Optika ja optikariistad. Fosimeetrid

Optics and optical instruments - Focimeters

EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 8598:1999 sisaldab Euroopa standardi EN ISO 8598:1998 ingliskeelset teksti. Käesolev dokument on jõustatud 12.12.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN ISO 8598:1999 consists of the English text of the European standard EN ISO 8598:1998. This document is endorsed on 12.12.1999 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: Käesolev rahvusvaheline standard esitab nõuded pidevnäiduga fosimeetritele ja digitaalselt ümardavatele fosimeetritele, mille abil saab mõõta sfääriliste ja astigmaatiliste klaaside, k.a. klaasid, mis on raamidesse monteeritud, ning kontaktläätsede kiirdpunktijõude ja prismaatilisi jõude ning mille abil saab klaase orienteerida ja märgistada.	**Scope:**

ICS 11.040.70

Võtmesõnad: frontofokomeetrid, nõuded tootmisele, optika, optiline instrumentaarium, optilised mõõteriistad, tehnilised andmed, testimine, täpsus

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 8598

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Descriptors: Optics, focimeters.

English version

Optics and optical instruments

Focimeters

(ISO 8598 : 1996)

Optique et instruments d'optique – Frontofocomètres (ISO 8598 : 1996)

Optik und optische Instrumente – Scheitelbrechwert-Meßgeräte (ISO 8598 : 1996)

This European Standard was approved by CEN on 1998-06-22.

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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

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

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Foreword

International Standard

ISO 8598 : 1996 Optics and optical instruments – Focimeters,

which was prepared by ISO/TC 172 'Optics and optical instruments' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 170 'Ophthalmic optics', the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by January 1999 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 8598 : 1996 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

1 Scope

This International Standard specifies requirements for continuously indicating focimeters and digitally rounding focimeters with which the vertex powers and prismatic powers of spherical and astigmatic lenses, including lenses mounted in frames and contact lenses, can be measured and with which lenses can be orientated and marked.

NOTE 1 For the measurement of vertex powers of contact lenses, see ISO 9337:—[1], *Optics and optical instruments — Contact lenses — Determination of back vertex power.*

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 7944:—[2], *Optics and optical instruments — Reference wavelengths.*

ISO 8429:1986, *Optics and optical instruments — Ophthalmology — Graduated dial scale.*

ISO 9342:—[1], *Optics and optical instruments — Test lenses for the calibration of focimeters.*

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1 focimeter: Instrument that is used to measure vertex powers and prismatic effects of spectacle and contact lenses, to orientate and mark uncut lenses, and to verify the correct mounting of lenses in spectacles frames.

3.2 continuously indicating focimeter: Focimeter with a continuous scale.

3.3 digitally rounding focimeter: Focimeter which displays measured values rounded to the nearest incremental value.

3.4 lens support: Aperture on the instrument against which the lens or the contact lens is placed for measurement.

NOTE 2 The focimeter measures the vertex power relative to the surface placed against the lens support.

3.5 adjusting rail: Movable rail or bar used as the reference axis for spectacles during measurement, which is aligned perpendicularly to the optical axis of the focimeter and parallel to the axis direction 0° to 180°.

NOTE 3 Also called the lens table or frame rest.

3.6 principal meridians: The two meridians of an astigmatic power lens (see 3.10) containing the optical axis; one of the meridians has maximum refractive

1) To be published.

2) To be published. (Revision of ISO 7944:1984)