



ISO metric hexagon nuts

Part 1: Style 1—Product grades A and B



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- Association of Accredited Certification Bodies
 - Association of Wall and Ceiling Industries of Australia and New Zealand
 - Australasian Corrosion Association
 - Australian Chamber of Commerce and Industry
 - Australian Engineered Fasteners and Anchors Council
 - Australian Industry Group
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 - National Association of Steel-Framed Housing
 - National Association of Testing Authorities Australia
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-

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Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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Australian Standard[®]

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Part 1: Style 1—Product grades A and B

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PREFACE

This Standard was prepared by the Australian members of Joint Standards Australia/Standards New Zealand Committee ME-029, Fasteners, to supersede AS 1112.1—2000.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to provide manufacturers, suppliers and users with the dimensions, tolerances and material requirements for hexagon regular nuts (style 1), with threads from M1.6 up to and including M64, with product grade A for threads $D \leq M16$ and product grade B for threads $D > M16$.

The objective of the revision is to adopt the current edition of ISO 4032.

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

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.

This Standard is identical with, and has been reproduced from ISO 4032:2012, *Hexagon regular nuts (style 1)—Product grades A and B*.

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

- (a) In the source text ‘this International Standard’ should read ‘this Australian Standard’.
- (b) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

<i>Reference to International Standard</i>	<i>Australian Standard</i>
ISO	AS
4759 Tolerances for fasteners	5066 Tolerances for ISO metric bolts, screws,
4759-1 Part 1: Bolts, screws, studs and nuts— Product grades A, B and C	studs and nuts—Product grades A, B and C

Only normative references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

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INTRODUCTION

This International Standard belongs to a complete group of product standards developed by ISO on external hexagon drive fasteners. It comprises the following:

- a) hexagon head bolts (ISO 4014, ISO 4015, ISO 4016 and ISO 8765);
- b) hexagon head screws (ISO 4017, ISO 4018 and ISO 8676);
- c) hexagon nuts (ISO 4032, ISO 4033, ISO 4034, ISO 4035, ISO 4036, ISO 7040, ISO 7041, ISO 7042, ISO 7719, ISO 7720, ISO 8673, ISO 8674, ISO 8675, ISO 10511, ISO 10512 and ISO 10513);
- d) hexagon bolts with flange (ISO 4162, ISO 15071 and ISO 15072);
- e) hexagon nuts with flange (ISO 4161, ISO 7043, ISO 7044, ISO 10663, ISO 12125, ISO 12126 and ISO 21670).

AUSTRALIAN STANDARD

ISO metric hexagon nuts**Style 1—Product grades A and B****1 Scope**

This International Standard specifies the characteristics of hexagon regular nuts (style 1), with threads from M1,6 up to and 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 can 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 high nuts (style 2), see ISO 4033.

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

ISO 3269, *Fasteners — Acceptance inspection*

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

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 8839, *Mechanical properties of fasteners — Bolts, screws, studs and nuts made of non-ferrous metals*

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*