ICS 33.180.01 SLOVENSKÁ TECHNICKÁ NORMA Apríl 2023

STN	**Dosky s optickými obvodmi Základné skúšobné a meracie postupy Časť 2-5: Skúška ohybnosti ohybných optoelektrických obvodov**	**STN EN IEC 62496-2-5** 35 9285

Optical circuit boards - Basic test and measurement procedures - Part 2-5: Flexibility test for flexible opto-electric circuits

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. 03/23

Obsahuje: EN IEC 62496-2-5:2023, IEC 62496-2-5:2022

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 62496-2-5

January 2023

ICS 33.180.01

English Version

Optical circuit boards - Basic test and measurement procedures - Part 2-5: Flexibility test for flexible opto-electric circuits (IEC 62496-2-5:2022)

Cartes à circuits optiques - Procédures fondamentales d'essais et de mesures - Partie 2-5: Essai de flexibilité pour les circuits optoélectriques souples (IEC 62496-2-5:2022)

Optische Leiterplatten - Grundlegende Prüf- und Messverfahren - Teil 2-5: Biegsamkeitstest für biegsame opto-elektrische Schaltkreise (IEC 62496-2-5:2022)

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 62496-2-5:2023 (E)

European foreword

The text of document 86/605/FDIS, future edition 1 of IEC 62496-2-5, prepared by IEC/TC 86 "Fibre optics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62496-2-5:2023.

The following dates are fixed:

•	latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop) 2023-10-11
•	latest date by which the national standards conflicting with the document have to be withdrawn	(dow) 2026-01-11

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Endorsement notice

The text of the International Standard IEC 62496-2-5:2022 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standard indicated:

IEC 60793-2-10 NOTE Harmonized as EN IEC 60793-2-10

IEC 60793-2-20 NOTE Harmonized as EN 60793-2-20

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60068-1	-	Environmental testing - Part 1: General and guidance	EN 60068-1	-
IEC 60793-2	series	Optical fibres - Part 2: Product specifications	EN IEC 60793-2	series
IEC 62496-2-1	-	Optical circuit boards - Part 2-1: Measurements - Optical attenuation and isolation	EN 62496-2-1	-
ISO 5626	1993	Paper - determination of folding endurance	-	-

IEC 62496-2-5

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INTERNATIONAL STANDARD

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Optical circuit boards – Basic test and measurement procedures – Part 2-5: Flexibility test for flexible opto-electric circuits

Cartes a circuits optiques – Procédures fondamentales d'essais et de mesures – Partie 2-5: Essai de flexibilité pour les circuits optoélectriques souples

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FOREWORD

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IEC 62496-2-5 has been prepared by IEC technical committee 86: Fibre optics. It is an International Standard.

The text of this International Standard is based on the following documents:

Draft	Report on voting
86/605/FDIS	86/609/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

A list of all parts in the IEC 62496 series, published under the general title *Optical circuit boards*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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OPTICAL CIRCUIT BOARDS – BASIC TEST AND MEASUREMENT PROCEDURES –

Part 2-5: Flexibility test for flexible opto-electric circuits

1 Scope

This part of IEC 62496 defines a test method for folding flexibility inspection of flexible opto-electric circuits with a flexibility tester endurance tester and presents a guideline for a step stress test method for finding the predetermined minimum mechanical folding radii below which the flexible opto-electric circuits can be damaged by intended folding distortion. Here, test samples are used instead of products for the flexibility test of their flexible opto-electric circuits, and the test samples have the same material, layer structure, processing technology and equipment as the products.

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.

IEC 60068-1, *Environmental testing – Part 1: General and guidance*

IEC 60793-2 (all parts), *Optical fibres – Part 2: Product specifications*

IEC 62496-2-1, *Optical circuit boards – Part 2-1: Measurements – Optical attenuation and isolation*

ISO 5626:1993, *Paper – Determination of folding endurance*