AS 1111.1:2015
ISO 4016:2011

AS 1111.1:2015

Australian STANDARD

ISO metric hexagon bolts and screws—Product grade C

Part 1: Bolts

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- 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
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- New Zealand Heavy Engineering Research Association
- Society of Automotive Engineers—Australasia
- Steel Construction New Zealand
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Part 1: Bolts

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PREFACE

This Standard was prepared by the Standards Australia Committee ME-029, Fasteners, to supersede AS 1111.1—2000, *ISO metric hexagon bolts and screws—Product grade C*, Part 1: *Bolts*.

The objective of this Standard is to provide manufacturers, suppliers and users with the dimensions, tolerances and material requirements for hexagon head bolts of ISO product grade C with ISO metric coarse threads.

This Standard is Part 1 of a two-part series on ISO metric hexagon bolts and screws. Part 2 gives the dimensions for screws.

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.

This Standard is identical with, and has been reproduced from, ISO 4016:2011, *Hexagon head bolts—Product grade C.*

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 Standards, as follows:

Reference to International Standard		*Australian Standard*	
ISO		AS	
898	Mechanical properties of fasteners made of carbon steel and alloy steel	4291	Mechanical properties of fasteners made of carbon steel and alloy steel
898-1	Part 1: Bolts, screws and studs with specified property classes—Coarse thread and fine pitch thread	4291.1	Part 1: Bolts, screws and studs
965	ISO general purpose metric screw threads—Tolerances	1721	General purpose metric screw threads
965-1	Part 1: Principles and basic data		
4018	Hexagon head screws—Product grade C	1111	ISO metric hexagon bolts and screws—Product grade C
		1111.2	Part 2: Screws
4759	Tolerances for fasteners		
4759-1	Part 1: Bolts, screws, studs and nuts—Product grades A, B and C	5066	Tolerances for ISO metric bolts, screws, 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).

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AUSTRALIAN STANDARD

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Part 1:
Bolts

1 Scope

This International Standard specifies the characteristics of hexagon head bolts with threads from M5 up to and including M64, of product grade C.

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 888, ISO 898-1, ISO 965-1 and ISO 4759-1.

2 Normative references

The following referenced documents are indispensable for the application of this document. 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 724, *ISO general-purpose metric screw threads — Basic dimensions*

ISO 898-1, *Mechanical properties of fasteners made of carbon steel and alloy steel — Part 1: Bolts, screws and studs 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 4018, *Hexagon head screws — Product grade C*

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 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 Tables 1 and 2.

Symbols and descriptions of dimensions are specified in ISO 225.

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