# INTERNATIONAL STANDARD

Fourth edition 2011-03-15

# Hexagon head bolts — Product grades A and B

Vis à tête hexagonale partiellement filetées — Grades A et B



Reference number ISO 4014:2011(E)

#### **PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

This document is a preview denerated by FLS



#### COPYRIGHT PROTECTED DOCUMENT

#### © ISO 2011

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Case postale 56 • CH-1211 Geneva 20 Tel. + 41 22 749 01 11 Fax + 41 22 749 09 47 E-mail copyright@iso.org Web www.iso.org

Published in Switzerland

### Foreword

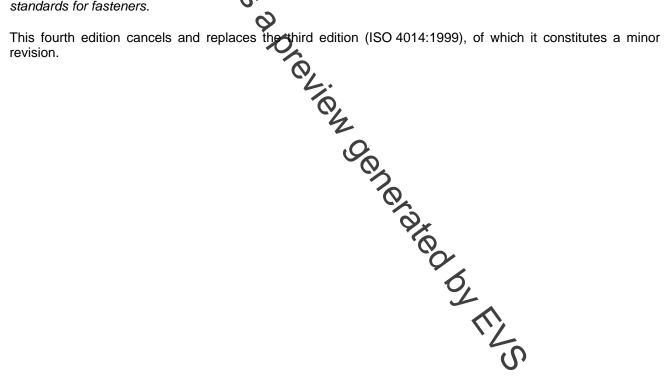
ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 4014 was prepared by Technicat Committee ISO/TC 2, Fasteners, Subcommittee SC 10, Product standards for fasteners.



#### Introduction

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

- hexagon head bolts (SO 4014, ISO 4015, ISO 4016 and ISO 8765); a)
- hexagon head screws ISO 4017, ISO 4018 and ISO 8676); b)
- hexagon nuts (ISO 4032, ISO 4033, ISO 4034, ISO 4035, ISO 4036, ISO 7040, ISO 7041, ISO 7042, c) ISO 7719, ISO 7720, ISO 9723, ISO 8674, ISO 8675, ISO 10511, ISO 10512 and ISO 10513);
- hexagon bolts with flange (ISO 462, ISO 15071 and ISO 15072); d)
- hexagon bolts with flange (ISO 162, ISO 15071 and ISO 15072); hexagon nuts with flange (ISO 161, ISO 7043, ISO 7044, ISO 10663, ISO 12125, ISO 12126 and ISO 21670). e)

## Hexagon head bolts — Product grades A and B

#### 1 Scope

This International standard specifies the characteristics of hexagon head bolts with threads from M1,6 up to and including M64, b product grade A for threads M1,6 to M24 and nominal lengths up to and including 10*d* or 150 mm, whichever is the shorter, and product grade B for threads over M24 or nominal lengths over 10*d* or 150 mm, whichever is the shorter.

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, ISO 3506-1, ISO 4753 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 — Toleranses — Part 1: Principles and basic data

ISO 3269, Fasteners — Acceptance inspection

ISO 3506-1, Mechanical properties of corrosion-resistant stainless steep asteners — Part 1: Bolts, screws and studs

ISO 4017, Hexagon head screws — Product grades A and B

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 6157-1, Fasteners — Surface discontinuities — Part 1: Bolts, screws and studs for general 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

ISO 10683, Fasteners — Non-electrolytically applied zinc flake coatings