

Australian Standard™

ISO metric hexagon nuts

Part 1: Style 1—Product grades A and B

[ISO title: Hexagon nuts, style 1—Product grades A and B]

This Australian Standard was prepared by Committee ME/29, Fasteners. It was approved on behalf of the Council of Standards Australia on 21 April 2000 and published on 23 June 2000.

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Australian Building Codes Board
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Part 1: Style 1—Product grades A and B

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PREFACE

This Standard was prepared by the Standards Australia Committee ME/29, Fasteners to supersede AS/NZS 1112:1996, *ISO metric hexagon nuts, including thin nuts, slotted nuts and castle nuts*, in part.

The objective of this Standard is to provide manufacturers, suppliers and users with the dimensions, tolerances and material requirements for style 1, hexagon nuts, ISO product grades A and B with ISO metric coarse threads.

This Standard incorporates Amendment No. 1 (September 2002). The change arising from the Amendment is indicated in the text by a marginal bar and amendment number against the table.

This Standard is Part 1 of a four-part series on ISO metric hexagon nuts. The other parts give the dimensions for the following:

Part 2: Style 2—Product grades A and B.

Part 3: Product grade C.

Part 4: Chamfered thin nuts – Product grades A and B.

This edition has been technically revised and introduces the designation of product grades A and B.

NOTE: The product grade refers to the quality of the product and to the size of the tolerances where grade A is the most precise and grade C is the least precise.

Statements expressed in mandatory terms in notice to table and figures are deemed to be requirements of this Standard.

This Standard is identical with and has been reproduced from ISO 4032:1999, *Hexagon nuts, style 1—Product grades A and B*.

As this Standard is reproduced from an International Standard, the following applies:

- Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- In the source text ‘this International Standard’ should read ‘this Australian Standard’.
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<i>Reference to International Standard</i>	<i>Australian Standard</i>
ISO	AS
225	—
Fasteners—Bolts, screws, studs and nuts—Symbols and designations of dimensions	
724	—
ISO general-purpose metric screw threads—Basic dimensions	
898	4291
Mechanical properties of fasteners	Mechanical properties of fasteners
898-2	4291.2
Part 2: Nuts with specified proof load values—Coarse thread	Part 2: Nuts with specified proof load values—Coarse thread
965	—
ISO general purpose metric screw threads—Tolerances	
965-1	—
Part 1: Principles and basic data	
3269	—
Fasteners—Acceptance inspection	
3506	—
Mechanical properties of corrosion-resistant stainless steel fasteners	
3506-2	—
Part 2: Nuts	

4042	Fasteners—Electroplated coatings	—
ISO		AS
4759	Tolerances for fasteners	—
4759-1	Part 1: Bolts, screws, studs and nuts— Product grades A, B and C	—
6157	Fasteners—Surface discontinuities	—
6157-2	Part 2: Nuts	—
8839	Mechanical properties of fasteners— Bolts, screws, studs and nuts made of non-ferrous metals	—
8992	Fasteners—General requirements for bolts, screws, studs and nuts	—
10683	Fasteners—Non-electrolytically applied zinc flake coatings	—

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INTRODUCTION

This International Standard is part of the complete ISO product standard series on external hexagon drive fasteners. The series comprises:

- a) hexagon head bolts (ISO 4014 to ISO 4016 and ISO 8765);
- b) hexagon head screws (ISO 4017, ISO 4018 and ISO 8676);
- c) hexagon nuts (ISO 4032 to ISO 4036, ISO 8673 to ISO 8675);
- d) hexagon bolts with flange (ISO 4162 and ISO 15071);
- e) hexagon nuts with flange (ISO 4161 and ISO 10663);
- f) structural bolts and nuts (ISO 4775, ISO 7411 to ISO 7414 and ISO 7417).

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AUSTRALIAN STANDARD

ISO metric hexagon nuts**Part 1:
Style 1—Products grades A and B****1 Scope**

This International Standard specifies the characteristics of hexagon nuts, style 1, with threads from M1.6 up to including M64, with product grade A for threads $d \leq M16$ and product grade B for threads $d > M16$.

If, in special cases, specifications other than those listed in this International Standard are required, they should be selected from existing International Standards, for example ISO 724, ISO 898-2, ISO 965-1, ISO 3506-2 and ISO 4759-1.

NOTE For hexagon nuts style 2, see ISO 4033.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 225:1983, *Fasteners — Bolts, screws, studs and nuts — Symbols and designations of dimensions.*

ISO 724:1993, *ISO general-purpose metric screw threads — Basic dimensions.*

ISO 898-2:1992, *Mechanical properties of fasteners — Part 2: Nuts with specified proof load values — Coarse thread.*

ISO 965-1:1998, *ISO general purpose metric screw threads — Tolerances — Part 1: Principles and basic data.*

ISO 3269:—¹⁾, *Fasteners — Acceptance inspection.*

ISO 3506-2:1997, *Mechanical properties of corrosion-resistant stainless steel fasteners — Part 2: Nuts.*

ISO 4042:1999, *Fasteners — Electroplated coatings.*

ISO 4759-1:—²⁾, *Tolerances for fasteners — Part 1: Bolts, screws, studs and nuts — Product grades A, B and C.*

ISO 6157-2:1988, *Fasteners — Surface discontinuities — Part 2: Nuts.*

ISO 8009:1983, *Mechanical properties of fasteners — Bolts, screws, studs and nuts made of non-ferrous metals.*

ISO 8002:1986, *Fasteners — General requirements for bolts, screws, studs and nuts.*

ISO 10683:—³⁾, *Fasteners — Non-electrolytically applied zinc flake coatings.*

¹⁾ To be published. (Revision of ISO 3269:1988)

²⁾ To be published. (Revision of ISO 4759-1:1978)

³⁾ To be published.