

**Oftalmiline optika. Lahtilõikamata
viimistletud prilliklaasid. Osa 1:
Monofokaalsete ja multifokaalsete
klaaside tehnilised andmed**

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 8980-1:2004 sisaldab Euroopa standardi EN ISO 8980-1:2004+AC:2005+AC:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.05.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 8980-1:2004 consists of the English text of the European standard EN ISO 8980-1:2004+AC:2005+AC:2006.</p> <p>This document is endorsed on 18.05.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: Standardi ISO 8980 käesolev osa esitab nõuded lahtilõikamata viimistletud monofokaalsete ja multifokaalsete klaaside optilistele ning geomeetrilistele omadustele.</p>	<p>Scope: This part of ISO 8980 specifies requirements for the optical and geometrical properties for uncut finished single-vision and multifocal spectacle lenses.</p>
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ICS 11.040.70

Võtmesõnad: geomeetrilised parameetrid, klassifikatsioon, näpitsprillid, oftalmiline instrumentarium, oftalmiline optika, optika, optilised omadused, prilliklaasid, sildiga märgistamine, tehnilised andmed, testimine

English version

**Ophthalmic optics - Uncut finished spectacle lenses - Part 1:
Specifications for single-vision and multifocal lenses (ISO 8980-
1:2004)**

Optique ophtalmique - Verres de lunettes finis non
détourés - Partie 1: Spécifications pour les verres
progressifs (ISO 8980-1:2004)

Augenoptik - Rohkantige fertige Brillengläser - Teil 1:
Anforderungen an Ein- und Mehrstärkengläser (ISO 8980-
1:2004)

This European Standard was approved by CEN on 6 January 2004.

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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 Management Centre has the same status as the official versions.

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Foreword

This document (EN ISO 8980-1:2004) has been prepared by Technical Committee ISO/TC 172 "Optics and optical instruments" 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 August 2004, and conflicting national standards shall be withdrawn at the latest by August 2004.

This document supersedes EN ISO 8980-1:1997.

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

Endorsement notice

The text of ISO 8980-1:2004 has been approved by CEN as EN ISO 8980-1:2004 without any modifications.

NOTE Normative references to International Standards are listed in annex ZA (normative).

Annex ZA
(normative)

**Normative references to international publications
with their relevant European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE Where an International Publication has been modified by common modifications, indicated by (mod.), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN</u>	<u>Year</u>
ISO 7944	1998	Optics and optical instruments - Reference wavelengths	EN ISO 7944	1998
ISO 8429	1986	Optics and optical instruments - Ophthalmology - Graduated dial scale	EN ISO 8429	1996
ISO 8598	1996	Optics and optical instruments - Focimeters	EN ISO 8598	1998
ISO 13666	1998	Ophthalmic optics - Spectacles lenses - Vocabulary	EN ISO 13666	1998

**Ophthalmic optics — Uncut finished
spectacle lenses —**

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

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



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Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Classification	2
5 Requirements	2
6 Test methods	6
7 Identification	8
8 Reference to this part of ISO 8980	8
Annex A (informative) Material and surface quality	9

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 8980-1 was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee SC 7, *Ophthalmic optics and instruments*.

This third edition cancels and replaces the second edition (ISO 8980-1:1996), which has been technically revised.

ISO 8980 consists of the following parts, under the general title *Ophthalmic optics — Uncut finished spectacle lenses*:

- *Part 1: Specifications for single-vision and multifocal lenses*
- *Part 2: Specifications for progressive power lenses*
- *Part 3: Transmittance specifications and test methods*
- *Part 4: Specifications and test methods for anti-reflective coatings*
- *Part 5: Minimum requirements for spectacle lenses claimed to be abrasion-resistant*

Ophthalmic optics — Uncut finished spectacle lenses —

Part 1: Specifications for single-vision and multifocal lenses

1 Scope

This part of ISO 8980 specifies requirements for the optical and geometrical properties for uncut finished single-vision and multifocal spectacle lenses.

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 7944, *Optics and optical instruments — Reference wavelengths*

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

ISO 8598, *Optics and optical instruments — Focimeters*

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

ISO 14889:2003, *Ophthalmic optics — Spectacle lenses — Fundamental requirements for uncut finished lenses*

3 Terms and definitions

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

3.1

focimeter, focal point on axis

FOA focimeter

focimeter in which the focal point of the focimeter remains on the axis of the focimeter when the lens under test is measured at a point of the lens where prism is not zero

See Figure 1.

NOTE Examples of this design include all manual focusing focimeters and some automatic focimeters.

3.2

focimeter, infinite on axis

IOA focimeter

focimeter in which the collimated beam coincides with the focimeter axis and the focal point of the focimeter goes off the axis of the focimeter when the lens under test is measured at a point of the lens where prism is not zero