Ophthalmic optics - Spectacle frames - Screw threads (ISO 11381:2016)



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 11381:2016 sisaldab Euroopa standardi EN ISO 11381:2016 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 11381:2016 consists of the English text of the European standard EN ISO 11381:2016.	
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.	
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 19.10.2016.	Date of Availability of the European standard is 19.10.2016.	
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.	

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

ICS 11.040.70, 21.040.10

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Aru 10, 10317 Tallinn, Eesti; koduleht <u>www.evs.ee</u>; telefon 605 5050; e-post <u>info@evs.ee</u>

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Aru 10, 10317 Tallinn, Estonia; homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

EUROPEAN STANDARD

EN ISO 11381

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2016

ICS 11.040.70; 21.040.10

Supersedes EN ISO 11381:1996

English Version

Ophthalmic optics - Spectacle frames - Screw threads (ISO 11381:2016)

Optique ophtalmique - Montures de lunettes - Filetages (ISO 11381:2016)

Augenoptik - Brillenfassungen - Schraubgewinde (ISO 11381:2016)

This European Standard was approved by CEN on 5 September 2016.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, 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: Avenue Marnix 17, B-1000 Brussels

European foreword

This document (EN ISO 11381:2016) has been prepared by Technical Committee ISO/TC 172 "Optics and photonics" in collaboration with Technical Committee CEN/TC 170 "Ophthalmic optics" 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 April 2017, and conflicting national standards shall be withdrawn at the latest by April 2017.

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 11381:1996.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 11381:2016 has been approved by CEN as EN ISO 11381:2016 without any modification.

Foreword 1 Scope 2 Normative references 3 Screw threads 4 Definitions and tolerances on lengths of screws 4.1 Flat head machine screws 4.2 Countersunk head screws 4.3 Plilister - countersunk head screws 4.4 Pan and cheese head screws 4.5 Tolerance on length 5 Screwing taps 6 Gauges Annex A (informative) Use and application of screw threads	Co	ontents	Page
1 Scope 2 Normative references 3 Screw threads 4 Definitions and tolerances on lengths of screws 4.1 Flat head machine screws 4.2 Countersunk head screws 4.3 Fillister — countersunk head screws 4.4 Pan and cheese head screws 4.5 Tolerance on length 5 Screwing taps 6 Gauges Annex A (informative) Use and application of screw threads	For	eword	iv
3 Screw threads 4 Definitions and tolerances on lengths of screws 4.1 Flat head machine screws 4.2 Countersunk head screws 4.3 Fillister — countersunk head screws 4.4 Pan and cheese head screws 4.5 Tolerance on length 5 Screwing taps 6 Gauges Annex A (informative) Use and application of screw threads			
3 Screw threads 4 Definitions and tolerances on lengths of screws 4.1 Flat head machine screws 4.2 Countersunk head screws 4.3 Fillister — countersunk head screws 4.4 Pan and cheese head screws 4.5 Tolerance on length 5 Screwing taps 6 Gauges Annex A (informative) Use and application of screw threads	2	Normative references	1
4.1 Flat head machine screws 4.2 Countersunk head screws 4.3 Fillister — countersunk head screws 4.4 Pan and cheese head screws 4.5 Tolerance on length 5 Screwing taps 6 Gauges Annex A (informative) Use and application of screw threads	3		
4.1 Flat head machine screws 4.2 Countersunk head screws 4.3 Fillister — countersunk head screws 4.4 Pan and cheese head screws 4.5 Tolerance on length. 5 Screwing taps 6 Gauges Annex A (informative) Use and application of screw threads	4	Definitions and tolerances on lengths of screws	2
4.3 Fillister — countersunk head screws 4.4 Pan and cheese head screws 4.5 Tolerance on length 5 Screwing taps 6 Gauges Annex A (informative) Use and application of screw threads		4.1 Flat head machine screws	2
4.4 Pan and cheese head screws 4.5 Tolerance on length 5 Screwing taps 6 Gauges Annex A (informative) Use and application of screw threads			
5 Screwing taps 6 Gauges Annex A (informative) Use and application of screw threads			
6 Gauges		4.5 Tolerance on length	3
Annex A (informative) Use and application of screw threads	5		
	6	Gauges	3
© ISO 2016 – All rights reserved			iii

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 www.iso.org/directives).

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 www.iso.org/patents).

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

For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 172, Optics and photonics, Subcommittee SC 7, *Ophthalmic optics and instruments.*

This second edition cancels and replaces the first edition (ISO 11381:1994), of which it constitutes a minor revision.

The following changes have been done:

- correction of the title:
- update of the normative references.

Ophthalmic optics — Spectacle frames — Screw threads

1 Scope

This International Standard specifies requirements for ISO metric screw threads for use with spectacle frames. Provision is made for screw threads of the following nominal sizes: $S0.8 \times 0.2$; $M1.0 \times 0.25$; $M1.0 \times 0.3$; M1

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 529, Short machine taps and hand taps

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

ISO 1501, ISO miniature screw threads

ISO 1502, ISO general-purpose metric screw threads — Gauges and gauging

3 Screw threads

The screw threads shall be either of the following:

- ISO metric threads of size $S0.8 \times 0.2$, complying with the requirements of ISO 1501;
- ISO metric screw threads of sizes M1,0 \times 0,25; M1,2 \times 0,25; M1,4 \times 0,3; M1,6 \times 0,35 or M2,0 \times 0,4, complying with the requirements of ISO 965-3.

The class of fit shall be as given in Table 1.

Table 1 — Class of fit of screw threads

Screw thread	Class of fit		
Screw thread	Nut	Screw	
S0,8 × 0,2	4H6	5h3	
M1,0 × 0,25	5Н	6h or 6g	
M1,2 × 0,25			
M1,4 × 0,3			
M1,6 × 0,35	6Н		
M2,0 × 0,4			

The designation of a screw thread consists of a capital letter indicating the thread series, followed by the value of the nominal diameter and of the pitch, expressed in millimetres, and separated by a Cross (×). The designation of the class of fit consists of a figure indicating the tolerance grade and a letter indicating the tolerance position, capital for nuts and lower case for bolts. The screw thread designation is separated from the class of fit by a dash.