National Standards Authority of Ireland

IRISH STANDARD

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FAMILY SPECIFICATION - OPTICAL FIBRE CABLES FOR INDOOR APPLICATIONS

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English version

Family specification – Optical fibre cables for indoor applications

Spécification – Câbles à fibres optiques pour applications intérieures

Familienspezifikation - Lichtwellenleiterkabel zur Anwendung in Innenräumen

This European Standard was approved by CENELEC on 2002-03-05. 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

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Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 86A, Optical fibres and optical fibre cables.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 187103 on 2002-03-05.

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)	2003-08-01
- latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2005-03-01

This standard has been produced in accordance with a specialised agreement on work repartition and co-operation for standardization concerning fibre optics and is part of the CEN/CENELEC/ETSI (European Telecommunications Standards Institute) co-operation agreement.

It uses information provided by the ETSI on functional and system related aspects by means of an Interim European Telecommunication Standard (I-ETS).

The document I-ETS 300 644, *Optical fibre cables for indoor applications*, prepared by ETSI/TM1/WG1, has been reviewed and completed by the CENELEC TC 86A for incorporation within the set of EN 1871xx standards prepared using a similar process.

Contents

Page

1 Scope

This family specification covers optical cables for telecommunication application to be used indoor. This specification does not cover cable assemblies, such as connectorized jumper cable, or the functional requirements for cable break-out (fan out). It also not covers cables for LAN applications and cables incorporating multimode fibres.

Clause 5 of this standard describes a blank detail specification for optical telecommunication cables to be used for indoor cables. It incorporates some minimum requirements common to all European countries.

Detail specifications may be prepared based on this family specification following in particular requirements of clause 5.

2 General

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 shall be interpreted with respect to this consideration. The total uncertainty of measurement for this standard shall be less than or equal to 0,05 dB for attenuation.

The expression of no change in attenuation means that any change in measurement value either positive or negative, within the uncertainty of measurement shall be ignored.

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

3 Normative references

This standard incorporates by dated and 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 standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

[1]	EN 188101	1995	Family specification: Single-mode dispersion unshifted (B1.1) optical fibre
[2]	EN 188102	1996	Family specification: Single-mode dispersion shifted (B2) optical fibre
[3]	EN 188103	200x	Family specification: Single-mode non zero dispersion shifted optical fibre (B4)
[4]	EN 187000	1995	Generic specification: Optical fibre cables
[5]	EN 188000	1995	Generic specification: Optical fibres
[6]	HD 624.7	1994	Materials used in communication cables – Part 7: Halogen free flame retardant thermoplastic sheathing compounds
[7]	IEC 60304	1982	Standard colours for insulation for low-frequency cables and wires
[8]	IEC 60332-1	1993	Tests on electric cables under fire conditions – Part 1: Test on a single vertical insulated wire or cable
[9]	IEC 60332-3	1992	Tests on electric cables under fire conditions – Part 3: Tests on bunched wires or cables