

This document is a preview generated by EVS

Simplex and duplex cables for use in terminated cable assemblies - Part 1: Blank Detail Specification and minimum requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 50551-1:2019 sisaldab Euroopa standardi EN 50551-1:2019 ingliskeelset teksti.	This Estonian standard EVS-EN 50551-1:2019 consists of the English text of the European standard EN 50551-1:2019.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 29.03.2019.	Date of Availability of the European standard is 29.03.2019.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 33.180.10

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:
Koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

English Version

Simplex and duplex cables for use in terminated cable assemblies - Part 1: Blank Detail Specification and minimum requirements

Câbles simplex et duplex utilisés dans des ensembles de câbles équipés - Partie 1: Spécification particulière cadre et exigences minimales

Simplex- und Duplex-Kabel, die in konfektionierten Leitungen benutzt werden - Teil 1: Vordruck für Bauartspezifikation und Mindestanforderungen

This European Standard was approved by CENELEC on 2019-02-18. 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

European foreword	3
1 Scope	4
2 Normative references	4
3 Cable Description.....	5
4 Optical fibres.....	7
4.1 Category A1a through A1b multimode optical fibres	7
4.2 Single mode optical fibres	8
5 Buffer.....	9
6 Cable construction	10
6.1 General.....	10
6.2 Mechanical and Environmental tests	11

European foreword

This document (EN 50551-1:2019) has been prepared by CLC/TC 86A "Optical fibres and optical fibre cables".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-02-18
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2022-02-18

This document supersedes EN 50551-1:2011.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

1 Scope

This document describes parameters that can be considered for simplex and duplex optical fibre cables for use in terminated cable assemblies or for termination with optical fibre passive components.

Product specifications may be prepared based on this blank detail specification following in particular requirements of Clauses 3 to 6.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

EN 60793-1-20, *Optical fibres - Part 1-20: Measurement methods and test procedures - Fibre geometry (IEC 60793-1-20)*

EN 60793-1-21, *Optical fibres - Part 1-21: Measurement methods and test procedures - Coating geometry (IEC 60793-1-21)*

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

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

EN 60793-1-43, *Optical fibres - Part 1-43: Measurement methods and test procedures - Numerical aperture measurement (IEC 60793-1-43)*

EN 60793-1-44, *Optical fibres - Part 1-44: Measurement methods and test procedures - Cut-off wavelength (IEC 60793-1-44)*

EN 60793-1-45, *Optical fibres - Part 1-45: Measurement methods and test procedures - Mode field diameter (IEC 60793-1-45)*

EN 60793-1-47, *Optical fibres - Part 1-47: Measurement methods and test procedures - Macrobending loss (IEC 60793-1-47)*

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

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

EN 60794-1-1, *Optical fibre cables - Part 1-1: Generic specification - General (IEC 60794-1-1)*

EN 60794-1-20, *Optical fibre cables - Part 1-20: Generic specification - Basic optical cable test procedures - General and Definitions (IEC 60794-1-20)*

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

EN 60794-1-22, *Optical fibre cables - Part 1-22: Generic specification - Basic optical cable test procedures - Environmental test methods (IEC 60794-1-22)*

EN 60794-1-23, *Optical fibre cables - Part 1-23: Generic specification - Basic optical cable test procedures - Cable element test methods (IEC 60794-1-23)*

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

EN 60794-2-50, *Optical fibre cables - Part 2-50: Indoor cables - Family specification for simplex and duplex cables for use in terminated cable assemblies (IEC 60794-2-50)*

EN 60811-1-1, *Insulating and sheathing materials of electric and optical cables – Common test methods – Part 1-1: General application – Measurement of thickness and overall dimensions – Tests for determining the mechanical properties (IEC 60811-1-1)*

EN 60794-2-51, *Optical fibre cables - Part 2-51: Indoor cables - Detail specification for simplex and duplex cables for use in cords for controlled environment (IEC 60794-2-51)*

3 Cable Description

(1) Prepared by:		(2) Document No: Issue: Date :
(3) Available from:	(4) Generic Specification Sectional Specification Family Specification Product Specification	: EN 60794-1-1 and : EN 60794-1-20, 21, 22, 23, 24 : EN 60794-2 : EN 60794-2-50 : EN 60794-2-51
(5) Additional references:		
(6) Cable description:		
(7) Cable construction:		
<u>Optical fibres</u>		
<u>Fibre count</u>		
<u>Construction</u>		
<ul style="list-style-type: none"> - Tight, semi-tight or loose secondary coating - Strength elements – non metallic - Strength elements – metallic 		
<u>Lay-up</u>		
Buffer		
<ul style="list-style-type: none"> - Material - Nominal outer diameter 		
Sheath		
<ul style="list-style-type: none"> - Material - Maximum diameter - Nominal thickness - Thickness tolerances - Colour 		
Additional armouring (if required)		
<ul style="list-style-type: none"> - Non-metallic armouring 		