

Australian Standard[®]

**ISO metric hexagon socket head cap
screws**

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- Australian Chamber of Commerce and Industry
 - Australian Industry Group
 - Bureau of Steel Manufacturer of Australia
 - Federal Chamber of Automotive Industries
 - Materials Australia
-

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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 1420—2001.

The objective of this 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 4762:2004, *Hexagon socket head cap screws*.

In addition to updating the list of reference documents the following minor technical changes have been introduced to this edition:

- (a) Changes to the requirements for broached sockets.
- (b) Reference to ISO 23429 for the gauging of hexagon sockets.

Statements expressed in mandatory terms in footnotes to tables are deemed to be requirements of this Standard.

The terms ‘normative’ and ‘informative’ are used 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:

- (i) Its number appears on the cover and title page while the international standard number appears only on the cover.
- (ii) In the source text ‘this International Standard’ should read ‘this Australian Standard’.
- (iii) 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 |
| 898 Mechanical properties of fasteners made of carbon and alloy steel | 4291 Mechanical properties of fasteners made of carbon and alloy steel |
| 898-1 Part 1: Bolts, screws and studs | 4291.1 Part 1: Bolts, screws and studs |
| 4759 Tolerances of fasteners | 5066 Tolerances for ISO metric bolts, screws, studs and nuts—Product grades A, B and C |
| 4759-1 Part 1: Bolts, screws studs and nuts—Product grades A, B and C | |

Any international references not listed have not been adopted as Australian or Australian/New Zealand Standards.

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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 coarse pitch thread from M1,6 up to and including M64 and product grade A.

For approximate masses of screws see Annex A.

If, in special cases, specifications other than those listed in this International Standard are required, they should be selected from existing International Standards, e.g ISO 261, ISO 888, ISO 898-1, ISO 965-2, ISO 3506-1, ISO 8839 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 designations of dimensions*

ISO 261, *ISO general-purpose metric screw threads — General plan*

ISO 888, *Bolts, screws and studs — Nominal lengths, and thread lengths for general purpose bolts*

ISO 898-1, *Mechanical properties of fasteners made of carbon steel and alloy steel — Part 1: Bolts, screws and studs*

ISO 965-2, *ISO general purpose metric screw threads — Tolerances — Part 2: Limits of sizes for general purpose external and internal screw threads — Medium quality*

ISO 965-3, *ISO general purpose metric screw threads — Tolerances — Part 3: Deviations for constructional screw threads*

ISO 3269, *Fasteners — Acceptance inspection*

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

ISO 4042, *Fasteners — Electroplated coatings*

ISO 4753, *Fasteners — Ends of parts with external ISO metric thread*

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

ISO 5152-1, *Fasteners — Surface discontinuities — Part 1: Bolts, screws and studs for general requirements*

ISO 5152-3, *Fasteners — Surface discontinuities — Part 3: Bolts, screws and studs for special requirements*

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*