DIS 4034:2016(E)

Bibliography

ISO/TR 16224, *Technical aspects of nut design*

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[oSIST prEN ISO 4034:2016
https://standards.iteh.ai/catalog/standards/sist/b5c47af9-2385-46c4-acac-a527ddc2e4d2/osist-pren-iso-4034-2016](https://standards.iteh.ai/catalog/standards/sist/b5c47af9-2385-46c4-acac-a527ddc2e4d2/osist-pren-iso-4034-2016)