



SLOVENSKI STANDARD
SIST EN 60794-3-30:2004

01-september-2004

Optical fibre cables -- Part 3-30: Outdoor cables - Family specification for optical telecommunication cables for lake and river crossings

Optical fibre cables -- Part 3-30: Outdoor cables - Family specification for optical telecommunication cables for lake and river crossings

Lichtwellenleiterkabel -- Teil 3-30: Außenkabel - Familienspezifikation für LWL-Fernmeldekabel für die Durchquerung von Seen und Flüssen

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

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Ta slovenski standard je istoveten z: EN 60794-3-30:2003

ICS:

33.180.10 Fibres and cables

SIST EN 60794-3-30:2004 en

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EUROPEAN STANDARD

EN 60794-3-30

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2003

ICS 33.180.10

Supersedes EN 187104:2001

English version

Optical fibre cables
Part 3-30: Outdoor cables -
Family specification for optical telecommunication cables
for lake and river crossings
(IEC 60794-3-30:2002)

Câbles à fibres optiques
Partie 3-30: Câbles extérieurs -
Spécification de famille pour les câbles
optiques de télécommunication utilisés
pour les traversées de lacs et de rivières
(CEI 60794-3-30:2002)

Lichtwellenleiterkabel
Teil 3-30: Außenkabel -
Familienspezifikation für LWL-
Fernmeldekabel für die Durchquerung
von Seen und Flüssen
(IEC 60794-3-30:2002)

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This European Standard was approved by CENELEC on 2002-12-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and 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/820/FDIS, future edition 1 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 2002-12-01.

This European Standard supersedes EN 187104:2001.

This standard shall be used in conjunction with EN 60794-1-1:2002, EN 60794-1-2:1999 and EN 60794-3:2002.

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) 2003-09-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2005-12-01

Annexes designated "normative" are part of the body of the standard.

In this standard, annex ZA is normative.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60794-3-30:2002 was approved by CENELEC as a European Standard without any modification. (standards.iteh.ai)

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60793-1-20	2001	Optical fibres Part 1-20: Measurement methods and test procedures - Fibre geometry	EN 60793-1-20	2002

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**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC**

60794-3-30

Première édition
First edition
2002-12

Câbles à fibres optiques –

Partie 3-30:

Câbles extérieurs –

**Spécification de famille pour les câbles optiques
de télécommunication utilisés pour les traversées
de lacs et de rivières**

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Optical fibre cables –

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Part 3-30:

Outdoor cables –

**Family specification for optical telecommunication
cables for lake and river crossings**

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL FIBRE CABLES –

**Part 3-30: Outdoor cables –
Family specification for optical telecommunication
cables for lake and river crossings**

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The 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 shall be used in conjunction with IEC 60794-1-1 and IEC 60794-1-2, and IEC 60794-3.

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

FDIS	Report on voting
86A/820/FDIS	86A/832/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.

This publication has been in accordance with ISO/IEC Directives, Part 3.

IEC 60794 consists of the following parts, under the general title *Optical fibre cables*:

- Part 1: Generic specification
 - Part 1-1: General
 - Part 1-2: Basic optical cable test procedures
- Part 2: Indoor optical fibre cables – Sectional specification
- Part 3: Outdoor optical fibre cables – Sectional specification
- Part 4: Aerial optical cables for high-voltage power lines – Sectional specification ¹⁾

The committee has decided that the contents of this publication will remain unchanged until April 2005. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

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¹⁾ Under consideration.

OPTICAL FIBRE CABLES –

Part 3-30: Outdoor cables – Family specification for optical telecommunication cables for lake and river crossings

1 Scope

This part of IEC 60794 is a family specification that covers optical telecommunication cables to be used as underwater cables for lake and river crossings. Requirements of the sectional specification IEC 60794-3 for duct, buried, aerial and lake- and river-crossing 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- and river-crossing line amplifiers.

Clause 5 of this standard describes a blank detail specification for optical telecommunication cables to be used for lake and river crossings. It incorporates some minimum requirements.

Detail specifications may be prepared on the basis of this family specification.

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).

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The number of fibres tested is representative of the cable design and should be agreed between the user and the manufacturer.

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 60793-1-20:2001, *Optical fibres – Part 1-20: Measurement methods and test procedures – Fibre geometry*

3 Symbols and abbreviations

For the purposes of this standard, the following symbols and abbreviations apply.

λ_{cc}	cabled fibre cut-off wavelength
d	nominal outer diameter of the cable
DS	detail specification