



SLOVENSKI STANDARD

SIST EN 60794-2-50:2008

01-september-2008

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Optical fibre cables - Part 2-50: Indoor optical fibre cables - Family specification for simplex and duplex cables for use in terminated cable assemblies (IEC 60794-2-50:2008)

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Lichtwellenleiterkabel - Teil 2-50: LWL-Innenkabel - Familienspezifikation für Simplex- und Duplexkabel für den Einsatz als Patchkabel (IEC 60794-2-50:2008)

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Câbles à fibres optiques - Partie 2-50: Câbles intérieurs - Spécification de famille pour les câbles simplex et duplex utilisés dans les ensembles de câbles équipés (CEI 60794-2-50:2008)

Ta slovenski standard je istoveten z: EN 60794-2-50:2008

ICS:

33.180.10 [U] cã } æÄ|æ } æÄ Á æ|ã Fibres and cables

SIST EN 60794-2-50:2008

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60794-2-50

June 2008

ICS 33.180.10

English version

**Optical fibre cables -
Part 2-50: Indoor cables -
Family specification for simplex and duplex cables
for use in terminated cable assemblies
(IEC 60794-2-50:2008)**

Câbles à fibres optiques -
Partie 2-50: Câbles intérieurs -
Spécification de famille pour
les câbles simplex et duplex utilisés
dans les ensembles de câbles équipés
(CEI 60794-2-50:2008)

Lichtwellenleiterkabel -
Teil 2-50: LWL-Innenkabel -
Familienspezifikation
für Simplex- und Duplexkabel
für den Einsatz als Patchkabel
(IEC 60794-2-50:2008)

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SIST EN 60794-2-50:2008

This European Standard was approved by CENELEC on 2008-06-01. CENELEC 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 CENELEC 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 CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 86A/1204/FDIS, future edition 1 of IEC 60794-2-50, prepared by SC 86A, Fibres and cables, of IEC TC 86, Fibre optics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60794-2-50 on 2008-06-01.

This standard is to be used in conjunction with EN 60794-1-1, EN 60794-1-2 and EN 60794-2.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2009-03-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2011-06-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60794-2-50:2008 was approved by CENELEC as a European Standard without any modification.

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Where a standard cited below belongs to the EN 50000 series, the European Standard applies instead of the relevant International Standard.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-14	- ¹⁾	Environmental testing - Part 2: Tests - Test N: Change of temperature	EN 60068-2-14	1999 ²⁾
IEC 60189-1	- ¹⁾	Low-frequency cables and wires with PVC insulation and PVC sheath - Part 1: General test and measuring methods	-	-
IEC 60793-1-1	- ¹⁾	Optical fibres - Part 1-1: Measurement methods and test procedures - General and guidance	EN 60793-1-1	2008 ²⁾
IEC 60793-1-20	- ¹⁾	Optical fibres - Part 1-20: Measurement methods and test procedures - Fibre geometry	EN 60793-1-20	2002 ²⁾
IEC 60793-1-21	- ¹⁾	Optical fibres - Part 1-21: Measurement methods and test procedures - Coating geometry	EN 60793-1-21	2002 ²⁾
IEC 60793-1-40 (mod)	- ¹⁾	Optical fibres - Part 1-40: Measurement methods and test procedures - Attenuation	EN 60793-1-40	2003 ²⁾
IEC 60793-1-46	- ¹⁾	Optical fibres - Part 1-46: Measurement methods and test procedures - Monitoring of changes in optical transmittance	EN 60793-1-46	2002 ²⁾
IEC 60793-2-10	- ¹⁾	Optical fibres - Part 2-10: Product specifications - Sectional specification for category A1 multimode fibres	EN 60793-2-10	2007 ²⁾
IEC 60793-2-50	- ¹⁾	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN 60793-2-50	200X ³⁾
IEC 60794-1-1	- ¹⁾	Optical fibre cables - Part 1-1: Generic specification - General	EN 60794-1-1	2002 ²⁾
IEC 60794-1-2	- ¹⁾	Optical fibre cables - Part 1-2: Generic specification - Basic optical cable test procedures	EN 60794-1-2	2003 ²⁾
IEC 60794-2	- ¹⁾	Optical fibre cables - Part 2: Indoor cables - Sectional specification	EN 60794-2	2003 ²⁾

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

³⁾ To be ratified.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60811-1-3	- ¹⁾	Insulating and sheathing materials of electric and optical cables - Common test methods - Part 1-3: General application - Methods for determining the density - Water absorption tests - Shrinkage test	EN 60811-1-3	1995 ²⁾
IEC 60811-1-4	- ¹⁾	Insulating and sheathing materials of electric and optical cables - Common test methods - Part 1-4: General application - Tests at low temperature	EN 60811-1-4	1995 ²⁾
ISO/IEC 11801	- ¹⁾	Information technology - Generic cabling for customer premises	EN 50173-1 ⁴⁾ and EN 50173-2 ⁵⁾	- ¹⁾

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⁴⁾ The title of EN 50173-1 is: *Information technology – Generic cabling systems – Part 1: General requirements.*

⁵⁾ The title of EN 50173-2 is: *Information technology – Generic cabling systems – Part 2: Office premises.*



IEC 60794-2-50

Edition 1.0 2008-04

INTERNATIONAL STANDARD

Optical fibre cables –

Part 2-50: Indoor cables – Family specification for simplex and duplex cables
for use in terminated cable assemblies

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INTERNATIONAL
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COMMISSION

PRICE CODE



CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references	6
3 Terms and definitions	7
4 Construction	7
4.1 General.....	7
4.2 Optical fibres and primary coating	7
4.3 Buffer	7
4.4 Tube.....	8
4.5 Strength and anti-buckling members	8
4.6 Sheath	8
4.7 Sheath marking	8
4.8 Examples of cable constructions	8
5 Tests	8
5.1 Dimensions	9
5.2 Mechanical requirements.....	9
5.2.1 Tensile performance	9
5.2.2 Crush	9
5.2.3 Impact	10
5.2.4 Repeated bending	10
5.2.5 Bend.....	10
5.2.6 Torsion	11
5.2.7 Bend at low temperature	11
5.2.8 Kink.....	11
5.2.9 Sheath pull-off force	11
5.2.10 Buffered fibre movement in compression	12
5.3 Environmental requirements	12
5.3.1 Temperature cycling	12
5.3.2 Sheath shrinkage.....	12
5.4 Transmission requirements	13
5.5 Fire performance	13
Annex A (informative) Examples of some types of cable construction	14
Annex B (normative) METHOD E21 – Sheath pull-off force for optical fibre cable for use in patch cords	17
Annex C (normative) METHOD F11 – Sheath shrinkage for optical fibre cable for use in patchcords	22
Annex D (normative) METHOD E22 – Buffered fibre movement under compression in optical fibre cables for use in patchcords	24
Annex E (normative) METHOD F12 – Temperature cycling for optical fibre cable for use in patchcords	26
Annex F (normative) – Guidance on the selection of tests applicable to optical fibre cables for use in patchcords	28
Bibliography.....	31
Figure A.1 – Simplex loose non-buffered fibre cable	14
Figure A.2 – Simplex ruggedized fibre cable	14

Figure A.3 – Duplex loose non-buffered fibre cable	14
Figure A.4 – Duplex ruggedized fibre cable	15
Figure A.5 – Duplex ruggedized fibre zip cord	15
Figure A.6 – Duplex ruggedized flat cable	15
Figure A.7 – Duplex ruggedized round cable	16
Figure B.1 – Schematic of test arrangement	19
Figure B.2 – Example of pulling jig	20
Figure B.3 – Cable sample preparation	21
Figure D.1 – Test set up for fibre movement under compression	25
Table 1 – Dimensions of buffered fibres	8
Table 2 – Temperature cycling severities	12
Table F.1 – Cable test method summary	28
Table F.2 – Cable testing agreement	30

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SIST EN 60794-2-50:2008

<https://standards.iteh.ai/catalog/standards/sist/8cf40aba-fa32-4671-a40b-29daa85ee3fe/sist-en-60794-2-50-2008>

INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL FIBRE CABLES –

**Part 2-50: Indoor cables –
Family specification for simplex and duplex cables
for use in terminated cable assemblies**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60794-2-50 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

This standard cancels and replaces IEC/PAS 60794-2-50 published in 2004. This first edition constitutes a technical revision.

This standard is to be used in conjunction with IEC 60794-1-1, IEC 60794-1-2 and IEC 60794-2.

The text of this standard is based on the following documents:

FDIS	Report on voting
86A/1204/FDIS	86A/1223/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of IEC 60794 series, under the general title *Optical fibre cables*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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

A bilingual version of this publication will be issued at a later date.

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OPTICAL FIBRE CABLES –

Part 2-50: Indoor cables – Family specification for simplex and duplex cables for use in terminated cable assemblies

1 Scope

This part of IEC 60794 is a family specification that covers requirements for simplex and duplex optical fibre cables for use in terminated cable assemblies or for termination with optical fibre passive components.

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.

They complete the normative references already listed in the generic specification (IEC 60794-1-1 and IEC 60794-1-2) or in the sectional specification (IEC 60794-2 series).

IEC 60068-2-14, *Environmental testing – Part 2: Tests. Test N: Change of temperature*

IEC 60189-1, *Low-frequency cables and wires with PVC insulation and PVC sheath – Part 1: General test and measuring methods*

IEC 60793-1-1, *Optical fibres – Part 1-1: Measurement methods and test procedures – General and guidance*

IEC 60793-1-20, *Optical fibres – Part 1-20: Measurement methods and test procedures – Fibre geometry*

IEC 60793-1-21, *Optical fibres – Part 1-21: Measurement methods and test procedures – Coating geometry*

IEC 60793-1-40, *Optical fibres – Part 1-40: Measurement methods and test procedures – Attenuation*

IEC 60793-1-46, *Optical fibres – Part 1-46: Measurement methods and test procedures – Monitoring of changes in optical transmittance*

IEC 60793-2-10, *Optical fibres – Part 2-10: Product specifications – Sectional specification for category A1 multimode fibres*

IEC 60793-2-50, *Optical fibres – Part 2-50: Product specifications – Sectional specification for class B single-mode fibres*

IEC 60794-1-1, *Optical fibre cables – Part 1-1: Generic specification – General*

IEC 60794-1-2, *Optical fibre cables – Part 1-2: Generic specification – Basic optical cable test procedures*