Irish Standard
I.S. EN 60794-3-12:2013

Optical fibre cables -- Part 3-12: Outdoor cables - Detailed specification for duct and directly buried optical telecommunication cables for use in premises cabling (IEC 60794-3-12:2012 (EQV))

I.S. EN 60794-3-12:2013

Incorporating amendments/corrigenda issued since publication:

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SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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EN 60794-3-12:2006	EN 60794-3-12:2013 EN 60794-3-12:2006	28 June, 2013 10 May, 2006

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English version

Optical fibre cables - Part 3-12: Outdoor cables - Detailed specification for duct and directly buried optical telecommunication cables for use in premises cabling

(IEC 60794-3-12:2012)

Câbles à fibres optiques -
Partie 3-12: Câbles extérieurs -
Spécification particulière pour les câbles optiques de télécommunication destinés à être installés dans des conduites ou à être directement enterrés et utilisés dans le câblage de locaux
(CEI 60794-3-12:2012)

Lichtwellenleiterkabel -
Teil 3-12: LWL-Außenkabel -
Produktspezifikation für LWL-Fernmelde-Erd- und Röhrenkabel für anwendungsneutrale Standortverkabelung
(IEC 60794-3-12:2012)

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CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 60794-3-12:2013 E

Foreword

The text of document 86A/1471/FDIS, future edition 2 of IEC 60794-3-12, 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 60794-3-12:2013.

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)	2013-12-28
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2016-01-16

This document supersedes EN 60794-3-12:2006.

EN 60794-3-12:2013 includes the following significant technical changes with respect to EN 60794-3-12:2006:

– reference to ISO/IEC 24702;

– reference to Fibre B6 (EN 60793-2-50);

– reference to Fibre A1a.3 (EN 60793-2-10);

– reference to the OS2 Fibre as defined by ISO/IEC 11801

– reference to the OM4 Fibre as defined by ISO/IEC 11801.

This International Standard is to be used in conjunction with EN 60794-1-1, EN 60794-1-2 and EN 60794-3-10.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 60794-3-12:2012 was approved by CENELEC as a European Standard without any modification.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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.

Publication	Year	Title	EN/HD	Year
IEC 60793-2-10	2011	Optical fibres - Part 2-10: Product specifications - Sectional specification for category A1 multimode fibres	EN 60793-2-10	2011
IEC 60793-2-50	2012	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN 60793-2-50	2013
IEC 60794-1-1	-	Optical fibre cables - Part 1-1: Generic specification - General	EN 60794-1-1	-
IEC 60794-1-2	-	Optical fibre cables - Part 1-2: Generic specification - Basic optical cable test procedures	EN 60794-1-2	-
IEC 60794-3	-	Optical fibre cables - Part 3: Sectional specification - Outdoor cables	EN 60794-3	-
IEC 60794-3-10	-	Optical fibre cables - Part 3-10: Outdoor cables - Family specification for duct, directly buried and lashed aerial optical telecommunication cables	EN 60794-3-10	-
ISO/IEC 11801	-	Information technology - Generic cabling for customer premises	-	-
ISO/IEC 24702	-	Information technology - Generic cabling - Industrial premises	-	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL FIBRE CABLES –

Part 3-12: Outdoor cables – Detailed specification for duct and directly buried optical telecommunication cables for use in premises cabling

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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International Standard IEC 60794-3-12 has been prepared by subcommittee SC 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

This second edition cancels and replaces the first edition published in 2005. This edition constitutes a technical revision.

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

– reference to ISO/IEC 24702;
– reference to Fibre B6 (IEC 60793-2-50);
– reference to Fibre A1a.3 (IEC 60793-2-10);
– reference to the OS2 Fibre as defined by ISO/IEC 11801;
– reference to the OM4 Fibre as defined by ISO/IEC 11801.

This International Standard is to be used in conjunction with IEC 60794-1-1, IEC 60794-1-2 and IEC 60794-3-10.

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

FDIS	Report on voting
86A/1471/FDIS	86A/1486/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 drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of 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 publication will remain unchanged until the stability 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,
- withdrawn,
- replaced by a revised edition, or
- amended.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

OPTICAL FIBRE CABLES –

Part 3-12: Outdoor cables – Detailed specification for duct and directly buried optical telecommunication cables for use in premises cabling

1 Scope

This part of IEC 60794 is a detailed specification for duct and directly buried optical telecommunication cables for use in premises cabling to ensure compatibility with ISO/IEC 11801 and ISO/IEC 24702. Those standards have requirements to ensure that models work for generic cabling and system performances. Values in this standard support these models.

The requirements of the family specification IEC 60794-3-10 are applicable to cables covered by this standard. Particular requirements detailed in Clause 4 of this standard either define a specific option relative to the requirements of IEC 60794-3-10 or define additional requirements.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE These references complete the normative references already listed in the generic specifications IEC 60794-1-1 and IEC 60794-1-2, in the sectional specification IEC 60794-3 and in the family specification IEC 60794-3-10.

IEC 60793-2-10:2011, *Optical fibres – Part 2-10: Product specifications – Sectional specification for category A1 multimode fibres*

IEC 60793-2-50:2012, *Optical fibres – Part 2-50: Product specifications – Sectional specification for class B single-mode fibres*

IEC 60794-1-1, *Optical fibre cables – Part 1-1: Generic specification – Cross reference table for optical cable test procedures*

IEC 60794-1-2, *Optical fibre cables – Part 1-2: Generic specification – Cross reference table for optical cable test procedures* [1]

IEC 60794-3, *Optical fibre cables – Part 3: Sectional specification – Outdoor cables*

IEC 60794-3-10, *Optical fibre cables – Part 3-10: Outdoor cables – Family specification for duct, directly buried and lashed aerial optical telecommunication cables*

ISO/IEC 11801, Information technology – Generic cabling for customer premises

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1 IEC 60794-1-2:2003, Second edition has been withdrawn. A third edition, with the revised title *Optical fibre cables - Part 1-2: Generic specification - Cross reference table for optical cable test procedures,* is currently in preparation.