

### SLOVENSKI STANDARD SIST EN 60794-3-30:2009

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Optical fibre cables - Part 3-30: Outdoor cables - Family specification for optical telecommunication cables for lakes, river crossings and coastal application (IEC 60794-3 -30:2008)

iTeh STANDARD PREVIEW

Lichtwellenleiterkabel - Teil 3-30: Außenkabel Familienspezifikation für LWL-Fernmeldekabel für die Durchquerung von Seen und Flüssen und für Küstenanwendungen (CEI 60794-3-30:2008)

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Câbles à fibres optiques - Partie 3-30: Câbles extérieurs - Spécification de famille pour les câbles optiques de télécommunication utilisés pour les traversées de lacs, de rivières, et pour applications côtières (IEC 60794-3-30:2008)

Ta slovenski standard je istoveten z: EN 60794-3-30:2008

ICS:

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### **EUROPEAN STANDARD**

### EN 60794-3-30

### NORME EUROPÉENNE EUROPÄISCHE NORM

November 2008

ICS 33.180.10

Supersedes EN 60794-3-30:2003

English version

# Optical fibre cables Part 3-30: Outdoor cables Family specification for optical telecommunication cables for lakes, river crossings and coastal application (IEC 60794-3-30:2008)

Lichtwellenleiterkabel -Câbles à fibres optiques -Partie 3-30: Câbles extérieurs -Teil 3-30: Außenkabel -Spécification de famille Familienspezifikation pour les câbles optiques für LWL-Fernmeldekabel de télécommunication utilisés für die Durchquerung pour les traversées de lacs, de rivières ARD yon Seen und Flüssen und für Küstenanwendungen et pour applications côtières (CEI 60794-3-30:2008) (standards.itel(IEG)60794-3-30:2008)

> <u>SIST EN 60794-3-30:2009</u> https://standards.iteh.ai/catalog/standards/sist/e017bdf6-f424-4d7d-8447-3581a637cae6/sist-en-60794-3-30-2009

This European Standard was approved by CENELEC on 2008-10-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

### **CENELEC**

European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

### **Foreword**

The text of document 86A/1203/FDIS, future edition 2 of IEC 60794-3-30, prepared by SC 86A, Fibres and cables, of IEC TC 86, Fibre optics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60794-3-30 on 2008-10-01.

This European Standard supersedes EN 60794-3-30:2003.

The main changes with respect to EN 60794-3-30:2003 are listed below:

- the title of the specification has been updated to include coastal applications;
- fibre specifications have been enlarged to include fibre Type B5;
- an annex has been added for additional requirements according to the MICE table.

This European Standard is to be read in conjunction with EN 60794-1-1, EN 60794-1-2 and EN 60794-3.

The following dates were fixed:

 latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement

(dop) 2009-07-01

 latest date by which the national standards conflicting with the EN have to be withdrawn ITEN STANDARD PREVIE

(dow) 2011-10-01

### (standards.iteh.ai)

### **Endorsement notice**

SIST EN 60794-3-30:2009

The text of the International Standard IEC  $_60794$   $_6730$   $_302008$  was approved by CENELEC as a European Standard without any modification  $_{3581a637cae6/sist-en-60794-3-30-2009}$ 

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

IEC 60654	NOTE	Harmonized in EN 60654 series (not modified).
IEC 60654-4	NOTE	Harmonized as EN 60654-4:1997 (not modified).
IEC 60721	NOTE	Harmonized in EN 60721 series (not modified).
IEC 60721-1	NOTE	Harmonized as EN 60721-1:1995 (not modified).
IEC 60721-3-3	NOTE	Harmonized as EN 60721-3-3:1995 (not modified).
IEC 61000-6-2	NOTE	Harmonized as EN 61000-6-2:2005 (not modified).
IEC 61918	NOTE	Harmonized as EN 61918:2008 (modified).

### Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

### Addition to Annex ZA of EN 60794-1-1, EN 60794-1-2 and EN 60794-3:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 60793-1-48	<b>-</b> <sup>1)</sup>	Optical fibres - Part 1-48: Measurement methods and test procedures - Polarization mode dispersion	EN 60793-1-48	2007 2)
IEC 60793-2-50	- 1)	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN 60793-2-50	2008 <sup>2)</sup>

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<sup>1)</sup> Undated reference.

<sup>&</sup>lt;sup>2)</sup> Valid edition at date of issue.

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IEC 60794-3-30

Edition 2.0 2008-04

## INTERNATIONAL STANDARD

## NORME INTERNATIONALE

### Optical fibre cables Feh STANDARD PREVIEW

Part 3-30: Outdoor cables – Family specification for optical telecommunication cables for lakes, river crossings and coastal application

SIST EN 60794-3-30:2009

Câbles à fibres optiques ds. iteh ai/catalog/standards/sist/e017bdf6-f424-4d7d-8447-

Partie 3-30: Câbles extérieurs Spécification de famille pour les câbles optiques de télécommunication utilisés pour les traversées de lacs, de rivières, et pour applications côtières

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mır	nımum	require	ements) – Cable description 60794-3-30:2009 https://standards.iteh.ai/catalog/standards/sist/e017bdf6-f424-4d7d-8447-	17			
			https://standards.itch.ai/catalog/standards/sist/e017bdf6-f424-4d7d-8447- tive) Cable construction 3381a63/cae6/sist-en-60794-3-30-2009				
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### INTERNATIONAL ELECTROTECHNICAL COMMISSION

### **OPTICAL FIBRE CABLES -**

# Part 3-30: Outdoor cables – Family specification for optical telecommunication cables for lakes, river crossings and coastal application

#### **FOREWORD**

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60794-3-30 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

This standard is to be used in conjunction with IEC 60794-1-1 and IEC 60794-1-2, and IEC 60794-3.

This second edition cancels and replaces the first edition published in 2002. This edition constitutes a technical revision. The main changes with respect to the previous edition are listed below:

- the title of the specification has been updated to include coastal applications;
- fibres specification have been enlarged to include fibre Type B5;
- an annex has been added for additional requirements according to the MICE table.

**-4** -

This bilingual version, published in 2008-07, corresponds to the English version.

The text of this standard is based on the following documents:

FDIS	Report on voting	
86A/1203/FDIS	86A/1222/RVD	

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

The French version of this standard has not been voted upon.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of IEC 60794 series, under the general title Optical fibre cables, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed;
- iTeh STANDARD PREVIEW withdrawn:
- replaced by a revised edition; or (standards.iteh.ai)

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### **OPTICAL FIBRE CABLES -**

# Part 3-30: Outdoor cables – Family specification for optical telecommunication cables for lakes, river crossings and coastal application

### 1 Scope

This family specification covers optical telecommunication cables to be used as underwater cables for lakes, river crossings and coastal applications. Requirements of the sectional specification IEC 60794-3 for duct, buried, aerial and lake, river crossings and coastal applications cables are applicable to cables covered by this standard. This standard does not cover methods of cable repair nor repair capability, nor does it cover cables for use with lake, river crossings and coastal applications line amplifiers.

Clause 4 of this standard describes a blank detail specification for optical telecommunication cables to be used for lakes, river crossings and coastal applications. It incorporates some minimum requirements.

Annex A describes a blank detail specification which may be used to prepare detail specifications.

Annex B describes the cable construction.

Annex C describes a blank detail specification for ISO/IEC 24702 applications (MICE).

The parameters specified in this standard may be affected by measurement uncertainty arising either from measurement errors or calibration errors due to lack of suitable standards. Acceptance criteria are interpreted with respect to this consideration (see IEC 60794-3, Clause 9).

The number of fibres tested should be representative of the cable design and should be agreed between the customer and the supplier.

#### 2 Normative references

The following referenced documents are indispensable for the application 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.

They complete the normative references already listed in the generic specification (IEC 60794-1-1, Clause 2 and IEC 60794-1-2, Clause 2) and in the sectional specification (IEC 60794-3, Clause 2).

IEC 60793-1-48, Optical fibres – Part 1-48: Measurement methods and test procedures – Polarization mode dispersion

IEC 60793-2-50, Optical fibres – Part 2-50: Product specifications – Sectional specification for class B single-mode fibres