



**SLOVENSKI STANDARD**  
**SIST EN ISO 8596:2000**  
**01-januar-2000**

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Ophthalmic optics - Visual acuity testing - Standard optotype and its presentation (ISO 8596:1994)

Augenoptik - Sehschärfepfung - Das Normsehzeichen und seine Darbietung (ISO 8596:1994)

**ITeH STANDARD PREVIEW**  
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Optique ophtalmique - Mesure de l'acuité visuelle - Optotype normalisé et sa présentation (ISO 8596:1994)

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**Ta slovenski standard je istoveten z: EN ISO 8596:1996**

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**ICS:**

11.040.70      Oftalmološka oprema      Ophthalmic equipment

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**en**

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EUROPEAN STANDARD

EN ISO 8596

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 1996

ICS 11.040.70

Descriptors: See ISO document

English version

Ophthalmic optics - Visual acuity testing -  
Standard optotype and its presentation  
(ISO 8596:1994)

Optique ophtalmique - Mesure de l'acuité  
visuelle - Optotype normalisé et sa  
présentation (ISO 8596:1994)

Augenoptik -  
Normsehzeichen  
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Sehschärfeprüfung - Das  
und seine Darbietung

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This European Standard was approved by CEN on 1996-02-16. 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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

## CEN

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

## Foreword

The text of the International Standard from ISO/TC 172 "Optics and optical instruments " of the International Organization for Standardization (ISO) has been taken over as a European Standard by the 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 1996, and conflicting national standards shall be withdrawn at the latest by August 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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

## Endorsement notice

The text of the International Standard ISO 8596:1994 was approved by CEN as a European Standard without any modification.

NOTE: Normatives references to International Standards are listed in Annex ZA (normative).

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## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated references, 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.

publication/year	title	EN/year
ISO 8597: 1994	Optics and optical instruments - Visual acuity testing - Method of correlating optotypes	EN ISO 8597: 1996

[SIST EN ISO 8596:2000](https://standards.iteh.ai/catalog/standards/sist/cfc82e32-f11a-4611-a003-a07ba5042604/sist-en-iso-8596-2000)  
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INTERNATIONAL  
STANDARD

**ISO**  
**8596**

First edition  
1994-02-15

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**Ophthalmic optics — Visual acuity  
testing — Standard optotype and its  
presentation**

**iTeh STANDARD PREVIEW**

*(Optique ophtalmique — Mesure de l'acuité visuelle — Optotype  
normalisé et sa présentation)*

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Reference number  
ISO 8596:1994(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.

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.

International Standard ISO 8596 was prepared by Technical Committee ISO/TC 172, *Optics and optical instruments*, Sub-Committee SC 7, *Ophthalmic, endoscopic, metrological instruments and test methods*.

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# Ophthalmic optics — Visual acuity testing — Standard optotype and its presentation

## 1 Scope

This International Standard specifies a range of Landolt ring optotypes and describes a method for measuring distance visual acuity under daylight conditions for the purposes of certification or licensing.

It is neither intended as a standard for clinical measurements nor for the certification of blindness or partial sight.

NOTE 1 For the purposes of measuring visual acuity, the standard optotype, or other optotypes which have been correlated with the standard optotype (as described in ISO 8597), should be used.

For clinical use, see the recommendation prepared by the Visual Functions Committee of the International Council of Ophthalmology (see clause 2).

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 3:1973, *Preferred numbers — Series of preferred numbers*.

ISO 8597:—<sup>1)</sup>, *Optics and optical instruments — Visual acuity testing — Method of correlating optotypes*.

Consilium Ophthalmologicum Universale — Visual Functions Committee, *Visual Acuity Measurement Standard*. Ital. J. Ophthalmol. II/I (1988), pp. 5-19.

## 3 Standard optotype

The standard optotype shall be the Landolt ring as detailed in table 1 and as shown in figure 1.

The visual acuity grade 1 shall be represented by a Landolt ring whose outer diameter,  $d$ , subtends an angle of 5' and whose width, as well as the gap in its continuity, subtends an angle of 1' at the designated viewing distance.

The Landolt ring shall be capable of being presented in eight different positions (see 6.2).

## 4 Visual acuity grades and standard optotype grades

The visual acuity grades shall be as given in table 1 and shall be expressed as the reciprocal of the gap width measured in minutes of arc.

The acuity values for the size of the optotype shall be graduated logarithmically. The quotient of the size of a test type and that of the next smaller one shall be:

$$\sqrt[10]{10} = 1,2589 \text{ (series of preferred numbers R10 from ISO 3).}$$

Optotypes of acuity grades 0,05, 0,06, 0,08 and 2,0 may be omitted if necessary. Addition of further acuity grades is permitted.

1) To be published.