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Optokablar – Del 3-12: Utomhuskablar – Detaljspecifikation för kablar för förläggning i rör eller mark för användning i fastighetsnät

Optical fibre cables –

Part 3-12: Outdoor optical fibre cables –

Detailed specification for duct and directly buried optical telecommunication cables for use in premises cabling

Som svensk standard gäller europastandarden EN 60794-3-12:2013. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60794-3-12:2013.

Nationellt förord

Europastandarden EN 60794-3-12:2013

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60794-3-12, Second edition, 2012 - Optical fibre cables - Part 3-12: Outdoor optical fibre cables - Detailed specification for duct and directly buried optical telecommunication cables for use in premises cabling**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden ska användas tillsammans med SS-EN 60794-1-1, SS-EN 60794-1-2 och SS-EN 60794-3-10.

Tidigare fastställd svensk standard SS-EN 60794-3-12, utgåva 1, 2006, gäller ej fr o m 2016-01-16.

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

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SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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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)

This European Standard was approved by CENELEC on 2013-01-16. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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	-	-

CONTENTS

1	Scope	5
2	Normative references	5
3	General requirements	6
4	Particular requirements	6
4.1	General	6
4.2	MICE (mechanical, ingress, climatic and chemical and electromagnetic) characteristics	6
4.3	Transmission requirements	7
4.3.1	Attenuation of cabled fibre	7
4.3.2	Fibre bandwidth requirements	7
4.3.3	Polarization mode dispersion (PMD) requirements	8
	Bibliography	9
	Table 1 – Multimode maximum cable attenuation coefficient (dB/km)	7
	Table 2 – Single-mode maximum cable attenuation coefficient (dB/km)	7
	Table 3 – Minimum multimode fibre bandwidth (MHz × km)	8

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*

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.

ISO/IEC 24702, Information technology – Generic cabling – Industrial premises