

Irish Standard I.S. EN ISO 6410-3:2021

Technical drawings - Screw threads and threaded parts - Part 3: Simplified representation (ISO 6410-3:2021)

 $\ensuremath{\mathbb C}$  CEN 2021  $\hfill No copying without NSAI permission except as permitted by copyright law.$ 

#### I.S. EN ISO 6410-3:2021

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

*NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.* 

This document is based on: EN ISO 6410-3:2021 *Published:* 2021-04-07

This document was published		ICS number:
under the authority of the NSAI and comes into effect on:		01.100.20
		21.040.01
2021-04-25		
		NOTE: If blank see CEN/CENELEC cover page
NSAI	T +353 1	1 807 3800 Sales:
1 Swift Square,	F +353 1	L 807 3838 T +353 1 857 6730
Northwood, Santry	E standa	ards@nsai.ie F +353 1 857 6729
Dublin 9	W NSAI.i	ie W standards.ie
Úda	irás um Cha	aighdeáin Náisiúnta na hÉireann

#### **National Foreword**

I.S. EN ISO 6410-3:2021 is the adopted Irish version of the European Document EN ISO 6410-3:2021, Technical drawings - Screw threads and threaded parts - Part 3: Simplified representation (ISO 6410-3:2021)

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

For relationships with other publications refer to the NSAI web store.

#### Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

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 6410-3:2021

# EUROPEAN STANDARD NORME EUROPÉENNE

# EN ISO 6410-3

# **EUROPÄISCHE NORM**

April 2021

ICS 01.100.20; 21.040.01

Supersedes EN ISO 6410-3:1996

**English Version** 

## Technical drawings - Screw threads and threaded parts -Part 3: Simplified representation (ISO 6410-3:2021)

Dessins techniques - Filetages et pièces filetées - Partie 3: Représentation simplifiée (ISO 6410-3:2021) Technische Zeichnungen - Gewinde und Gewindeteile -Teil 3: Vereinfachte Darstellung (ISO 6410-3:2021)

This European Standard was approved by CEN on 11 March 2021.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

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



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

This is a free page sample. Access the full version online. I.S. EN ISO 6410-3:2021

EN ISO 6410-3:2021 (E)

Contents	Page
European foreword	

### **European foreword**

This document (EN ISO 6410-3:2021) has been prepared by Technical Committee ISO/TC 10 "Technical product documentation" in collaboration with CCMC.

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 October 2021, and conflicting national standards shall be withdrawn at the latest by October 2021.

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

This document supersedes EN ISO 6410-3:1996.

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### **Endorsement notice**

The text of ISO 6410-3:2021 has been approved by CEN as EN ISO 6410-3:2021 without any modification.

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

This page is intentionally left blank

# INTERNATIONAL STANDARD

# ISO 6410-3

Second edition 2021-03

# Technical drawings — Screw threads and threaded parts —

# Part 3: Simplified representation

Dessins techniques — Filetages et pièces filetées — Partie 3: Représentation simplifiée



Reference number ISO 6410-3:2021(E) ISO 6410-3:2021(E)



#### **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2021

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Page

## Contents

Forew	ord	
Introd	uction	
1	Scope.	
2	Norma	tive references 1
3	Terms	and definitions1
4	4.1 4.2	fied representation 1   General 1   Screws and nuts 1   Small diameter threads 2
Biblio	graphy	

#### ISO 6410-3:2021(E)

## 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see <u>www.iso.org/</u> iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 10, *Technical product documentation*, Subcommittee SC 6, *Mechanical engineering documentation*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/SS F01, *Technical drawings*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 6410-3:1993), of which it constitutes a minor revision. The changes compared to the previous edition are as follows:

- a break line has been added to Figures 1 to 4;
- <u>Figures 2</u> and <u>4</u> have been redrawn to proportionate the designations;
- Notes have been added to <u>Figures 1</u> to <u>4</u> to align with ISO 129-1:2018;
- a Bibliography has been added.

A list of all parts in the ISO 6410 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <u>www.iso.org/members.html</u>.

## Introduction

ISO 6410 has been devised to provide a universal means of communication among the various interests involved in the design, manufacture and installation of fasteners.

Requirements within industries vary considerably; in recognition of this fact ISO 6410 is presented in three parts.

This is a free page sample. Access the full version online. I.S. EN ISO 6410-3:2021

# Technical drawings — Screw threads and threaded parts —

## Part 3: Simplified representation

#### 1 Scope

This document establishes rules for the simplified representation of threaded parts, with the exception of screw thread inserts, which are covered in ISO 6410-2. This representation is applicable when it is not necessary to show the exact shape and details of the parts (see ISO 6410-1), for example in assembly drawings.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 6410-1:1993, Technical drawings — Screw threads and threaded parts — Part 1: General conventions

#### 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <u>https://www.iso.org/obp</u>
- IEC Electropedia: available at <u>http://www.electropedia.org/</u>

#### 4 Simplified representation

#### 4.1 General

In simplified representation, only essential features shall be shown. The degree of simplification depends on the kind of object represented, the scale of the drawing and the purpose of the documentation.

Therefore, the following features shall not be drawn in simplified representations of threaded parts:

- edges of chamfers of nuts and heads;
- thread run-outs;
- the shape of ends of screws;
- undercuts.

#### 4.2 Screws and nuts

When it is essential to show the shapes of screw heads, drive patterns or nuts, the examples of simplified representations shown in <u>Table 1</u> shall be used. Combinations of features, not shown in <u>Table 1</u>, may also be used. A simplified representation of the opposite (threaded) end view is not necessary.



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

**Product Page** 

S Looking for additional Standards? Visit Intertek Inform Infostore

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