

This document is a preview generated by EVS

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 61754-4:2013 sisaldab Euroopa standardi EN 61754-4:2013 ingliskeelset teksti.	This Estonian standard EVS-EN 61754-4:2013 consists of the English text of the European standard EN 61754-4:2013.
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 kätesaadavaks 29.11.2013.	Date of Availability of the European standard is 29.11.2013.
Standard on kätesaadav 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 33.180.20

Standardite reproduutseerimise 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

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61754-4

November 2013

ICS 33.180.20

Supersedes EN 61754-4:1997 + A1:1999 + A2:2001

English version

**Fibre optic interconnecting devices and passive components -
Fibre optic connector interfaces -
Part 4: Type SC connector family
(IEC 61754-4:2013)**

Dispositifs d'interconnexion et composants
passifs à fibres optiques -
Interfaces de connecteurs à fibres
optiques
(CEI 61754-4:2013)

Lichtwellenleiter -
Verbindungselemente und passive
Bauteile - Steckgesichter von
Lichtwellenleiter-Steckverbindern -
Teil 4: Steckverbinderfamilie der Bauart
SC (IEC 61754-4:2013)

This European Standard was approved by CENELEC on 2013-08-26. 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

Foreword

The text of document 86B/3620/FDIS, future edition 2 of IEC 61754-4, prepared by subcommittee 86B "Fibre optic interconnecting devices and passive components" of IEC/TC 86 "Fibre optics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61754-4:2013.

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) 2014-05-26
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2014-08-26

This document supersedes EN 61754-4:1997 + A1:1999 + A2:2001.

EN 61754-4:2013 includes the following significant technical changes with respect to EN 61754-4:1997 + A1:1999 + A2:2001:

- a) addition of the duplex plug and adaptor connector interface;
- b) reconsideration of the overall content of the standard.

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 61754-4:2013 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 61755-3-1	-	Fibre optic interconnecting devices and passive components -Fibre optic connector optical interfaces - Part 3-1:Connectors with 2,5 mm and 1,25 mm diameter cylindrical full zirconia ferrule, non-angled single mode non-dispersion shifted fibres	prEN 61755-3-1 ¹⁾	-
IEC 61755-3-2	-	Fibre optic interconnecting devices and passive components -Fibre optic connector optical interfaces - Part 3-2: Connectors with 2,5 mm and 1,25 mm diameter cylindrical full zirconia ferrule, angled single mode non-dispersion shifted fibres	prEN 61755-3-2 ¹⁾	-

¹⁾ At draft stage

CONTENTS

FOREWORD	4
1 Scope	6
2 Normative references	6
3 Description	6
4 Interfaces	6
Bibliography	38
 Figure 1 – Simplex PC plug connector interface	8
Figure 2 – Simplex adaptor connector interface	11
Figure 3 – Pin gauge for adaptor	13
Figure 4 – Duplex PC plug connector interface	14
Figure 5 – Duplex adaptor connector interface	17
Figure 6 (<i>continued overleaf</i>)	20
Figure 6 – Simplex APC plug connector interface	21
Figure 7 (<i>continued overleaf</i>)	23
Figure 7 – Duplex APC plug connector interface	24
Figure 8 – Simplex active device receptacle interface for APC connector plug	26
Figure 9 – Simplex active device receptacle interface for PC connector plug	29
Figure 10 – Duplex active device receptacle interface for APC connector plug	32
Figure 11 – Duplex active device receptacle interface for PC connector plug	35
 Table 1 – Interminateability of interface	7
Table 2 – Dimensions of the simplex PC plug connector interface	9
Table 3 – Grade	10
Table 4 – Dimensions of the simplex adaptor connector interface	12
Table 5 – Grade	13
Table 6 – Pin gauge dimensions	13
Table 7 – Dimensions of the duplex PC plug connector interface	15
Table 8 – Grade	16
Table 9 – Dimensions of the duplex adaptor connector interface	18
Table 10 – Grade	19
Table 11 – Dimensions of the simplex APC plug connector interfaces	22
Table 12 – Dimensions of the duplex APC plug connector interfaces	25
Table 13 – Dimensions of the simplex active device receptacle interface for APC connector plug	27
Table 14 – Alignment feature grade	28
Table 15 – Mechanical stop feature grade	28
Table 16 – Dimensions of the simplex active device receptacle interface for PC connector plug	30
Table 17 – Alignment feature grade	31
Table 18 – Mechanical stop feature grade	31

Table 19 – Dimensions of the duplex active device receptacle interface for APC connector plug	33
Table 20 – Alignment feature grade	34
Table 21 – Mechanical stop feature grade	34
Table 22 – Dimensions of the duplex active device receptacle interface for PC connector plug	36
Table 23 – Alignment feature grade	37
Table 24 – Mechanical stop feature grade	37

FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – FIBRE OPTIC CONNECTOR INTERFACES –

Part 4: Type SC connector family

1 Scope

This part of IEC 61754 defines the standard interface dimensions for type SC family of connectors.

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 61755-3-1, *Fibre optic connector optical interfaces – Part 3-1: Optical interface, 2,5 mm and 1,25 mm diameter cylindrical full zirconia PC ferrule, single mode fibre*

IEC 61755-3-2, *Fibre optic connector optical interfaces – Part 3-2: Optical interface, 2,5 mm and 1,25 mm diameter cylindrical full zirconia ferrules for 8 degrees angled-PC single mode fibres*

3 Description

The parent connector for the type SC connector family is a single position plug connector which is characterized by a 2,5 mm nominal ferrule diameter. It includes a push-pull coupling mechanism which is spring loaded relative to the ferrule in the direction of the optical axis. The plug has a single male key which may be used to orient and limit the relative position between the connector and the component to which it is mated. The optical alignment mechanism of the connector is of a resilient sleeve style.

This part of IEC 61754 defines the standard interface dimensions of active device receptacles for the type SC connectors. The receptacles are used to retain the connector plug and mechanically maintain the optical datum target of the plugs at a defined position within the receptacle housings.

4 Interfaces

This standard contains the following standard interfaces:

Interface IEC 61754-4-1: simplex plug connector interface – push/pull, PC

Interface IEC 61754-4-2: simplex adaptor connector interface – push/pull

Interface IEC 61754-4-3: duplex plug connector interface – push/pull, PC

Interface IEC 61754-4-4: duplex adaptor connector interface – push/pull

Interface IEC 61754-4-5: simplex plug connector interface – push/pull, APC 8°

Interface IEC 61754-4-6: duplex plug connector interface – push/pull, APC 8°