

Australian Standard™

**ISO metric hexagon socket head cap  
screws**

[ISO title: Hexagon socket head cap screws]



This Australian Standard was prepared by Committee ME-029, Fasteners. It was approved on behalf of the Council of Standards Australia on 14 August 2001 and published on 7 December 2001.

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## ISO metric hexagon socket head cap screws

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## PREFACE

This Standard was prepared by the Standards Australia Committee ME-029, Fasteners to supersede AS/NZS 1420:1996.

The objective of the Standard is to provide manufacturers and users of threaded fasteners with the dimensions and mechanical properties for hexagon socket head cap screws with coarse metric threads.

This Standard is identical with and has been reproduced from ISO 4762:1997, *Hexagon socket head cap screws*.

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

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the annex to which they apply. A ‘normative’ annex is an integral part of a Standard, whereas an ‘informative’ annex is only for information and guidance.

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

- (a) Its number appears on the cover and title page while the International Standard number appears only on the cover.
- (b) In the source text, ‘this International Standard’ should read ‘this Australian Standard’.
- (c) A full point substitutes for a comma when referring to decimal mark.

References to International Standards should be replaced by identical Australian Standards, as follows:

Reference to International Standard	Australian Standard
ISO	AS
225	—
Fasteners—Bolts, screws, studs and nuts—Symbols and designations of dimensions	
261	—
ISO general purpose metric screw threads—General plan	
888	—
Bolts, screws and studs—Nominal lengths, and thread lengths for general purpose bolts	
898	4291
Mechanical properties of fasteners made of carbon and alloy steel	Mechanical properties of fasteners made of carbon and alloy steel
898-1	4291.1
Part 1: Bolts, screws and studs	Part 1: Bolts, screws and studs
965	—
ISO general purpose metric screw threads—Tolerances	
965-2	—
Part 2: Limits of signs for general purpose bolts and nut threads—Medium quality	
965-3	—
Part 3: Deviations for constructional threads	
3269	—
Fasteners—Acceptance inspections	
3506	—
Mechanical properties of corrosion-resistant stainless steel fasteners	
3506-1	—
Part 1: Bolts, screws and studs	
4042	—
Fasteners—Electroplated coatings	

ISO		AS
4753	Fasteners—Ends of parts with external metric ISO threads	—
4759	Tolerances of fasteners	—
4759-1	Part 1: Bolts, screws, studs and nuts—Product grades A, B and C	—
6157	Fasteners—Surface discontinuities	—
6157-1	Part 1: Bolts, screws and studs for general requirements	—
6157-3	Part 3: Bolts, screws and studs for special requirements	—
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	—

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## AUSTRALIAN STANDARD

# ISO metric hexagon socket head cap screws

## 1 Scope

This International Standard specifies the characteristics of hexagon socket head cap screws with threads from M1,6 up to and including M64 and product grade A.

Gauging of hexagon sockets is specified in annex A. For approximate masses of screws see annex B.

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 261, ISO 888, ISO 898-1, ISO 965-2, ISO 3506-1 and ISO 4759-1.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

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

ISO 261:–<sup>1)</sup>, *ISO general purpose metric screw threads – General plan.*

ISO 888:1976, *Bolts, screws and studs – Nominal lengths, and thread lengths for general purpose bolts.*

ISO 898-1:–<sup>2)</sup>, *Mechanical properties of fasteners made of carbon and alloy steel – Part 1: Bolts, screws and studs.*

ISO 965-2:–<sup>3)</sup>, *ISO general purpose metric screw threads – Tolerances – Part 2: Limits of sizes for general purpose bolt and nut threads – Medium quality.*

ISO 965-3:–<sup>4)</sup>, *ISO general purpose metric screw threads – Tolerances – Part 3: Deviations for constructional threads.*

ISO 3269:1988, *Fasteners – Acceptance inspection.*

ISO 3506-1:1997, *Mechanical properties of corrosion-resistant stainless steel fasteners – Part 1: Bolts, screws and studs.*

ISO 4042:–<sup>5)</sup>, *Fasteners – Electroplated coatings.*

ISO 4753:1983, *Fasteners – Ends of parts with external metric ISO threads.*

ISO 4759-1:–<sup>6)</sup>, *Tolerances for fasteners – Part 1: Bolts, screws, studs and nuts – Product grades A, B and C.*

ISO 6157-1:1988, *Fasteners – Surface discontinuities – Part 1: Bolts, screws and studs for general requirements.*

ISO 6157-3:1988, *Fasteners – Surface discontinuities – Part 3: Bolts, screws and studs for special requirements.*

ISO 8839:1986, *Mechanical properties of fasteners – Bolts, screws, studs and nuts made of non-ferrous metals.*

ISO 8992:1986, *Fasteners – General requirements for bolts, screws, studs and nuts.*

1) To be published. (Revision of ISO 261:1973)

2) To be published. (Revision of ISO 898-1:1988)

3) To be published. (Revision of ISO 965-2:1980)

4) To be published. (Revision of ISO 965-3:1980)

5) To be published. (Revision of ISO 4042:1989)

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