This is a free page sample. Access the full version online.

NSAI Standards

Irish Standard
I.S. EN ISO 10644:2009

Screw and washer assemblies made of steel with plain washers - Washer hardness classes 200 HV and 300 HV (ISO 10644:2009)

© NSAI 2009 No copying without NSAI permission except as permitted by copyright law.

This is a free page sample. Access the full version online.

I.S. EN ISO 10644:2009

Incorporating amendments/corrigenda issued since publication:

This document replaces:	*This document is based on:*	*Published:*
I.S. EN ISO 10644:1999	EN ISO 10644:2009 EN ISO 10644:1998	1 July, 2009 19 March, 1999

This document was published under the authority of the NSAI and comes into effect on:
9 September, 2009

ICS number:
21.060.30

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W **NSAI.ie**

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Price Code:
F

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online.

I.S. EN ISO 10644:2009

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 10644

July 2009

ICS 21.060.30

Supersedes EN ISO 10644:1998

English Version

Screw and washer assemblies made of steel with plain washers - Washer hardness classes 200 HV and 300 HV (ISO 10644:2009)

Vis en acier à rondelle plate incorporée - Rondelles de classes de dureté 200 HV et 300 HV (ISO 10644:2009)

Kombi-Schrauben aus Stahl mit flachen Scheiben - Härteklassen der Scheiben 200 HV und 300 HV (ISO 10644:2009)

This European Standard was approved by CEN on 20 June 2009.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

© 2009 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN ISO 10644:2009: E

This is a free page sample. Access the full version online.

Contents

Page

Foreword.....3

This is a free page sample. Access the full version online.

Foreword

This document (EN ISO 10644:2009) has been prepared by Technical Committee ISO/TC 2 "Fasteners" in collaboration with Technical Committee CEN/TC 185 “Fasteners” the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2010, and conflicting national standards shall be withdrawn at the latest by January 2010.

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

This document supersedes EN ISO 10644:1998.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 10644:2009 has been approved by CEN as a EN ISO 10644:2009 without any modification.

This is a free page sample. Access the full version online.

This page is intentionally left BLANK.

This is a free page sample. Access the full version online.

I.S. EN ISO 10644:2009

INTERNATIONAL STANDARD

ISO 10644

Second edition
2009-07-01

Screw and washer assemblies made of steel with plain washers — Washer hardness classes 200 HV and 300 HV

Vis en acier à rondelle plate incorporée — Rondelles de classes de dureté 200 HV et 300 HV

Reference number
ISO 10644:2009(E)

© ISO 2009

This is a free page sample. Access the full version online.

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.

COPYRIGHT PROTECTED DOCUMENT

© ISO 2009

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

This is a free page sample. Access the full version online.

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 10644 was prepared by Technical Committee ISO/TC 2, *Fasteners*, Subcommittee SC 10, *Product standards for fasteners*.

This second edition cancels and replaces the first edition (ISO 10644:1998), which has been technically revised.

© ISO 2009 – All rights reserved

This is a free page sample. Access the full version online.

This is a free page sample. Access the full version online.

Screw and washer assemblies made of steel with plain washers — Washer hardness classes 200 HV and 300 HV

1 Scope

This International Standard specifies the requirements for metric screw and plain washer assemblies made of steel with coarse thread M2 to M12 inclusive, flat seating heads, property classes up to and including 10.9 and washer hardness classes 200 HV or 300 HV.

The plain washers are captive, i.e. prevented from disassembly and free to rotate.

NOTE The manufacturing of screw and washer assemblies takes into consideration material and production procedure of screw blank and washer as well as the assembly process of components, in order to meet specification requirements (see Annex A).

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 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 1207, *Slotted cheese head screws — Product grade A*

ISO 1580, *Slotted pan head screws — Product grade A*

ISO 4014, *Hexagon head bolts — Product grades A and B*

ISO 4015, *Hexagon head bolts — Product grade B — Reduced shank (shank diameter approximately equal to pitch diameter)*

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

ISO 4042, *Fasteners — Electroplated coatings*

ISO 4762, *Hexagon socket head cap screws*

ISO 7045, *Pan head screws with type H or type Z cross recess — Product grade A*

ISO 9717, *Phosphate conversion coatings for metals — Method of specifying requirements*

ISO 10673, *Plain washers for screw and washer assemblies — Small, normal and large series — Product grade A*

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

ISO 14579, *Hexalobular socket head cap screws*

© ISO 2009 – All rights reserved

SAI GLOBAL

This is a free preview. Purchase the entire publication at the link below:

Product Page

Looking for additional Standards? Visit Intertek Inform Infostore

Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation