



SLOVENSKI STANDARD SIST EN IEC 60794-1-31:2021

01-november-2021

Nadomešča:

SIST EN IEC 60794-1-31:2018

Optični kabli - 1-31. del: Splošna specifikacija - Elementi optičnih kablov - Optično vlakno (IEC 60794-1-31:2021)

Optical fibre cables - Part 1-31: Generic specification - Optical cable elements - Optical fibre ribbon (IEC 60794-1-31:2021)

Lichtwellenleiterkabel - Teil 1-31: Fachgrundspezifikation - LWL-Kabelelemente - LWL-Bandkabel (IEC 60794-1-31:2021)

Câbles à fibres optiques - Partie 1-31: Spécification intermédiaire pour éléments de câbles - Rubans de fibres optiques (IEC 60794-1-31:2021)

Ta slovenski standard je istoveten z: EN IEC 60794-1-31:2021

ICS:

33.180.10 (Optična) vlakna in kabli Fibres and cables

SIST EN IEC 60794-1-31:2021 en

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EUROPEAN STANDARD

EN IEC 60794-1-31

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2021

ICS 33.180.10; 33.180.99

Supersedes EN IEC 60794-1-31:2018 and all of its amendments and corrigenda (if any)

English Version

**Optical fibre cables - Part 1-31: Generic specification - Optical cable elements - Optical fibre ribbon
(IEC 60794-1-31:2021)**

Câbles à fibres optiques - Partie 1-31: Spécification générale - Éléments de câbles optiques - Rubans de fibres optiques
(IEC 60794-1-31:2021)

Lichtwellenleiterkabel - Teil 1-31: Fachgrundspezifikation - LWL-Kabelelemente - LWL-Bandkabel
(IEC 60794-1-31:2021)

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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 60794-1-31:2021 (E)**European foreword**

The text of document 86A/2071/CDV, future edition 2 of IEC 60794-1-31, 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 60794-1-31:2021.

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) 2022-05-02
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-08-02

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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 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 60794-1-23	-	Optical fibre cables - Part 1-23: Generic specification - Basic optical cable test procedures - Cable element test methods	EN IEC 60794-1-23	-
IEC 60794-2	-	Optical fibre cables - Part 2: Indoor cables - Sectional specification	EN 60794-2	-
IEC 60794-3	-	Optical fibre cables - Part 3: Outdoor cables - Sectional specification	EN 60794-3	-
IEC 60794-4	-	Optical fibre cables - Part 4: Aerial optical cables along electrical power lines - Sectional specification	EN IEC 60794-4	-
IEC 60794-5	-	Optical fibre cables - Part 5: Microduct cabling for installation by blowing - Sectional specification	EN 60794-5	-
IEC 60794-6	-	Optical fibre cables - Part 6: Indoor/outdoor cables - Sectional specification	EN IEC 60794-6	-

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IEC 60794-1-31

Edition 2.0 2021-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE



Optical fibre cables – Part 1-31: Generic specification – Optical cable elements – Optical fibre ribbon
(standards.iteh.ai)

Câbles à fibres optiques – Partie 1-31: Spécification générique – Éléments de câbles optiques – Rubans de fibres optiques
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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 33.180.10; 33.180.99

ISBN 978-2-8322-9944-9

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL FIBRE CABLES –

**Part 1-31: Generic specification – Optical cable elements –
Optical fibre ribbon**

FOREWORD

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IEC 60794-1-31 has been prepared by subcommittee SC86A: Fibres and cables, of IEC technical committee 86: Fibre optics. It is an International Standard.

This second edition cancels and replaces the first edition published in 2018. This edition constitutes a technical revision.

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

- a) The geometrical requirements for optical fibre ribbon with typically 250 μm coating diameter have been modified and those for the optical fibre ribbon with typically 200 μm coating diameter have been added.
- b) "Identification by positional identification" and "Identification by ribbon coding and fibre colouring" are moved to a new informative Annex A.

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

CDV	Report on voting
86A/2071/CDV	86A/2109/RVC

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 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 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 1-31: Generic specification – Optical cable elements – Optical fibre ribbon

1 Scope

This part of IEC 60794, which is a generic specification, covers optical fibre ribbons. Requirements which are described in this part apply to optical fibre ribbon cables for use with telecommunication equipment and devices employing similar techniques, in particular optical fibre cables in IEC 60794-2 for indoor use, in IEC 60794-3 for outdoor use, in IEC 60794-4 for self-supporting overhead use, in IEC 60794-5 for air blown use and in IEC 60794-6 for indoor/outdoor use. The detailed specification can be verified in specifications for each application such as IEC 60794-2 and IEC 60794-3.

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

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

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

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

IEC 60794-4, *Optical fibre cables – Part 4: Sectional specification – Aerial optical cables along electrical power lines*

IEC 60794-5, *Optical fibre cables – Part 5: Sectional specification – Microduct cabling for installation by blowing*

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

3 Terms, definitions, symbols and abbreviated terms

For the purposes of this document, the terms, definitions, symbols and abbreviated terms given in IEC 60794-1-1 apply.