Optical fibre cables -- Part 2-20: Indoor optical fibre cables - Family specification for multi-fibre optical distribution cables

EESTI STANDARDIKESKUS
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NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60794-2-20:2010 sisaldab Euroopa standardi EN 60794-2-20:2010 ingliskeelset teksti.	This Estonian standard EVS-EN 60794-2-20:2010 consists of the English text of the European standard EN 60794-2-20:2010.
Standard on kinnitatud Eesti Standardikeskuse 28.02.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 28.02.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 07.01.2010.	Date of Availability of the European standard text 07.01.2010.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 33.180.10

EUROPEAN STANDARD

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EN 60794-2-20

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Supersedes EN 60794-2-20:2003

English version

Optical fibre cables - Part 2-20: Indoor cables - Family specification for multi-fibre optical distribution cables

(IEC 60794-2-20:2008)

Câbles à fibres optiques -
Partie 2-20: Câbles intérieurs -
Spécification de famille pour les câbles optiques multifibres de distribution
(CEI 60794-2-20:2008)

Lichtwellenleiterkabel -
Teil 2-20: LWL-Innenkabel -
Familienspezifikation
für Mehrfaserverteilerkabel
(IEC 60794-2-20:2008)

CENELEC

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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 60794-2-20:2010 E

Foreword

The text of document 86A/1187/CDV, future edition 2 of IEC 60794-2-20, 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 60794-2-20 on 2009-12-01

This European Standard supersedes EN 60794-2-20:2003.

The main changes are listed below:

– cable crush to be measured both during and after load;

– cable torsion test length parameter correlated to cable outer diameter;

– cable description and construction blank detail specification annexes;

– MICE environment blank detail specification is addressed in Annex B.

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

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)	2010-09-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2012-12-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60794-2-20:2008 was approved by CENELEC as a European Standard without any modification.

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 60721-1	NOTE Harmonized as EN 60721-1 (not modified).
IEC 60721-3-3 + A2	NOTE Harmonized as EN 60721-3-3 + A2 (not modified).
IEC 60794-1-2	NOTE Harmonized as EN 60794-1-2 (not modified).
IEC 61000-6-2	NOTE Harmonized as EN 61000-6-2 (not modified).
IEC 61326	NOTE Harmonized as EN 61326 (not modified).
IEC 61918	NOTE Harmonized as EN 61918 (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.

Publication	Year	Title	EN/HD	Year
IEC 60189-1	-	Low-frequency cables and wires with PVC insulation and PVC sheath - Part 1: General test and measuring methods	-	-
IEC 60304	-	Standard colours for insulation for low-frequency cables and wires	HD 402 S2	-
IEC 60793-2-10	-	Optical fibres - Part 2-10: Product specifications - Sectional specification for category A1 multimode fibres	EN 60793-2-10	-
IEC 60793-2-50	-	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN 60793-2-50	-
IEC 60794-2	-	Optical fibre cables - Part 2: Indoor cables - Sectional specification	EN 60794-2	-
IEC 60811-1-4	-	Insulating and sheathing materials of electric and optical cables - Common test methods - Part 1-4: General application - Tests at low temperature	EN 60811-1-4	-
IEC/TR 62222	-	Fire performance of communication cables installed in buildings	-	-

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OPTICAL FIBRE CABLES –

Part 2-20: Indoor cables – Family specification for multi-fibre optical distribution cables

1 Scope

This part of IEC 60794 is a family specification covering multi-fibre optical distribution cables for indoor use. The requirements of the sectional specification IEC 60794-2 are applicable to cables covered by this standard.

Annex B contains requirements that supersede the normal requirements in case the cables are intended to be used in installation governed by the MICE table of ISO/IEC 24702 (i.e. Industrial premises).

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).

IEC 60189-1, *Low-frequency cables and wires with PVC insulation and PVC sheath – Part 1: General test and measuring methods*

IEC 60304, *Standard colours for insulation for low-frequency cables and wires*

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

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

IEC 60794-2, *Optical fibre cables – Part 2: Indoor cables – Sectional specification*

IEC 60811-1-4, *Common test methods for insulating and sheathing materials of electric cables – Part 1: Methods for general application – Section four: Tests at low temperature*

IEC 62222, *Fire performance of communication cables installed in buildings*

3 Construction

3.1 General

In addition to the constructional requirements in IEC 60794-2, the following considerations apply to multi-fibre indoor cables.

The cable shall be designed and manufactured for an expected operating lifetime of at least 15 years. In this context, the attenuation at the operational wavelength(s) of the optical fibres contained in the installed cable shall not exceed values agreed between customer and