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Irish Standard
I.S. EN 60794-1-21:2015

Optical fibre cables - Part 1-21: Generic specification - Basic optical cable test procedures - Mechanical tests methods

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NORME EUROPÉENNE

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EN 60794-1-21

May 2015

ICS 33.180.10

Supersedes EN 60794-1-2:2003 (partially)

English Version

Optical fibre cables - Part 1-21: Generic specification - Basic optical cable test procedures - Mechanical tests methods (IEC 60794-1-21:2015)

Câbles à fibres optiques - Partie 1-20: Spécification générique - Procédures fondamentales d'essais des câbles optiques - Méthodes d'essais mécaniques (IEC 60794-1-21:2015)

Lichtwellenleiter - Teil 1-21: Fachgrundspezifikation - Grundlegende - Prüfverfahren für Lichtwellenleiterkabel - Mechanische Prüfverfahren (IEC 60794-1-21:2015)

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Ref. No. EN 60794-1-21:2015 E

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Foreword

The text of document 86A/1638/FDIS, future edition 1 of IEC 60794-1-21, 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 60794-1-21:2015.

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)	2016-01-14
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2018-04-14

This document supersedes EN 60794-1-2:2003 (partially).

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Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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NOTE 1 When 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.

Publication	Year	Title	EN/HD	Year
IEC 60227-2	-	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V -- Part 2: Test methods	-	-
IEC 60793-1-22	2001	Optical fibres -- Part 1-22: Measurement methods and test procedures - Length measurement	EN 60793-1-22	2002
IEC 60793-1-32	2010	Optical fibres -- Part 1-32: Measurement methods and test procedures - Coating strippability	EN 60793-1-32	2010
IEC 60793-1-40	-	Optical fibres -- Part 1-40: Measurement methods and test procedures - Attenuation	EN 60793-1-40	-
IEC 60793-1-46	2001	Optical fibres -- Part 1-46: Measurement methods and test procedures - Monitoring of changes in optical transmittance	EN 60793-1-46	2002
IEC 60794-1-1	-	Optical fibre cables -- Part 1-1: Generic specification - General	EN 60794-1-1	-
IEC 60794-1-2	2013	Optical fibre cables -- Part 1-2: Generic specification - Cross reference table for optical cable test procedures	EN 60794-1-2	2014
IEC 60794-1-20	2014	Optical fibre cables -- Part 1-20: Generic specification - Basic optical cable test procedures - General and Definitions	EN 60794-1-20	2014
IEC 60794-1-22	2012	Optical fibre cables -- Part 1-22: Generic specification - Basic optical cable test procedures - Environmental test methods	EN 60794-1-22	2012
IEC 61300-2-44	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-44: Tests - Flexing of the strain relief of fibre optic devices	EN 61300-2-44	-
IEC/TR 62691	-	Optical fibre cables - Guide to the installation of optical fibre cables	-	-

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IEC 60794-1-21

Edition 1.0 2015-03

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Optical fibre cables –
Part 1-21: Generic specification – Basic optical cable test procedures – Mechanical test methods

IEC 60794-1-21:2015-03(en)

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OPTICAL FIBRE CABLES –

Part 1-21: Generic specification – Basic optical cable test procedures – Mechanical test methods

FOREWORD

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International Standard IEC 60794-1-21 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

This first edition of IEC 60794-1-21 cancels and replaces the mechanical tests part of the second edition of IEC 60794-1-2, published in 2003. It constitutes a technical revision.

It has been decided to split the second edition of IEC 60794-1-2 into six new documents:

– IEC 60794-1-2, *Optical fibre cables – Part 1-2: Generic specification – Basic optical cable test procedures*
– IEC 60794-1-20, *Optical fibre cables – Part 1-20: Generic specification – Basic optical cable test procedures – General and definitions*

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– 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 tests methods*
– IEC 60794-1-23, *Optical fibre cables – Part 1-23: Generic specification – Basic optical cable test procedures – Cable elements tests methods*
– IEC 60794-1-24, *Optical fibre cables – Part 1-24: Generic specification – Basic optical cable test procedures – Electrical tests methods*

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

FDIS	Report on voting
86A/1638/FDIS	86A/1655/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.

This standard is intended to be used in conjunction with IEC 60794-1-1.

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 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

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OPTICAL FIBRE CABLES –

Part 1-21: Generic specification – Basic optical cable test procedures – Mechanical test methods

1 Scope and object

This part of IEC 60794 applies to optical fibre cables for use with telecommunication equipment and devices employing similar techniques, and to cables having a combination of both optical fibres and electrical conductors.

The object of this standard is to define test procedures to be used in establishing uniform requirements for mechanical requirement performance.

Throughout this standard the wording “optical cable” may also include optical fibre units, microduct fibre units, etc.

General requirements and definitions are given in IEC 60794-1-20 and a complete reference guide to test method of all types in the IEC 60794-1-2.

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.

IEC 60227-2, *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Part 2: Test methods*

IEC 60793-1-22:2001, *Optical fibres – Part 1-22: Measurement methods and test procedures – Length measurement*

IEC 60793-1-32:2010, *Optical fibres – Part 1-32: Measurement methods and test procedures – Coating strippability*

IEC 60793-1-40, *Optical fibres – Part 1-40: Measurement methods and test procedures – Attenuation*

IEC 60793-1-46:2001, *Optical fibres – Part 1-46: Measurement methods and test procedures – Monitoring of changes in optical transmittance*

IEC 60794-1-1, *Optical fibres – Part 1-1: Generic specification – General*

IEC 60794-1-2:2013, *Optical fibre cables – Part 1-2: Generic specification – Cross reference table for optical cable test procedures*

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