

<b>STN</b>	<p style="text-align: center;"><b>Optické káble</b> <b>Časť 2-30: Vnútorné káble</b> <b>Skupinová špecifikácia optických pásikových</b> <b>kálov na používanie v zakončených kompletných</b> <b>optických kábloch</b></p>	<p><b>STN</b> <b>EN IEC</b> <b>60794-2-30</b></p>
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Optical fibre cables - Part 2-30: Indoor cables - Family specification for optical fibre ribbon cables for use in terminated cable assemblies

Táto norma obsahuje anglickú verziu európskej normy.

This standard includes the English version of the European Standard.

Táto norma bola označená vo Vestníku ÚNMS SR č. 10/19

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**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN IEC 60794-2-30**

May 2019

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English Version

**Optical fibre cables - Part 2-30: Indoor cables - Family  
specification for optical fibre ribbon cables for use in terminated  
cable assemblies  
(IEC 60794-2-30:2019)**

Câbles à fibres optiques - Partie 2-30: Câbles intérieurs -  
Spécification de famille pour les câbles à rubans de fibres  
optiques utilisés dans les assemblages de câbles  
connectorisés  
(IEC 60794-2-30:2019)

Lichtwellenleiter - Teil 2-30: LWL-Innenkabel -  
Familienspezifikation für Lichtwellenleiter-Bandkabel für den  
Einsatz in konfektionierten Kabeln  
(IEC 60794-2-30:2019)

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Europäisches Komitee für Elektrotechnische Normung

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

**EN IEC 60794-2-30:2019 (E)****European foreword**

The text of document 86A/1704/CDV, future edition 3 of IEC 60794-2-30, 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 60794-2-30:2019.

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) 2020-01-22
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-04-22

This document supersedes EN 60794-2-30:2008.

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The text of the International Standard IEC 60794-2-30:2019 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 60794-1-31	NOTE	Harmonized as EN IEC 60794-1-31
IEC 60793-1-21	NOTE	Harmonized as EN 60793-1-21
IEC 60794-1-24	NOTE	Harmonized as EN 60794-1-24
IEC 60811-501	NOTE	Harmonized as EN 60811-501

**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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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 60793-1-40	-	Optical fibres - Part 1-40: Attenuation - measurement methods		-
IEC 60793-1-44	-	Optical fibres - Part 1-44: Measurement methods and test procedures - Cut-off wavelength	EN 60793-1-44	-
IEC 60793-2	-	Optical fibres - Part 2: Product specifications - General	EN 60793-2	-
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	-	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 60794-1-2	-	Optical fibre cables – Part 1-2: Generic specification – Basic optical cable test – procedures – General guidance	EN 60794-1-2	-
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	-	Optical fibre cables - Part 1-22: Generic specification - Basic optical cable test procedures - Environmental test methods	EN IEC 60794-1-22	-

**EN IEC 60794-2-30:2019 (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 EN 60794-1-23 specification - Basic optical cable test procedures - Cable element test methods		-
IEC 60794-2	2017	Optical fibre cables - Part 2: Indoor cables EN 60794-2 - Sectional specification		2017
IEC 60794-3	-	Optical fibre cables - Part 3: Outdoor EN 60794-3 cables - Sectional specification		-
IEC 60811-202	-	Electric and optical fibre cables - Test EN 60811-202 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 EN 60811-203 methods for non-metallic materials - Part 203: General tests - Measurement of overall dimensions		-
IEC 60811-504	-	Electric and optical fibre cables - Test EN 60811-504 methods for non-metallic materials - Part 504: Mechanical tests - Bending tests at low temperature for insulation and sheaths		-



IEC 60794-2-30

Edition 3.0 2019-03

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Optical fibre cables –**

**Part 2-30: Indoor cables – Family specification for optical fibre ribbon cables for use in terminated cable assemblies**

**Câbles à fibres optiques –**

**Partie 2-30: Câbles intérieurs – Spécification de famille pour les câbles à rubans de fibres optiques utilisés dans les assemblages de câbles connectorisés**





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IEC 60794-2-30

Edition 3.0 2019-03

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



### Optical fibre cables –

**Part 2-30: Indoor cables – Family specification for optical fibre ribbon cables for use in terminated cable assemblies**

### Câbles à fibres optiques –

**Partie 2-30: Câbles intérieurs – Spécification de famille pour les câbles à rubans de fibres optiques utilisés dans les assemblages de câbles connectorisés**

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**INTERNATIONAL ELECTROTECHNICAL COMMISSION****OPTICAL FIBRE CABLES –****Part 2-30: Indoor cables –  
Family specification for optical fibre ribbon  
cables for use in terminated cable assemblies****FOREWORD**

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International Standard IEC 60794-2-30 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. This edition constitutes a technical revision.

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

- a) removal of Annex C;
- b) reference to the most recent fibre standards;
- c) reference to IEC 60794-1-21, IEC 60794-1-22, IEC 60794-1-23 and IEC 60794-1-24.

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 International Standard is based on the following documents:

CDV	Report on voting
86A/1704/CDV	86A/1808/RVC

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

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

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## OPTICAL FIBRE CABLES –

### Part 2-30: Indoor cables – Family specification for optical fibre ribbon cables for use in terminated cable assemblies

## 1 Scope

This part of IEC 60794 is a family specification which covers indoor optical fibre ribbon cables for use in terminated cable assemblies. The requirements of the sectional specification IEC 60794-2 are applicable to cables covered by this document.

The requirements of this document are written to define flat ribbon cables. This document can be applicable to other cable constructions. Parts of IEC 60794-3 which are applicable for ribbon tests are the subject of IEC 60794-1-31.

Annex B contains requirements that supersede the normal requirements in case the cables are intended to be used in installation governed by the MICE table of ISO 11801-3 [4]<sup>1</sup>.

## 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.

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

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

IEC 60793-1-44, *Optical fibres – Part 1-44: Measurement methods and test procedures – Cut-off wavelength*

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 specification – Sectional specification for class B single-mode fibres*

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

<sup>1</sup> Numbers in square brackets refer to the Bibliography.

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

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

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 60794-2:2017, *Optical fibre cables – Part 2: Indoor cables – Sectional specification*

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

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*

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