

STN	Optické káble Časť 4-20: Rámcová špecifikácia Vzdušné optické káble pre silnoprúdové vedenia Skupinová špecifikácia pre ADSS (All Dielectric Self Supported) optické káble	STN EN IEC 60794-4-20 35 9223
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Optical fibre cables - Part 4-20: Sectional specification - Aerial optical cables along electrical power lines - Family specification for ADSS (all dielectric self-supported) optical 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. 04/19

Obsahuje: EN IEC 60794-4-20:2018, IEC 60794-4-20:2018

Oznámením tejto normy sa od 02.10.2021 ruší
STN EN 60794-4-20 (35 9223) z augusta 2013

128600

EUROPEAN STANDARD

EN IEC 60794-4-20

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2018

ICS 33.180.10

Supersedes EN 60794-4-20:2012

English Version

Optical fibre cables - Part 4-20: Sectional specification - Aerial optical cables along electrical power lines - Family specification for ADSS (all dielectric self-supported) optical cables (IEC 60794-4-20:2018)

Câbles à fibres optiques - Partie 4-20: Spécification intermédiaire - Câbles optiques aériens le long des lignes électriques de puissance - Spécification de famille pour les câbles optiques autoporteurs entièrement diélectriques (ADSS)
(IEC 60794-4-20:2018)

Lichtwellenleiterkabel - Teil 4-20: Lichtwellenleiter-Luftkabel auf Starkstrom-Freileitungen - Familienspezifikation für ADSS-LWL-Kabel (dielektrische, selbsttragende LWL-Kabel)
(IEC 60794-4-20:2018)

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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 60794-4-20:2018 (E)**European foreword**

The text of document 86A/1867/FDIS, future edition 2 of IEC 60794-4-20, 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 IEC 60794-4-20:2018.

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) 2019-07-02
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-10-02

This document supersedes EN 60794-4-20:2012.

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The text of the International Standard IEC 60794-4-20:2018 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 60060-1:2010 NOTE Harmonized as EN 60060-1:2010 (not modified)
IEC 60794-1-2 NOTE Harmonized as EN 60794-1-2
IEC 60794-3-20 NOTE Harmonized as EN 60794-3-20
IEC 60794-4 series NOTE Harmonized as EN 60794-4 series
IEC 61395 NOTE Harmonized as EN 61395
IEC 61935 series NOTE Harmonized as EN 61935 series

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	-	Optical fibres - Part 2: Product specifications - General	EN 60793-2	-
IEC 60793-2-50	-	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN 60793-2-50	-
IEC 60794-1-1	-	Optical fibre cables - Part 1-1: Generic specification - General	EN 60794-1-1	-
IEC 60794-1-21	2015	Optical fibre cables - Part 1-21: Generic specification - Basic optical cable test procedures - Mechanical tests methods	EN 60794-1-21	2015
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	-
IEC 60794-4	-	Optical fibre cables - Part 4: Sectional specification - Aerial optical cables along electrical power lines	EN IEC 60794-4	-
ISO 9001	-	Quality management systems Requirements	-EN ISO 9001	-



IEC 60794-4-20

Edition 2.0 2018-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE



Optical fibre cables –

Part 4-20: Sectional specification – Aerial optical cables along electrical power lines – Family specification for ADSS (all dielectric self-supported) optical cables

Câbles à fibres optiques –

Partie 4-20: Spécification intermédiaire – Câbles optiques aériens le long des lignes électriques de puissance – Spécification de famille pour les câbles optiques autoporteurs entièrement diélectriques (ADSS)



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IEC 60794-4-20

Edition 2.0 2018-08

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INTERNATIONALE

ICS 33.180.10

ISBN 978-2-8322-5907-8

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL FIBRE CABLES –

**Part 4-20: Sectional specification – Aerial optical cables along
electrical power lines – Family specification for ADSS
(all dielectric self-supported) optical cables**

FOREWORD

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International Standard IEC 60794-4-20 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

This second edition cancels and replaces the first edition published in 2012 and constitutes a technical revision.

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

- a) this document has been streamlined by cross-referencing IEC 60794-1-1, IEC 60794-4 (all parts) and IEC 60794-1-2;
- b) reference to the MICE table has been deleted;
- c) the example of test method for particular environment in Annex C has been deleted;

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

FDIS	Report on voting
86A/1867/FDIS	86A/1876/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 the 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 4-20: Sectional specification – Aerial optical cables along electrical power lines – Family specification for ADSS (all dielectric self-supported) optical cables

1 Scope

This part of IEC 60794-4, which is a family specification, covers optical telecommunication cables, commonly with single-mode fibres¹ used primarily in overhead power lines applications. The cables can also be used in other overhead utility networks, such as for telephony or TV services. Requirements of the sectional specification IEC 60794-4 for aerial optical cables along electrical power lines are applicable to cables covered by this document.

This document covers the construction, mechanical, electrical, and optical performance, installation guidelines, acceptance criteria, test requirements, environmental considerations, and accessories compatibility for an all dielectric, self-supporting fibre optic (ADSS) cable. This document provides construction and performance requirements that ensure, within the guidelines of this document, that the required mechanical integrity of the cable components as well as optical fibre mechanical reliability and transmission parameters are maintained.

The ADSS cable consists of single mode optical fibres contained in one or more protective dielectric fibre optic units surrounded by or attached to suitable dielectric strength members and sheaths. The cable does not contain metallic components. An ADSS cable is designed to meet the optical and mechanical requirements under different installation, operating and environmental conditions and loadings, as described in Annex B.

This document excludes any "lashed" or "wrapped" OPAC cables included in IEC 60794-4. Figure 8 aerial cables are also excluded; they are specified in IEC 60794-3-20.

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, *Optical fibres – Part 2: Product specifications – General*

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: Generic specification – General*

IEC 60794-1-21:2015, *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*

¹ In some particular situations in the electrical industry, short overhead links can be also designed with multimode fibres.

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

ISO 9001, *Quality management systems – Requirements*

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