

STN	Očná optika Okuliarové šošovky Základné požiadavky na hotové šošovky s neobrušenými okrajmi (ISO 14889: 2025)	STN EN ISO 14889 19 5023
------------	--	--

Ophthalmic optics - Spectacle lenses - Fundamental requirements for uncut finished lenses (ISO 14889:2025)

Táto norma obsahuje anglickú verziu európskej normy.

This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/25

Obsahuje: EN ISO 14889:2025, ISO 14889:2025

Oznámením tejto normy sa ruší

STN EN ISO 14889 (19 5023) z januára 2014

140896

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2025

Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii v znení neskorších predpisov.

EUROPEAN STANDARD

EN ISO 14889

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2025

ICS 11.040.70

Supersedes EN ISO 14889:2013, EN ISO
14889:2013/A1:2017

English Version

Ophthalmic optics - Spectacle lenses - Fundamental requirements for uncut finished lenses (ISO 14889:2025)

Optique ophtalmique - Verres de lunettes - Exigences
fondamentales relatives aux verres finis non détournés
(ISO 14889:2025)

Augenoptik - Brillengläser - Grundlegende
Anforderungen an rohkantige fertige Brillengläser (ISO
14889:2025)

This European Standard was approved by CEN on 28 April 2025.

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, Türkiye 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

EN ISO 14889:2025 (E)

Contents	Page
European foreword.....	3
Annex ZA (informative) Relationship between this European standard and the General Safety and Performance Requirements of Regulation (EU) 2017/745 aimed to be covered.....	4

European foreword

This document (EN ISO 14889:2025) 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 December 2025, and conflicting national standards shall be withdrawn at the latest by December 2025.

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 14889:2013 and EN ISO 14889:2013/A1:2017.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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, Türkiye and the United Kingdom.

Endorsement notice

The text of ISO 14889:2025 has been approved by CEN as EN ISO 14889:2025 without any modification.

EN ISO 14889:2025 (E)**Annex ZA**
(informative)**Relationship between this European standard and the General Safety and Performance Requirements of Regulation (EU) 2017/745 aimed to be covered**

This European standard has been prepared under M/575 to provide one voluntary means of conforming to the General Safety and Performance Requirements of Regulation (EU) 2017/745 of 5 April 2017 concerning medical devices [O] L 117] and to system or process requirements including those relating to quality management systems, risk management, post-market surveillance systems, clinical investigations, clinical evaluation or post-market clinical follow-up.

Once this standard is cited in the Official Journal of the European Union under that Regulation, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding General Safety and Performance Requirements of that Regulation, and associated EFTA Regulations.

Where a definition in this standard differs from a definition of the same term set out in Regulation (EU) 2017/745, the differences shall be indicated in this Annex Z. For the purpose of using this standard in support of the requirements set out in Regulation (EU) 2017/745, the definitions set out in this Regulation prevail.

Where the European standard is an adoption of an International Standard, the scope of this standard can differ from the scope of the European Regulation that it supports. As the scope of the applicable regulatory requirements differ from nation to nation and region to region, the standard can only support European regulatory requirements to the extent of the scope of the European regulation for medical devices (EU) 2017/745).

NOTE 1 Where a reference from a clause of this standard to the risk management process is made, the risk management process needs to be in compliance with Regulation (EU) 2017/745. This means that risks have to be 'reduced as far as possible', 'reduced to the lowest possible level', 'reduced as far as possible and appropriate', 'removed or reduced as far as possible', 'eliminated or reduced as far as possible', 'removed or minimized as far as possible', or 'minimized', according to the wording of the corresponding General Safety and Performance Requirement.

NOTE 2 The manufacturer's policy for determining **acceptable risk** must be in compliance with General Safety and Performance Requirements 1, 2, 3, 4, 5, 8, 9, 10, 11, 14, 16, 17, 18, 19, 20, 21 and 22 of the Regulation.

NOTE 3 When a General Safety and Performance Requirement does not appear in Table ZA.1, it means that it is not addressed by this European Standard.

Table ZA.1 — Correspondence between this European standard and Annex I of Regulation (EU) 2017/745 [OJ L 117] and to system or process requirements including those relating to quality management systems, risk management, post-market surveillance systems, clinical investigations, clinical evaluation or post-market clinical follow-up

General Safety and Performance Requirements of Regulation (EU) 2017/745	Clause(s)/Subclause(s) of this EN	Remarks/Notes
10.1 (a)	4.3.2, 5.2	4.3.2 and 5.2 of the standard only meet the requirements of Annex I, GSPR 10.1 (a) of the Regulation in respect of flammability.
10.1 (b)	4.3.1	4.3.1 of the standard only meets the requirements of Annex I, GSPR 10.1 (b) of the Regulation in respect of physiological compatibility.
10.1 (f)	4.4, 5.3	4.4 and 5.3 of the standard only meet the requirements of Annex I, GSPR 10.1 (f) of the Regulation in respect of mechanical strength.
14.2 (a)	4.4, 5.3	4.4 and 5.3 of the standard only meet the requirements of Annex I, GSPR 14.2 (a) of the Regulation in respect of mechanical strength.
14.3	4.3.2, 5.2	4.3.2 and 5.2 of the standard only meet the requirements of Annex I, GSPR 14.3 of the Regulation in respect of flammability.
23.1 (a)	6	Clause 6 of the standard only meets the requirements of Annex I, GSPR 23.1 (a) of the Regulation in respect of permanent or non-permanent marking and product identification.
23.1 (b)	6	Clause 6 of the standard only meets the requirements of Annex I, GSPR 23.1 (b) of the Regulation in respect of permanent or non-permanent marking and product identification.
23.2 (c)	6.1.1	6.1.1 of the standard only meets the requirements of Annex I,

EN ISO 14889:2025 (E)

General Safety and Performance Requirements of Regulation (EU) 2017/745	Clause(s)/Subclause(s) of this EN	Remarks/Notes
		GSPR 23.2 (c) of the Regulation in respect of manufacturer's name.

WARNING 1 Presumption of conformity stays valid only as long as a reference to this European standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2 Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

Table ZA.2 — Normative references from Clause 2 of this document and their corresponding European publications

Reference in Clause 2	International Standard edition	Title	Corresponding European Standard Edition
ISO 8980-1	ISO 8980-1:2017	Ophthalmic optics — Uncut finished spectacle lenses — Part 1: Specifications for single-vision and multifocal lenses	EN ISO 8980-1:2017
ISO 8980-2	ISO 8980-2:2017	Ophthalmic optics — Uncut finished spectacle lenses — Part 2: Specifications for power-variation lenses	EN ISO 8980-2:2017
ISO 8980-3	ISO 8980-3:2022	Ophthalmic optics — Uncut finished spectacle lenses — Part 3: Transmittance specifications and test methods	EN ISO 8980-3:2022
ISO 8980-4	ISO 8980-4:2006	Ophthalmic optics — Uncut finished spectacle lenses — Part 4: Specifications and test methods for anti-reflective coatings	EN ISO 8980-4:2006
ISO 13666	ISO 13666:2019	Ophthalmic optics – Spectacle lenses - Vocabulary	EN ISO 13666:2019

Table ZA.3 — Prevailing terms of regulation (EU) 2017/745 for the use of this European standard under that regulation

Term used in this EN	Regulation (EU) 2017/745	Clause(s)/Subclause(s) of this EN	Remarks/Notes
Manufacturer	Article 2 (30)	3.1	This definition is consistent with EU regulation 2017/745. Nevertheless, this definition differs from the definition set in Article 2 (30) of MDR 2017/745. This definition was condensed to match ophthalmic industry practice.

For devices intended by the manufacturer to be for dual use in accordance with Chapter I, Article I, item 3 of Regulation (EU) 2017/745 the following Table ZA.4 details the relevant essential requirements of Regulation (EU) 2016/425 on Personal Protective Equipment and their corresponding clauses of this European Standard. Table ZA.4 however, does not imply any citation in the OJEU under the PPE Regulation and thus does not provide presumption of conformity for the PPE Regulation.

Table ZA.4 — Relevant Essential Health and Safety Requirements from Regulation (EU) 2016/425 Personal Protective Equipment that are addressed by this European Standard (Chapter I, Article I, item 3) of Regulation (EU) 2017/745

Essential Health and Safety from Regulation (EU) 2016/425	Clause(s)/Subclause(s) of this EN	Remarks/Notes
—	—	<p>General</p> <p>A manufacturer may claim that his lenses in addition of being corrective lenses be protective lenses that provide personal eye protection to the user.</p> <p>As a matter of fact, personal eye protection can relate to various kinds of risk, e.g. sunglare (indirect solar radiation^a), radiation other than indirect solar radiation, mechanical impact, etc.</p> <p>Some of those risks call for requirements that go beyond those for lenses the primary function of which is correction of vision. For the purposes of EN ISO 14889, the following applies.</p>

EN ISO 14889:2025 (E)

Essential Health and Safety from Regulation (EU) 2016/425	Clause(s)/Subclause(s) of this EN	Remarks/Notes
—	—	<p>Corrective lenses with filter properties against sunglare (indirect solar radiation)^a</p> <p>In accordance with the European Commission's "Guide to Application of Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on Personal Protective Equipment and repealing Council Directive 89/686/EEC" such lenses are categorized as medical devices, thus falling under Regulation (EU) 2017/745. Compliance with the GSPRs of Regulation (EU) 2017/745, and of EN ISO 14889 as detailed by the above Table ZA.1 implies that the relevant requirements are met.</p>
—	—	<p>Corrective lenses designed to provide protection other than protection against sunglare (indirect solar radiation)^a</p> <p>Where corrective lenses are designed to provide protection other than protection against sunglare (indirect solar radiation), the relevant basic health and safety requirements of Regulation (EU) 2016/425 apply.</p> <p>These are not addressed in EN ISO 14889.</p> <p>Refer to Regulation (EU) 2016/425 and the relevant European Standard(s) on personal eye protection.</p>
<p>^a Indirect solar radiation implies general use for protection against solar radiation but not for direct observation of the sun.</p>		



International Standard

ISO 14889

Ophthalmic optics — Spectacle lenses — Fundamental requirements for uncut finished lenses

*Optique ophtalmique — Verres de lunettes — Exigences
fondamentales relatives aux verres finis non détournés*

**Fourth edition
2025-04**

ISO 14889:2025(en)**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2025
All rights reserved.

ISO publications, in their entirety or in fragments, are owned by ISO. They are licensed, not sold, and are subject to the terms and conditions set forth in the ISO End Customer License Agreement, the License Agreement of the relevant ISO member body, or those of authorized third-party distributors.

Unless otherwise specified or required for its implementation, no part of this ISO publication may be reproduced, distributed, modified, or used in any form or by any means, electronic or mechanical, including photocopying, scanning, recording, or posting on any intranet, internet, or other digital platforms, without the prior written permission of ISO, the relevant ISO member body or an authorized third-party distributor.

This publication shall not be disclosed to third parties, and its use is strictly limited to the license type and purpose specified in the applicable license grant. Unauthorized reproduction, distribution, or use beyond the granted license is prohibited and may result in legal action.

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

ISO 14889:2025(en)**Contents**

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Fundamental requirements for spectacle lenses	1
4.1 Performance	1
4.2 Design	2
4.3 Materials	2
4.3.1 Physiological compatibility	2
4.3.2 Resistance to ignition	2
4.4 Mechanical strength	2
4.5 Transmittance	2
4.5.1 General requirements	2
4.5.2 Additional requirements for lenses intended for road use and driving	2
5 Test methods	3
5.1 General	3
5.2 Resistance to ignition	3
5.2.1 Apparatus	3
5.2.2 Procedure	3
5.3 Test for mechanical strength	4
5.3.1 Apparatus	4
5.3.2 Procedure	4
6 Identification	5
6.1 Identification of the spectacle lens to be stated on the package of each individual spectacle lens or in an accompanying document	5
6.2 Information to be made available	6
Bibliography	7

ISO 14889:2025(en)**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 document 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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee SC 7, *Ophthalmic optics and instruments*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 170, *Ophthalmic optics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This fourth edition cancels and replaces the third edition (ISO 14889:2013), which has been technically revised. It also incorporates the Amendment ISO 14889:2013/Amd.1:2017.

The main changes are as follows:

- dated reference and titles have been brought up-to-date;
- editorial update of the whole document;
- [Figure 1](#) has been updated;
- Terminology has been changed from "inflammability" to "resistance to ignition".

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 www.iso.org/members.html.

Licensing and use terms

The ISO publications, as well as any updates and/or corrections, and any intellectual property or other rights pertaining thereto, are owned by ISO. ISO publications are licensed, not sold. Nothing in this document shall operate to assign or transfer any intellectual property rights from ISO to the user. The ISO publications are protected by copyright law, database law, trademark law, unfair competition law, trade secrecy law, or any other applicable law, as the case may be. Users acknowledge and agree to respect ISO's intellectual property rights in the ISO publications.

The use of ISO publications is subject to the terms and conditions of the applicable licensing agreement.

ISO publications are provided under different licensing agreement types ("License Type") allowing a non-exclusive, non-transferable, limited, revocable right to use/access the ISO publications for one or more of the

ISO 14889:2025(en)

following purposes described below (“Purpose”), which may be internal or external in scope. The applicable Purpose(s) must be captured in the licensing agreement.

a) License Type:

- i. a single registered end-user license (watermarked in the user’s name) for the specified Purpose. Under this license the user cannot share the ISO Publication with anyone, including on a network;
- ii. a network license for the specified Purpose. The network license may be assigned to either unnamed concurrent end-users or named concurrent end-users within the same organization.

b) Purpose:

- i. Internal Purpose: internal use only within user’s organization, including but not limited to own implementation (“Internal Purpose”).

The scope of permitted internal use is specified at the time of purchase or through subsequent agreement with ISO, the ISO member body in the user’s country, any other ISO member body or an authorized third-party distributor, including any applicable internal reproduction rights (such as internal meetings, internal training programs, preparation of certification services, integration or illustration in internal manuals, internal training materials, and internal guidance documents). Each internal use must be explicitly specified in the purchase order, and specific fees and requirements will apply to each permitted use.

- ii. External Purpose: external use, including but not limited to:

- testing services
- inspection services
- certification services
- auditing services
- consulting services
- training services
- software development and other digital platform or software-enabled digital services; and

any other services or activities conducted by the user or users’ organization to third parties, whether for commercial or non-commercial purposes (“External Purpose”).

The scope of permitted external use is specified at the time of purchase or through subsequent agreement with ISO, the ISO member body in user’s country, any other ISO member body or an authorized third-party distributor, including any applicable external reproduction rights (e.g. in publications, products, or services marketed and sold by user/user’s organization). Each external use must be explicitly specified in the purchase order, and specific fees and requirements will apply to each permitted use.

Unless users have been granted reproduction rights according to the above provisions, they are not granted the right to share or sub-license the ISO publications in- or outside their organization for either Purpose. If users wish to obtain additional reproduction rights for ISO publications or their content, users may contact ISO or the ISO member body in their country to explore their options.

In case the user or the user’s organization is granted a license for the External Purpose of providing any of the following services to third parties:

- testing services
- inspection services
- certification services
- auditing services

ISO 14889:2025(en)**— consulting services**

the user or user's organization agrees to verify that the third party receiving such services has obtained a license for its own implementation of the ISO Standard being used from the ISO member body in their country, any other ISO member body, ISO or an authorized third-party distributor. This verification obligation shall be included in the applicable license agreement obtained by the user or user's organization.

The ISO publications shall not be disclosed to third parties, and Users shall use them solely for the purpose specified in the purchase order and/or applicable licensing agreement. Unauthorized disclosure or use of ISO publications beyond the licensed purpose is prohibited and may result in legal action.

Use restrictions

Except as provided for in the applicable License Agreement and subject to a separate license by ISO, the ISO member body in user's country, any other ISO member body or an authorized third-party distributor, users are not granted the right to:

- use the ISO Publications for any purpose other than the Purpose;
- grant use or access rights to the ISO Publications beyond the License Type;
- disclose the ISO Publications beyond the intended Purpose and/or License Type;
- sell, lend, lease, reproduce, distribute, import/export or otherwise commercially exploit ISO Publication(s). In the case of joint standards (such as ISO/IEC standards), this clause shall apply to the respective joint copyright ownership;
- assign or otherwise transfer ownership of the ISO Publications, in whole or in fragments, to any third party.

Regardless of the License Type or Purpose for which users are granted access and use rights for ISO publications, users are not permitted to access or use any ISO publications, in whole or in fragments, for any machine learning and/or artificial intelligence and/or similar purposes, including but not limited to accessing or using them (i) as training data for large language or similar models, or (ii) for prompting or otherwise enabling artificial intelligence or similar tools to generate responses. Such use is only permitted if expressly authorized through a specific license agreement by the ISO member body in the requester's country, another ISO member body, or ISO. Requests for such authorization may be considered on a case-by-case basis to ensure compliance with intellectual property rights. For the avoidance of doubt, you cannot claim the benefit of copyright exception of Article 4 of the Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market, for the purpose of text and data mining on ISO Publications, as ISO hereby opts out of this exception.

If ISO, or the ISO member body in the user's country, has reasonable doubt that users are not compliant with these terms, it may request in writing to perform an audit, or have an audit performed by a third-party auditor, during business hours at user's premises or via remote access.

Ophthalmic optics — Spectacle lenses — Fundamental requirements for uncut finished lenses

1 Scope

This document specifies fundamental requirements for uncut finished spectacle lenses. This document is not applicable to protective spectacle lenses.

This document takes precedence over the corresponding requirements of other standards, if differences exist.

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 8980-1, *Ophthalmic optics — Uncut finished spectacle lenses — Part 1: Specifications for single-vision and multifocal lenses*

ISO 8980-2, *Ophthalmic optics — Uncut finished spectacle lenses — Part 2: Specifications for power-variation lenses*

ISO 8980-3:2022, *Ophthalmic optics — Uncut finished spectacle lenses — Part 3: Transmittance specifications and test methods*

ISO 8980-4, *Ophthalmic optics — Uncut finished spectacle lenses — Part 4: Specifications and test methods for anti-reflective coatings*

ISO 13666, *Ophthalmic optics — Spectacle lenses — Vocabulary*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN