Optical fibre cables - Part 4: Sectional specification - Aerial optical cables along electrical power lines



#### EESTI STANDARDI EESSÕNA

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See Eesti standard EVS-EN IEC 60794-4:2018 sisaldab Euroopa standardi EN IEC 60794-4:2018 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 60794-4:2018 consists of the English text of the European standard EN IEC 60794-4:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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#### **EN IEC 60794-4**

August 2018

ICS 33.180.10

Supersedes EN 60794-4:2003

#### **English Version**

# Optical fibre cables - Part 4: Sectional specification - Aerial optical cables along electrical power lines (IEC 60794-4:2018)

Câbles à fibres optiques - Partie 4: Spécification intermédiaire - Câbles optiques aériens le long des lignes électriques de transport d'énergie (IEC 60794-4:2018)

Lichtwellenleiterkabel - Teil 4: Rahmenspezifikation - Lichtwellenleiter-Luftkabel auf Starkstrom-Freileitungen (IEC 60794-4:2018)

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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

#### **European foreword**

The text of document 86A/1862/FDIS, future edition 2 of IEC 60794-4, 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 60794-4:2018.

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
- latest date by which the national standards conflicting with the document have to be withdrawn

This document supersedes EN 60794-4:2003

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The text of the International Standard IEC 60794-4:2018 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 60794-1-2	NOTE	Harmonized as EN 60794-1-2
IEC 60794-1-23	NOTE	Harmonized as EN 60794-1-23
IEC 60794-1-31	NOTE	Harmonized as EN IEC 60794-1-31
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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>	EN/HD	<u>Year</u>
IEC 60104	-	Aluminium-magnesium-silicon alloy wire for overhead line conductors	-	-
IEC 60304	-	Standard colours for insulation for low-frequency cables and wires	HD 402 S2	-
IEC 60793-1-21	-	Optical fibres Part 1-21: Measurement methods and test procedures - Coating geometry	EN 60793-1-21	-
IEC 60793-1-32	-	Optical fibres Part 1-32: Measurement methods and test procedures - Coating strippability	EN 60793-1-32	-
IEC 60793-1-40	-	Optical fibres Part 1-40: Measurement methods and test procedures - Attenuation	EN 60793-1-40	-
IEC 60793-1-44	-	Optical fibres Part 1-44: Measurement methods and test procedures - Cut-off wavelength		-
IEC 60793-1-48	-	Optical fibres – Part 1-48: Measurement methods and test procedures -Polarization mode dispersion	EN 60793-1-48	-
IEC 60793-2	-	Optical fibres - Part 2: Product specifications - General	EN 60793-2	-
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		-
IEC 60794-1-22	-	Optical fibre cables - Part 1-22: Generic specification - Basic optical cable test procedures - Environmental test methods		5

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 60794-1-24	-	Optical fibre cables Part 1-24: Generic EN 60794-1-24 - specification - Basic optical cable test procedures - Electrical test methods
IEC 60794-3	-	Optical fibre cables - Part 3: Outdoor cables - EN 60794-3 - Sectional specification
IEC 60794-4-20	2012	Optical fibre cables Part 4-20: Aerial optical EN 60794-4-20 2012 cables along electrical power lines - Family specification for ADSS (All Dielectric Self Supported) Optical cables
IEC 60811-202	3	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 60811-401	-	Electric and optical fibre cables - Test EN 60811-401 - methods for non-metallic materials Part 401: Miscellaneous tests - Thermal ageing methods - Ageing in an air oven
IEC 60811-406	-	Electric and optical fibre cables - Test EN 60811-406 - methods for non-metallic materials Part 406: Miscellaneous tests - Resistance to stress cracking of polyethylene and polypropylene compounds
IEC 60811-501	-	Electric and optical fibre cables - Test EN 60811-501 - methods for non-metallic materials - Part 501:  Mechanical tests - Tests for determining the mechanical properties of insulating and sheathing compounds
IEC 60811-604	2012	Electric and optical fibre cables - Test EN 60811-604 2012 methods for non-metallic materials Part 604: Physical tests - Measurement of absence of corrosive components in filling compounds
IEC 60811-607	-	Electric and optical fibre cables - Test EN 60811-607 - methods for non-metallic materials Part 607: Physical tests - Test for the assessment of carbon black dispersion in polyethylene and polypropylene
IEC 60888	-	Zinc-coated steel wires for stranded conductors
IEC 60889	-	Hard-drawn aluminium wire for overhead line EN 60889 - conductors
IEC 61089	1991	Round wire concentric lay overhead electrical - stranded conductors
IEC 61232	-	Aluminium-clad steel wires for electrical EN 61232 - purposes

61395

Country of the state of IEC 61394 Overhead lines - Requirements for greases for aluminium, aluminium alloy and steel bare conductors

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

#### **OPTICAL FIBRE CABLES -**

## Part 4: Sectional specification – Aerial optical cables along electrical power lines

#### **FOREWORD**

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

This second edition cancels and replaces the first edition published in 2003. This edition constitutes a technical revision.

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

- a) the specification has been streamlined by cross-referencing IEC 60794-1-1;
- b) the classification as type tests or routine tests has been deleted;
- c) cable kink test has been deleted;
- d) creep test for ADSS is referred to IEC 60794-4-20.