

Simplex and duplex cables to be used for cords -- Part 2: Detailed specification and minimum requirements for a 3,0 mm simplex ruggedised single mode fibre cable to be used for patchcords/cords category U

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 50551-2:2013 sisaldab Euroopa standardi EN 50551-2:2013 ingliskeelset teksti.	This Estonian standard EVS-EN 50551-2:2013 consists of the English text of the European standard EN 50551-2:2013.
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 25.10.2013.	Date of Availability of the European standard is 25.10.2013.
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:
Aru 10, 10317 Tallinn, Eesti; 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:
Aru 10, 10317 Tallinn, Estonia; www.evs.ee; phone 605 5050; e-mail info@evs.ee

**Simplex and duplex cables to be used for cords -
Part 2: Detailed specification and minimum requirements for a 3,0 mm
simplex ruggedised single mode fibre cable to be used for
patchcords/cords category U**

Câbles simplex et duplex destinés à être utilisés en tant que cordons -
Partie 2: Spécifications particulières et exigences minimales relatives aux câbles à fibres optiques unimodales renforcés simplex de 3,0 mm pour usage en cordons / cordons de brassage, en Catégorie U

Simplex- und Duplex-Kabel, die in konfektionierten Leitungen benutzt werden -
Teil 2: Bauartspezifikation und Mindestanforderungen für ein 3,0 mm-Simplex-Einmodenfaserkabel mit zusätzlichem Schutz für konfektionierte Kabel/Leitungen der Kategorie U

This European Standard was approved by CENELEC on 2013-08-19. 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

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

Contents	Page
Foreword	3
1 Scope	4
2 Normative references	4
3 Cable description	5
4 Optical fibres — Single mode optical fibre	7
5 Buffer	7
6 Cable construction	8
6.1 General	8
6.2 Mechanical and environmental tests	9

This document is a preview generated by EVS

Foreword

This document (EN 50551-2:2013) 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) 2014-08-19
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2016-08-19

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.

EN 50551 is composed with the following parts:

- EN 50551-1, *Simplex and duplex cables to be used for cords — Part 1: Blank Detail Specification and minimum requirements*;
- EN 50551-2, *Simplex and duplex cables to be used for cords — Part 2: Detailed specification and minimum requirements for a 3,0 mm simplex ruggedised single mode fibre cable to be used for patchcords/cords category U*.

This European Standard was jointly prepared by the Technical Committee CLC/TC 86A "Optical fibres and optical fibre cables", and the Technical Committee CLC/TC 86BXA "Fibre optic interconnect, passive and connectorised components".

1 Scope

This European Standard describes the minimum set of requirements that a simplex ruggedised single mode fibre cable shall meet in order to allow termination with a connector for use in category U (Uncontrolled Environment).

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.

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 60793-1-44, *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 60793-2-50, *Optical fibres — Part 2-50: Product specifications — Sectional specification for class B single-mode fibres (IEC 60793-2-50)*

EN 60794-1 (all parts), *Optical fibre cables (IEC 60794-1, all parts)*

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

EN 60794-2-50:2008, *Optical fibre cables — Part 2-50: Indoor cables — Family specification for simplex and duplex cables for use in terminated cable assemblies (IEC 60794-2-50:2008)*

EN 60811-201, *Electric and optical fibre cables — Test methods for non-metallic materials — Part 201: General tests — Measurement of insulation thickness (IEC 60811-201)*

EN 60811-203, *Electric and optical fibre cables — Test methods for non-metallic materials — Part 203: General tests — Measurement of overall dimensions (IEC 60811-203)*

EN 61034-1, *Measurement of smoke density of cables burning under defined conditions — Part 1: Test apparatus (IEC 61034-1)*

EN 61034-2, *Measurement of smoke density of cables burning under defined conditions — Part 2: Test procedure and requirements (IEC 61034-2)*

EN 61753-1, *Fibre optic interconnecting devices and passive components performance standard — Part 1: General and guidance for performance standards (IEC 61753-1)*

IEC 60332-3-25, *Tests on electric and optical fibre cables under fire conditions — Part 3-25: Test for vertical flame spread of vertically-mounted bunched wires or cables — Category D*

IEC 60754-1, *Test on gases evolved during combustion of materials from cables — Part 1: Determination of the halogen acid gas content*

IEC 60754-2, *Test on gases evolved during combustion of materials from cables — Part 2: Determination of acidity (by pH measurement) and conductivity*