

BUREAU OF INDIAN STANDARDS
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Doc No.: PGD 37 (22812)
IS 1364 (Part 6) : 2023
ISO 4033 : 2023

भारतीय मानक मसौदा

उत्पाद ग्रेड ए और बी के लिए षटकोणीय शार्प वाले काबले, पेंच और ढिबरियाँ
भाग 6 शैली 2 की षटकोणी ढिबरियाँ
(दूसरा पुनरीक्षण)

Draft Indian Standard

Hexagon Head Bolts, Screws and Nuts of Product Grades A and B
Part 6 Hexagon Nuts, Style 2

(*Second Revision*)

ICS 21.060.20

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Last date for receipt of comment is
21 January 2024

General Engineering and Fasteners Sectional Committee, PGD 37

NATIONAL FOREWORD

This Indian Standard (Part 6) (Second Revision) which is identical with ISO 4033 : 2023 'Fasteners — Hexagon high nuts (style 2)' issued by the International Organization for Standardization (ISO) will be adopted by the Bureau of Indian Standards on the recommendation of the General Engineering and Fasteners Standards Sectional Committee and approval of the Production and General Engineering Division Council.

This standard was originally published in 2002 and subsequently revised in 2018. The second revision of this standard has been undertaken to align it with the latest version of ISO 4033.

The major changes in this revision are as follows:

- a) Sizes M18, M22, M27, M33 and M39 have been added;
- b) Minimum height of the washer-face c_{\min} has been added;
- c) $d_{a,\max}$, $d_{w,\min}$ and $m_{w,\min}$ have been specified with two decimal places;
- d) $d_{w,\min}$ for 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;
- e) For steel nuts, quenching and tempering condition has been specified in accordance with IS 1367 (Part 6), and property class 9 has been deleted;
- f) Stainless steel nuts have been added; and
- g) Specifications for marking and labelling have been added as 6.

This standard is published in 6 parts. Other parts in this series are:

- Part 1 Hexagon head bolts (Size range M1.6 to M64)
- Part 2 Hexagon head screws (Size range M1.6 to M64)
- Part 3 Hexagon nuts, style 1 (Size Range M1.6 to M64)
- Part 4 Hexagon thin nuts (Chamfered) (Size range M1.6 to M64)
- Part 5 Hexagon thin nuts — Product grade B (Unhampered) (Size range M1.6 to M10)

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated:

| <i>International Standard</i> | <i>Corresponding Indian Standard</i> | <i>Degree of Equivalence</i> |
|--|---|------------------------------|
| ISO 225 Fasteners — Bolts, screws, studs and nuts — Symbols and descriptions of dimensions | IS 8536 : 2021/ISO 225 : 2010 Fasteners — Bolts, screws, studs and nuts — Symbols and descriptions of dimensions (<i>second revision</i>) | Identical |
| ISO 898-2 Fasteners — Mechanical properties of fasteners made of carbon steel and alloy steel — Part 2: Nuts with specified property classes | IS 1367 (Part 6) : 2023/ISO 898-2 : 2022 Technical supply conditions for threaded steel fasteners: Part 6 Mechanical properties of fasteners made of carbon steel and alloy steel — Nuts with specified property classes — Coarse thread and fine pitch thread (<i>fourth revision</i>) | Identical |
| ISO 965-1 ISO general purpose metric screw threads — Tolerances — Part 1: Principles and basic data | IS 14962 (Part 1) : 2018/ISO 965-1 : 2013 ISO general purpose metric screw threads — Tolerances: Part 1 Principles and basic data (<i>first revision</i>) | Identical |
| ISO 1891-4 Fasteners — Vocabulary — Part 4: Control, inspection, delivery, acceptance and quality | Doc No: PGD 37 (22772)/ISO 1891- 4 : 2018 Fasteners — Vocabulary: Part 4 Control, inspection, delivery, acceptance and quality | Identical |
| ISO 3269 Fasteners — Acceptance inspection | IS 1367 (Part 17) : 2023/ISO 3269 : 2019 Technical supply conditions for threaded | Identical |

| | | |
|---|--|-----------|
| | steel fasteners: Part 17 Inspections, sampling and acceptance procedure (<i>fifth revision</i>) | |
| ISO 3506-2 Fasteners — Mechanical properties of corrosion-resistant stainless steel fasteners — Part 2: Nuts with specified grades and property classes | IS 1367 (Part 14/Sec 2) : 2023/ISO 3506-2 : 2020 Technical supply conditions for threaded steel fasteners: Part 14 Mechanical properties of corrosion-resistant stainless-steel fasteners, Section 2 Nuts with specified grades and property classes (<i>fifth revision</i>) | Identical |
| ISO 4042 Fasteners — Electroplated coating systems | Doc No. PGD 37 (19630)/ISO 4042 : 2022 Technical supply conditions for threaded steel fasteners: Part 11 Electroplated coating systems (<i>fifth revision</i>) | Identical |
| ISO 4759-1 Tolerances for fasteners — Part 1: Bolts, screws, studs and nuts — Product grades A, B and C | IS 1367 (Part 2) : 2002/ISO 4759-1 : 2000 Technical supply conditions for threaded steel fasteners: Part 2 Tolerances for fasteners — Bolts, screws, studs and nuts — Product grades A, B and C (<i>third revision</i>) | Identical |
| ISO 6157-2 Fasteners — Surface discontinuities — Part 2: Nuts | IS 1367 (Part 10) : 2002/ISO 6157-2:1995 Technical supply conditions for threaded steel fasteners: Part 10 Surface discontinuities — Nuts (<i>third revision</i>) | Identical |
| ISO 8991 Designation system for fasteners | IS 1367 (Part 16) : 2002/ISO 8991:1986 Technical supply conditions for threaded steel fasteners: Part 16 Designation system for fasteners (<i>third revision</i>) | Identical |
| ISO 8992 Fasteners — General requirements for bolts, screws, studs and nuts | IS 1367 (Part 1) : 2014/ISO 8992 : 2005 Technical supply conditions for threaded steel fasteners: Part 1 General requirements for bolts, screws, studs and nuts (<i>fourth revision</i>) | Identical |
| ISO 10683 Fasteners — Non-electrolytically applied zinc flake coating systems | IS 10683 : 2018/ISO 10683 : 2018 Fasteners — Non-electrolytically applied zinc flake coating systems | Identical |
| ISO 10684 Fasteners — Hot dip galvanized coatings | IS 1367 (Part 13) : 2020/ISO 10684 : 2004 Technical supply conditions for threaded steel fasteners: Part 13 Hot dip galvanized coatings on threaded fasteners (<i>third revision</i>) | Identical |

The standard also makes a reference to the BIS Certification Marking and packaging of the product. Details of which are given in National Annex A.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2020 'Rules for rounding off numerical values (*second revision*).' The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

National Annex A
(National Foreword)

A-1 PACKAGING

The packaging of hexagon head nuts shall be in accordance with IS 1367 (Part 18) : 1996 'Industrial fasteners — Threaded steel fasteners — Technical supply conditions: Part 18 Packaging'.

A-2 BIS CERTIFICATION MARKING

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations frames thereunder, and the product(s) may be marked with the Standard Mark.

NOTE: The technical content of draft standard is not available on website. For details, please refer to ISO 4033 : 2023 or contact:

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