SVENSK STANDARD SS-EN 60794-2-20

Fastställd	Utgåva	Sida	Ansvarig kommitté
2014-08-20	3	1 (1+25)	SEK TK 86

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Optokablar – Del 2-20: Inomhuskablar – Familjespecifikation för flerfiberkablar vid användning som fördelningskablar

Optical fibre cables – Part 2-20: Indoor cables – Family specification for multi-fibre optical cables

Som svensk standard gäller europastandarden EN 60794-2-20:2014. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60794-2-20:2014.

Nationellt förord

Europastandarden EN 60794-2-20:2014

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 60794-2-20, Third edition, 2013 - Optical fibre cables - Part 2-20: Indoor cables - Family specification for multi-fibre optical cables**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden ska användas tillsammans med SS-EN 60794-1-1, SS-EN 60794-1-2 och SS-EN 60794-2.

Tidigare fastställd svensk standard SS-EN 60794-2-20, utgåva 2, 2010, gäller ej fr o m 2016-12-10.

ICS 33.180.01

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60794-2-20

May 2014

ICS 33.180.01

Supersedes EN 60794-2-20:2010

English Version

Optical fibre cables - Part 2-20: Indoor cables - Family specification for multi-fibre optical cables (IEC 60794-2-20:2013)

Optical fibre cables - Part 2-20: Indoor cables - Family specification for multi-fibre optical cables
(CEI 60794-2-20:2013)

Lichtwellenleiterkabel - Teil 2-20: LWL-Innenkabel - Familienspezifikation für Mehrfaser-Lichtwellenleiterkabel
(IEC 60794-2-20:2013)

This European Standard was approved by CENELEC on 2013-12-10. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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Ref. No. EN 60794-2-20:2014 E

SEK Svensk Elstandard

Foreword

The text of document 86A/1513/FDIS, future edition 3 of IEC 60794-2-20, prepared by SC 86A, "Fibres and cables", of IEC TC 86, "Fibre optics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60794-2-20:2014.

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)	2014-11-16
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2016-12-10

This document supersedes EN 60794-2-20:2010.

EN 60794-2-20:2014 includes the following significant technical changes with respect to EN 60794-2-20:2010:

• removal of Annex C;

• reference to the most recent fibre standards;

• reference to the new series EN 60794-1-2X.

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

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 60794-2-20:2013 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 standards indicated:

IEC 60654 (Series)	NOTE	Harmonized as EN 60654 (Series) (not modified).
IEC 60721-1	NOTE	Harmonized as EN 60721-1 (not modified).
IEC 60721-3-3	NOTE	Harmonized as EN 60721-3-3 (not modified).
IEC 61000-6-2	NOTE	Harmonized as EN 61000-6-2 (not modified).
IEC 61326 (Series)	NOTE	Harmonized as EN 61326 (Series) (not modified).
IEC 61918	NOTE	Harmonized as EN 61918 (modified).

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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.

To be used together with the Annexes ZA of EN 60794-1-1 and EN 60794-1-2.

Publication	Year	Title	EN/HD	Year
IEC 60189-1		Low-frequency cables and wires with PVC insulation and PVC sheath - Part 1: General test and measuring methods	-	-
IEC 60304		Standard colours for insulation for low-frequency cables and wires	HD 402 S2	
IEC 60793-1-20		Optical fibres - Part 1-20: Measurement methods and test procedures - Fibre geometry	EN 60793-1-20	
IEC 60793-1-21		Optical fibres - Part 1-21: Measurement methods and test procedures - Coating geometry	EN 60793-1-21	
IEC 60793-2-10		Optical fibres - Part 2-10: Product specifications - Sectional specification for category A1 multimode fibres	EN 60793-2-10	
IEC 60793-2-50 + corr. January		Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN 60793-2-50	
IEC 60794-1-1 + corr. January		Optical fibre cables - Part 1-1: Generic specification - General	EN 60794-1-1	
IEC 60794-1-2		Optical fibre cables - Part 1-2: Generic specification - Cross reference table for optical cable test procedures	EN 60794-1-2	
IEC 60794-1-20		Optical fibre cables - Part 1-20: Generic specification - Basic optical cable test procedures - General and Definitions	FprEN 60794-1-20	
IEC 60794-1-22		Optical fibre cables - Part 1-22: Generic specification - Basic optical cable test procedures - Environmental test methods	EN 60794-1-22	
IEC 60794-1-23		Optical fibre cables - Part 1-23: Generic specification - Basic optical cable test procedures - Cable element test methods	EN 60794-1-23	
IEC 60794-2	2002	Optical fibre cables - Part 2: Indoor cables - Sectional specification	EN 60794-2	2003
IEC 60794-3	2001	Optical fibre cables - Part 3: Sectional specification - Outdoor cables	EN 60794-3	2002

IEC 60811-202	Electric and optical fibre cables - Test methods for non-metallic materials - Part 202: General tests - Measurement of thickness of non-metallic sheath	EN 60811-202	
IEC 60811-203	Electric and optical fibre cables - Test methods for non-metallic materials - Part 203: General tests - Measurement of overall dimensions	EN 60811-203	
IEC 60811-504	Electric and optical fibre cables - Test methods for non-metallic materials - Part 504: Mechanical tests - Bending tests at low temperature for insulation and sheaths	EN 60811-504	
IEC/TR 62222	Fire performance of communication cables installed in buildings	-	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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OPTICAL FIBRE CABLES –

Part 2-20: Indoor cables – Family specification for multi-fibre optical cables

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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8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60794-2-20 has been prepared by sub-committee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

This third edition cancels and replaces the second edition published in 2008 and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

– removal of Annex C;
– reference to the most recent fibre standards;
– reference to the new series IEC 60794-1-2X.

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/1513/FDIS	86A/1549/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, published 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 stability 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.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

OPTICAL FIBRE CABLES –

Part 2-20: Indoor cables – Family specification for multi-fibre optical cables

1 Scope

This part of IEC 60794 is a family specification covering multi-fibre optical cables for indoor use. The requirements of the sectional specification IEC 60794-2 are applicable to cables covered by this standard. Annex B contains a Blank Detail Specification and general guidance in case the cables are intended to be used in installation governed by the MICE table of ISO/IEC 24702 (Industrial premises) [11][1].

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE These reference complete the normative references already listed in the generic specification (IEC 60794-1-1 and IEC 60794-1-2).

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

IEC 60304, *Standard colours for insulation for low-frequency cables and wires*

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 60793-2-10, *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*

IEC 60794-1-20, *Optical fibre cables – Part 1-20: Generic specification – Basic optical cable test procedures – General and definitions*[2]

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1 Figures in square brackets refer to the Bibliography.

2 To be published.

IEC 60794-1-22, *Optical fibre cables – Part 1-22: Generic specification – Basic optical cable test procedures – Environmental test methods*

IEC 60794-1-23, *Optical fibre cables – Part 1-23: Generic specification – Basic optical cable test procedures – Cable element test methods*

IEC 60794-2:2002, *Optical fibre cables – Part 2: Indoor cables – Sectional specification*

IEC 60794-3:2001, *Optical fibre cables – Part 3: Sectional specification – Outdoor cables*

IEC 60811-202, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 202: General tests – Measurement of thickness of non-metallic sheath*

IEC 60811-203, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 203: General tests – Measurement of overall dimensions.*

IEC 60811-504, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 504: Mechanical tests – Bending tests at low temperature for insulation and sheaths*

IEC/TR 62222, *Fire performance of communication cables installed in buildings*