

STN	Optické káble Časť 6-10: Vnútorne/vonkajšie káble Skupinová špecifikácia univerzálnych vnútorných/vonkajších káblov	STN EN IEC 60794-6-10 35 9223
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Optical fibre cables - Part 6-10: Indoor-outdoor cables - Family specification for universal indoor-outdoor cables

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. 05/21

Obsahuje: EN IEC 60794-6-10:2020, IEC 60794-6-10:2020

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**Optical fibre cables - Part 6-10: Indoor-outdoor cables - Family
specification for universal indoor-outdoor cables
(IEC 60794-6-10:2020)**

Câbles à fibres optiques - Partie 6-10 : Câbles
intérieurs/extérieurs - Spécification de famille pour les
câbles intérieurs/extérieurs universels
(IEC 60794-6-10:2020)

Lichtwellenleiterkabel - Teil 6-10: Innen-/Außenkabel -
Familienspezifikation für ein universelles Innen-
/Außenkabel
(IEC 60794-6-10:2020)

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EN IEC 60794-6-10:2020 (E)**European foreword**

The text of document 86A/2036/FDIS, future edition 1 of IEC 60794-6-10, 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 IEC 60794-6-10:2020.

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) 2021-08-03
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-11-03

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

IEC 60794-1-219	NOTE	Harmonized as EN IEC 60794-1-219 ¹
IEC 60794-5-10	NOTE	Harmonized as EN 60794-5-10
IEC 61753-1	NOTE	Harmonized as EN IEC 61753-1

¹ To be published. Stage at the time of publication: prEN IEC 60794-1-219:2020.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60332-1	series	Tests on electric and optical fibre cables under fire conditions - Part 1: Test for vertical flame propagation for a single insulated wire or cable	EN 60332-1	series
IEC 60332-3	series	Tests on electric and optical fibre cables under fire conditions - Part 3: Test for vertical flame spread of vertically-mounted bunched wires or cables	EN IEC 60332-3	series
IEC 60754-2	2011	Test on gases evolved during combustion of materials from cables - Part 2: Determination of acidity (by pH measurement) and conductivity	EN 60754-2	2014
IEC 60793-2	-	Optical fibres - Part 2: Product specifications - General	EN IEC 60793-2	-
IEC 60793-2-10	-	Optical fibres - Part 2-10: Product specifications - Sectional specification for category A1 multimode fibres	EN IEC 60793-2-10	-
IEC 60793-2-50	-	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN IEC 60793-2-50	-
IEC 60794-1-1	-	Optical fibre cables - Part 1-1: Generic specification - General	EN 60794-1-1	-
IEC 60794-1-21	-	Optical fibre cables - Part 1-21: Generic specification - Basic optical cable test procedures - Mechanical tests methods	EN 60794-1-21	-
IEC 60794-1-22	2017	Optical fibre cables - Part 1-22: Generic specification - Basic optical cable test procedures - Environmental test methods	EN IEC 60794-1-22	2018

EN IEC 60794-6-10:2020 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60794-1-23	-	Optical fibre cables - Part 1-23: Generic specification - Basic optical cable test procedures - Cable element test methods	EN IEC 60794-1-23	-
IEC 60794-1-24	-	Optical fibre cables - Part 1-24: Generic specification - Basic optical cable test procedures - Electrical test methods	EN 60794-1-24	-
IEC 60794-1-31	2018	Optical fibre cables - Part 1-31: Generic specification - Optical cable elements - Optical fibre ribbon	EN IEC 60794-1-31	2018
IEC 60794-1-215	-	Optical fibre cables - Part 1-215: Generic specification - Basic optical cable test procedures - Environmental test methods - Cable external freezing test, Method F15	EN IEC 60794-1-215	-
IEC 60794-2	series	Optical fibre cables - Part 2: Indoor cables	EN 60794-2	series
IEC 60794-2	-	Optical fibre cables - Part 2: Indoor cables - Sectional specification	EN 60794-2	-
IEC 60794-3	series	Optical fibre cables - Part 3: Outdoor cables	EN 60794-3	series
IEC 60794-3-10	2015	Optical fibre cables - Part 3-10: Outdoor cables - Family specification for duct, directly buried and lashed aerial optical telecommunication cables	EN 60794-3-10	2015
IEC 60794-6	2020	Optical fibre cables - Part 6: Indoor-outdoor cables - Sectional specification for indoor-outdoor cables	-	-
IEC 60811-202	2012	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	2012
+ A1	2017		+ A1	2017
IEC 60811-203	2012	Electric and optical fibre cables - Test methods for non-metallic materials - Part 203: General tests - Measurement of overall dimensions	EN 60811-203	2012
IEC 60811-406	-	Electric and optical fibre cables - Test methods for non-metallic materials - Part 406: Miscellaneous tests - Resistance to stress cracking of polyethylene and polypropylene compounds	EN 60811-406	-

EN IEC 60794-6-10:2020 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60811-604	-	Electric and optical fibre cables - Test methods for non-metallic materials - Part 604: Physical tests - Measurement of absence of corrosive components in filling compounds	EN 60811-604	-
IEC 61034	series	Measurement of smoke density of cables burning under defined conditions	EN 61034	series
ISO 4892-2	2013	Plastics - Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps	EN ISO 4892-2	2013



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INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Optical fibre cables –
Part 6-10: Indoor-outdoor cables – Family specification for universal
indoor-outdoor cables**

**Câbles à fibres optiques –
Partie 6-10: Câbles intérieurs/extérieurs – Spécification de famille pour
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INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Optical fibre cables –
Part 6-10: Indoor-outdoor cables – Family specification for universal
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**Câbles à fibres optiques –
Partie 6-10: Câbles intérieurs/extérieurs – Spécification de famille pour
les câbles intérieurs/extérieurs universels**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL FIBRE CABLES –

**Part 6-10: Indoor-outdoor cables –
Family specification for universal indoor-outdoor cables**

FOREWORD

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International Standard IEC 60794-6-10 has been prepared by subcommittee SC 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

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

FDIS	Report on voting
86A/2036/FDIS	86A/2050/RVD

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

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

A list of all parts in the 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 document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

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OPTICAL FIBRE CABLES –

Part 6-10: Indoor-outdoor cables – Family specification for universal indoor-outdoor cables

1 Scope

This part of IEC 60794 is a family specification covering features of optical fibre cables applicable to outdoor as well as indoor environments, called "universal indoor-outdoor cables". These cables generally possess the characteristics associated with outdoor cable designs (according to IEC 60794-3, however typically less stringent, and typically "non armoured") having the thermal and mechanical robustness that makes them suitable for use in the outside plant, while simultaneously being flexible enough, compact and lightweight and exhibiting the fire performance required in indoor premises. A typical application is for example the centralized cabling in central office and the premises or local area network where the same cable design is used for the entire length of the cabling link including both the indoor as well as the outdoor portions.

2 Normative references

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IEC 60332-1 (all parts), *Tests on electric and optical fibre cables under fire conditions – Part 1: Test for vertical flame propagation for a single insulated wire or cable*

IEC 60332-3 (all parts), *Tests on electric and optical fibre cables under fire conditions – Part 3: Test for vertical flame spread of vertically-mounted bunched wires or cables*

IEC 60754-2:2011, *Test on gases evolved during combustion of materials from cables – Part 2: Determination of acidity (by pH measurement) and conductivity*

IEC 60793-2, *Optical fibres – Part 2: Product specifications – General*

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 60794-1-21, *Optical fibre cables – Part 1-21: Generic specification – Basic optical cable test procedures – Mechanical test methods*

IEC 60794-1-22:2017, *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*

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IEC 60794-1-24, *Optical fibre cables – Part 1-24: Generic specification – Basic optical cable test procedures – Electrical test methods*

IEC 60794-1-31:2018, *Optical fibre cables – Part 1-31 : Generic specification – Optical cable elements – Optical fibre ribbon*

IEC 60794-1-215, *Optical fibre cables – Part 1-215: Generic specification – Basic optical cable test procedures – Environmental test methods – Cable external freezing test, Method F15*

IEC 60794-2 (all parts), *Optical fibre cables – Part 2: Indoor cables*

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

IEC 60794-3 (all parts), *Optical fibre cables – Part 3: Outdoor cables*

IEC 60794-3-10:2015, *Optical fibre cables – Part 3-10: Outdoor cables – Family specification for duct, directly buried and lashed aerial optical telecommunication cables*

IEC 60794-6:2020, *Optical fibre cables – Part 6: Indoor-outdoor cables – Sectional specification for indoor-outdoor cables*

IEC 60811-202:2012, *Electric and optical cables – Test methods for non-metallic materials – Part 202: General tests – Measurement of thickness of non-metallic sheath*
IEC 60811-202:2012/AMD1:2017

IEC 60811-203:2012, *Electric and optical cables – Test methods for non-metallic materials – Part 203: General tests – Measurement of overall dimensions*

IEC 60811-406, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 406: Miscellaneous tests – Resistance to stress cracking of polyethylene and polypropylene compounds*

IEC 60811-604, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 604: Physical tests – Measurement of absence of corrosive components in filling compounds*

IEC 61034 (all parts), *Measurement of smoke density of cables burning under defined conditions*

ISO 4892-2:2013, *Plastics – Methods of exposure to laboratory light sources – Part 2: Xenon-arc lamps*

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