

STN	Optické káble Časť 4-30: Vzdušné optické káble pre silnoprúdové vedenia Skupinová špecifikácia pre optické káble OPPC (optical phase conductor)	STN EN IEC 60794-4-30 35 9223
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Optical fibre cables - Part 4-30: Aerial optical cables along electrical power lines - Family specification for optical phase conductor (OPPC) 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. 08/21

Obsahuje: EN IEC 60794-4-30:2021, IEC 60794-4-30:2021

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EUROPEAN STANDARD

EN IEC 60794-4-30

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English Version

Optical fibre cables - Part 4-30: Aerial optical cables along
electrical power lines - Family specification for optical phase
conductor (OPPC) optical cables
(IEC 60794-4-30:2021)

Câbles à fibres optiques - Partie 4-30: Câbles optiques
aériens le long des lignes électriques de puissance -
Spécification de famille pour les conducteurs de phase à
fibres optiques (OPPC)
(IEC 60794-4-30:2021)

Lichtwellenleiterkabel - Teil 4-30: Lichtwellenleiter-Luftkabel
entlang Starkstrom-Freileitungen - Familienspezifikation für
OPPC-Kabel (LWL-Phasenseil)
(IEC 60794-4-30:2021)

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

EN IEC 60794-4-30:2021 (E)**European foreword**

The text of document 86A/2079/FDIS, future edition 1 of IEC 60794-4-30, 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 60794-4-30:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2022-02-12 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2024-05-12 document have to be withdrawn

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

IEC 60793-1-44	NOTE	Harmonized as EN 60793-1-44
IEC 60793-1-48	NOTE	Harmonized as EN 60793-1-48
IEC 60794-1-2	NOTE	Harmonized as EN IEC 60794-1-2
IEC 60794-1-23	NOTE	Harmonized as EN IEC 60794-1-23
IEC 60794-4 (series)	NOTE	Harmonized as EN IEC 60794-4 (series)
ISO 9001	NOTE	Harmonized as EN ISO 9001

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 60104	-	Aluminium-magnesium-silicon alloy wire for overhead line conductors	-	-
IEC 60468	-	Method of measurement of resistivity of metallic materials	-	-
IEC 60793-1-40	-	Optical fibres - Part 1-40: Attenuation measurement methods	EN IEC 60793-1-40	-
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	-	Optical fibre cables - Part 1-22: Generic specification - Basic optical cable test procedures - Environmental test methods	EN IEC 60794-1-22	-
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 60794-1-219	-	Optical fibre cables - Part 1-219: Generic specification - Basic optical cable test procedures - Material compatibility test, Method F19	EN IEC 60794-1-219	- ¹
IEC 60794-4	-	Optical fibre cables - Part 4: Sectional specification - Aerial optical cables along electrical power lines	EN IEC 60794-4	-
IEC 60888	-	Zinc-coated steel wires for stranded conductors	-	-

¹ Under preparation. Stage at time of publication: prEN IEC 60794-1-219.

EN IEC 60794-4-30:2021 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60889	-	Hard-drawn aluminium wire for overhead line conductors	EN 60889	-
IEC 61089	-	Round wire concentric lay overhead electrical - stranded conductors		-
IEC 61232	-	Aluminium-clad steel wires for electrical purposes	EN 61232	-
IEC 61394	-	Overhead lines - Requirements for greases for aluminium, aluminium alloy and steel bare conductors	EN 61394	-
IEC 61395	-	Overhead electrical conductors - Creep test procedures for stranded conductors	EN 61395	-
IEC 62219	-	Overhead electrical conductors - Formed wire, concentric lay, stranded conductors	EN 62219	-



IEC 60794-4-30

Edition 1.0 2021-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Optical fibre cables –
Part 4-30: Aerial optical cables along electrical power lines – Family
specification for optical phase conductor (OPPC) optical cables**

**Câbles à fibres optiques –
Partie 4-30: Câbles optiques aériens le long des lignes électriques de
puissance – Spécification de famille pour les conducteurs de phase à fibres
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IEC 60794-4-30

Edition 1.0 2021-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Optical fibre cables –

Part 4-30: Aerial optical cables along electrical power lines – Family specification for optical phase conductor (OPPC) optical cables

Câbles à fibres optiques –

Partie 4-30: Câbles optiques aériens le long des lignes électriques de puissance – Spécification de famille pour les conducteurs de phase à fibres optiques (OPPC)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL FIBRE CABLES –

Part 4-30: Aerial optical cables along electrical power lines – Family specification for optical phase conductor (OPPC) optical cables

FOREWORD

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IEC 60794-4-30 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics. It is an International Standard.

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

FDIS	Report on voting
86A/2079/FDIS	86A/2088/RVD

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 "<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.

OPTICAL FIBRE CABLES –

Part 4-30: Aerial optical cables along electrical power lines – Family specification for optical phase conductor (OPPC) optical cables

1 Scope

This part of IEC 60794, which is a family specification, specifies the optical fibre, cable elements, cable construction requirements, main requirements for installation and operating conditions, cable design characteristics and test for OPPC (optical phase conductor), used for carrying current as well as communication and data transmission. The corresponding environmental declaration can be built according to IEC TR 62839-1.

The OPPC is a substitute for a conventional phase bare conductor containing optical fibres. Usually, the fibres are embedded loosely in protective buffer tubes. To fulfil mechanical and electrical requirements, an armouring of one or more layers with aluminium, aluminium alloy, and aluminium clad steel, galvanized steel or a mixture of them is helically stranded.

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.

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IEC 60793-2-50, *Optical fibres – Part 2-50: Product specifications – Sectional specifications 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, *Optical fibre cables – Part 1-22: Generic specification – Basic optical cable test procedures – Environmental test methods*

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

IEC 60794-1-219, *Optical fibre cables – Part 1-219: Generic specification – Basic optical cable test procedures – Material compatibility test, method F19¹*

¹ Under preparation. Stage at the time of publication: IEC/CCDV 60794-1-219:2020.

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

IEC 60888, *Zinc-coated steel wires for stranded conductors*

IEC 60889, *Hard-drawn aluminium wire for overhead line conductors*

IEC 61089, *Round wire concentric lay overhead electrical stranded conductors*

IEC 61232, *Aluminium-clad steel wires for electrical purposes*

IEC 61394, *Overhead lines – Requirements for greases for aluminium, aluminium alloy and steel bare conductors*

IEC 61395, *Overhead electrical conductors – Creep test procedures for stranded conductors*

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