

### SLOVENSKI STANDARD SIST EN ISO 8980-1:2017

01-november-2017

Nadomešča:

SIST EN ISO 8980-1:2004

SIST EN ISO 8980-1:2004/AC:2006

Očesna optika - Nebrušena zglajena stekla očal - 1. del: Specifikacije za enogoriščna in večgoriščna stekla (ISO 8980-1:2017)

Ophthalmic optics - Uncut finished spectacle lenses - Part 1: Specifications for single-vision and multifocal lenses (ISO 8980-1:2017)

### iTeh STANDARD PREVIEW

Augenoptik - Rohkantige fertige Brillengläser Teil 1: Anforderungen an Ein- und Mehrstärkengläser (ISO 8980-1:2017)

#### SIST EN ISO 8980-1:2017

Optique ophtalmique Verres de lunettes finis non détourés 4- Partie 1: Spécifications pour les verres unifocaux et multifocaux (ISO 8980-1:2017)

Ta slovenski standard je istoveten z: EN ISO 8980-1:2017

ICS:

11.040.70 Oftalmološka oprema Ophthalmic equipment

SIST EN ISO 8980-1:2017 en

**SIST EN ISO 8980-1:2017** 

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 8980-1:2017 https://standards.iteh.ai/catalog/standards/sist/68957525-3448-4eaf-b756-0efc4015d7c9/sist-en-iso-8980-1-2017 EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM EN ISO 8980-1

August 2017

ICS 11.040.70

Supersedes EN ISO 8980-1:2004

#### **English Version**

# Ophthalmic optics - Uncut finished spectacle lenses - Part 1: Specifications for single-vision and multifocal lenses (ISO 8980-1:2017)

Optique ophtalmique - Verres de lunettes finis non détourés - Partie 1: Spécifications pour les verres unifocaux et multifocaux (ISO 8980-1:2017)

Augenoptik - Rohkantige fertige Brillengläser - Teil 1: Anforderungen an Ein- und Mehrstärkengläser (ISO 8980-1:2017)

This European Standard was approved by CEN on 26 May 2017.

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, 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: Avenue Marnix 17, B-1000 Brussels

### EN ISO 8980-1:2017 (E)

Contents	Pag
Euronean foreword	

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 8980-1:2017 https://standards.iteh.ai/catalog/standards/sist/68957525-3448-4eaf-b756-0efc4015d7c9/sist-en-iso-8980-1-2017

EN ISO 8980-1:2017 (E)

### **European foreword**

This document (EN ISO 8980-1:2017) 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 February 2018, and conflicting national standards shall be withdrawn at the latest by February 2018.

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 8980-1:2004.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### iTeh STANDARD PREVIEW

Endorsement notice (standards.Iten.ai)

The text of ISO 8980-1:2017 has been approved by CEN as EN ISO 8980-1:2017 without any modification.

https://standards.iteh.ai/catalog/standards/sist/68957525-3448-4eaf-b756-0efc4015d7c9/sist-en-iso-8980-1-2017

**SIST EN ISO 8980-1:2017** 

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 8980-1:2017 https://standards.iteh.ai/catalog/standards/sist/68957525-3448-4eaf-b756-0efc4015d7c9/sist-en-iso-8980-1-2017 **SIST EN ISO 8980-1:2017** 

# INTERNATIONAL STANDARD

ISO 8980-1

Fourth edition 2017-07

### Ophthalmic optics — Uncut finished spectacle lenses —

Part 1: **Specifications for single-vision and multifocal lenses** 

iTeh STOptique ophtalmique — Verres de lunettes finis non détourés —
Partie 1: Spécifications pour les verres unifocaux et multifocaux

<u>SIST EN ISO 8980-1:2017</u> https://standards.iteh.ai/catalog/standards/sist/68957525-3448-4eaf-b756-0efc4015d7c9/sist-en-iso-8980-1-2017



ISO 8980-1:2017(E)

### iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 8980-1:2017</u> https://standards.iteh.ai/catalog/standards/sist/68957525-3448-4eaf-b756-0efc4015d7c9/sist-en-iso-8980-1-2017



### **COPYRIGHT PROTECTED DOCUMENT**

#### © ISO 2017, Published in Switzerland

All rights reserved. Unless otherwise specified, 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 Ch. de Blandonnet 8 • CP 401 CH-1214 Vernier, Geneva, Switzerland Tel. +41 22 749 01 11 Fax +41 22 749 09 47 copyright@iso.org www.iso.org

Co	ntent	S	Page
Fore	eword		iv
1	Scop	e	1
2	Norn	native references	1
3	Terms and definitions		
4	Classification		
=			
5	<b>кеq</b> и 5.1	i <b>rements</b> Reference temperature	
	5.2	Optical requirements	
	0.2	5.2.1 General	
		5.2.2 Back vertex power	
		5.2.3 Direction of the cylinder axis	
		5.2.4 Addition power for multifocal lenses	
		5.2.5 Prismatic power	
		5.2.6 Prism base setting	
	5.3	Geometrical requirements	
		5.3.1 Requirements for size and thickness	
	г 4	5.3.2 Requirements on segment dimensions for multifocal lenses	
	5.4	Orientation requirement for polarizing lenses	
6	Verif	ication methods STANDARD PREVIEW  General	5
	6.1	General	5
	6.2	Verification method for back vertex power	5
	6.3	Verification method for the direction of the cylinder axis	
		6.3.1 General SIST FN ISO 8980-12017	5
		6.3.1 General 6.3.2 Single-vision lenses ISO 8980-1:2017 6.3.3 https://doi.org/10.0000/10.000000000000000000000000000	5 5
	6.4	Verification method for prismatic power 80-1-2017	د
	0.4	6.4.1 General	6
		6.4.2 Single-vision lenses (excluding position-specific single-vision lenses)	
		6.4.3 Position-specific single-vision lenses	
		6.4.4 Multifocal lenses	
	6.5	Verification method for addition power	
		6.5.1 General	
		6.5.2 Procedure	6
	6.6	Verification method for segment size	7
	6.7	Inspection method for material and surface quality	7
7	Marl	king requirements for single-vision lenses	7
•	7.1	Position-specific single-vision lenses	
	7.2	Polarizing lenses	
8	Iden	tification and information	
9		rence to this document	
		formative) Material and surface quality	
ומום	nograpi	ıy	10

ISO 8980-1:2017(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="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 on 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 the following URL: <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>. (standards.iteh.ai)

This document was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee SC 7, *Ophthalmic optics and instruments*.

SIST EN ISO 8980-1:2017

https://standards.iteh.ai/catalog/standards/sist/68957525-3448-4eaf-b756-

This fourth edition cancels and replaces the third edition (ISO 8980-1:2004), which has been technically revised. It also incorporates the Technical Corrigendum ISO 8980-1:2004/Cor.1:2006.

A list of all parts in the ISO 8980 series can be found on the ISO website.

### Ophthalmic optics — Uncut finished spectacle lenses —

### Part 1:

### Specifications for single-vision and multifocal lenses

### 1 Scope

This document specifies requirements and verification methods for the optical and geometrical properties for uncut finished single-vision and multifocal spectacle lenses.

#### 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 7944, Optics and optical instruments — Reference wavelengths

ISO 8429, Optics and optical instruments — Ophthalmology — Graduated dial scale

ISO 8598-1, Optics and optical instruments—Focimeters—Part 1: General purpose instruments (Standards.iteh.al)

ISO 8980-3, Ophthalmic optics — Uncut finished spectacle lenses — Part 3: Transmittance specifications and test methods

SIST EN ISO 8980-1:2017

ISO 13666, Ophthalmic optics — Spectacle lenses — Vocabulary, Special Control of Control

ISO 14889, Ophthalmic optics — Spectacle lenses — Fundamental requirements for uncut finished lenses

ISO 21987, Ophthalmic optics — Mounted spectacle lenses

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 13666 and ISO 21987 apply.

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

- ISO Online browsing platform: available at <a href="http://www.iso.org/obp">http://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>

#### 4 Classification

Uncut finished lenses are classified as follows:

- a) single-vision finished lenses;
- b) multifocal finished lenses;
- c) power-variation finished lenses.