SVENSK STANDARD SS-EN 60794-1-20

Fastställd	Utgåva	Sida	Ansvarig kommitté
2014-06-11	1	1 (1+14)	SEK TK 86

Optokablar – Del 1-20: Artspecifikation – Grundläggande provningsmetoder – Allmänt och definitioner

Optical fibre cables – Part 1-20: Generic specification – Basic optical cable test procedures – General and definitions

Som svensk standard gäller europastandarden EN 60794-1-20:2014. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60794-1-20:2014.

Nationellt förord

Europastandarden EN 60794-1-20:2014

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 60794-1-20, First edition, 2014 - Optical fibre cables - Part 1-20: Generic specification - Basic optical cable test procedures - General and definitions**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden ska användas tillsammans med SS-EN 60794-1-1.

Tidigare fastställd svensk standard SS-EN 60794-1-2, utgåva 2, 2003, gäller ej fr o m 2017-02-21.

ICS 33.180.10

Denna standard är fastställd av SEK Svensk Elstandard,
som också kan lämna upplysningar om **sakinnehållet** i standarden.
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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

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

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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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60794-1-20

April 2014

ICS 33.180.10

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

English version

Optical fibre cables - Part 1-20: Generic specification - Basic optical cable test procedures - General and definitions

(IEC 60794-1-20:2014)

Câbles à fibres optiques - Partie 1-20: Spécification générique - Procédures fondamentales d'essais des câbles optiques - Généralités et définitions (CEI 60794-1-20:2014)

Lichtwellenleiterkabel - Teil 1-20: Fachgrundspezifikation - Grundlegende Prüfverfahren für Lichtwellenleiterkabel - Grundlegendes und Definitionen (IEC 60794-1-20:2014)

CENELEC

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 60794-1-20:2014 E

SEK Svensk Elstandard

Foreword

The text of document 86A/1476/CDV, future edition 1 of IEC 60794-1-20, 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 60794-1-20:2014.

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)	2014-11-21
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2017-02-21

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

EN 60794-1-20:2014 includes the following significant technical changes with respect to EN 60794-1-2:2003:

EN 60794-1-20:2014 cancels and replaces the general and guidance part of EN 60794-1-2:2003.

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

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 60794-1-20:2014 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 60068-2-14	NOTE	Harmonized as EN 60068-2-14.
IEC 60544 Series	NOTE	Harmonized in EN 60544 Series (not modified).
IEC 60793-1-22	NOTE	Harmonized as EN 60793-1-22.
IEC 60793-1-32	NOTE	Harmonized as EN 60793-1-32.
IEC 60793-1-54	NOTE	Harmonized as EN 60793-1-54.
IEC 60794-1-2:2003	NOTE	Harmonized as EN 60794-1-2:2003 (not modified).

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 60793-1	Series	Optical fibres - Part 1: Measurement methods and test procedures	EN 60793-1	Series
IEC 60793-1-40	-	Optical fibres - Part 1-40: Measurement methods and test procedures - Attenuation	EN 60793-1-40	-
IEC 60793-1-41	-	Optical fibres - Part 1-41: Measurement methods and test procedures - Bandwidth	EN 60793-1-41	-
IEC 60793-1-46	-	Optical fibres - Part 1-46: Measurement methods and test procedures - Monitoring of changes in optical transmittance	EN 60793-1-46	-
IEC 60793-1-48	-	Optical fibres - Part 1-48: Measurement methods and test procedures - Polarization mode dispersion	EN 60793-1-48	-
IEC 60793-2	Series	Optical fibres	EN 60793-2	Series
IEC 60793-2-10	-	Optical fibres - Part 2-10: Product specifications - Sectional specification for category A1 multimode fibres	EN 60793-2-10	-
IEC 60793-2-40	-	Optical fibres - Part 40: Product specifications - Sectional specification for category A4 multimode fibres	EN 60793-2-40	-
IEC 60793-2-50	-	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN 60793-2-50	-
IEC 60794-1	Series	Optical fibre cables - Part 1: Generic specification	EN 60794-1	Series
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 60794-2	Series	Optical fibre cables - Part 2: Indoor cables	EN 60794-2	Series
IEC 60794-3	Series	Optical fibre cables - Part 3: Outdoor cables	EN 60794-3	Series

Publication	Year	Title	EN/HD	Year
IEC 60794-3-20	-	Optical fibre cables - Part 3-20: Outdoor cables - Family specification for self-supporting aerial telecommunication cables	EN 60794-3-20	-
IEC 60794-4	-	Optical fibre cables - Part 4: Sectional specification - Aerial optical cables along electrical power lines	EN 60794-4	-
IEC 60794-5	-	Optical fibre cables - Part 5: Sectional specification - Microduct cabling for installation by blowing	EN 60794-5	-
IEC/TR 61931	-	Fibre optic - Terminology	-	-
IEC/TR 62362	-	Selection of optical fibre cable specifications relative to mechanical, ingress, climatic or electromagnetic characteristics - Guidance	-	-
ISO/IEC Guide 98-3	-	Uncertainty of measurement - Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)	-	-
ISO/IEC Guide 99	-	International vocabulary of metrology - Basic and general concepts and associated terms (VIM)	-	-
ISO/IEC 11801	-	Information technology - Generic cabling for customer premises	-	-

CONTENTS

OPTICAL FIBRE CABLES –

Part 1-20: Generic specification – Basic optical cable test procedures – General and definitions

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 the geometrical, transmission, material, mechanical, ageing (environmental exposure) and climatic properties of optical fibre cables, and electrical requirements where appropriate.

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

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 60793-1 (all parts 1), *Optical fibres – Measurement methods and test procedures*

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

IEC 60793-1-41, *Optical fibres – Part 1-41: Measurement methods and test procedures – Bandwidth*

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

IEC 60793-1-48, *Optical fibres – Part 1-48: Measurement methods and test procedures – Polarization mode dispersion*

IEC 60793-2 (all parts), *Optical fibres*

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

IEC 60793-2-40, *Optical fibres – Part 2-10: Product specifications – Sectional specification for category A4 multimode fibres*

IEC 60793-2-50, *Optical fibres – Part 2-10: Product specifications – Sectional specification for class B single-mode fibres*

IEC 60794-1 (all parts), *Optical fibre cables – Part 1: Generic specification*

IEC 60794-1-1, *Optical fibre cables – 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 (third edition)*

IEC 60794-2 (all parts), *Optical fibre cables – Part 2: Indoor cables*

IEC 60794-3 (all parts), *Optical fibre cables – Part 3: Outdoor cables*

IEC 60794-3-20, *Optical fibre cables – Part 3-20: Outdoor cables – Family specification for self-supporting aerial telecommunication cables*

IEC 60794-4, *Optical fibre cables:– Part 4: Aerial optical cables along electrical power lines*

IEC 60794-5, *Optical fibre cables – Part 5: Sectional specification – Microduct cabling for installation by blowing*

IEC 61931, *Fibre optic – Terminology*

IEC/TR 62362, *Selection of optical fibre cable specifications relative to mechanical, ingress, climatic or electromagnetic characteristics – Guidance*

ISO/IEC 98-3, *Uncertainty of measurement – Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)*

ISO/IEC Guide 99, *International vocabulary of metrology – Basic and general concepts and associated terms (VIM)*

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