BS EN 61754-4-100:2016

BSI Standards Publication

Fibre optic interconnecting devices and passive components — Fibre optic connector interfaces

Part 4-100: Type SC connector family — Simplified receptacle SC-PC connector interfaces

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National foreword

This British Standard is the UK implementation of EN 61754-4-100:2016. It is identical to IEC 61754-4-100:2015. It supersedes BS EN 61754-4-1:2003 which is withdrawn.

The UK participation in its preparation was entrusted by Technical Committee GEL/86, Fibre optics, to Subcommittee GEL/86/2, Fibre optic interconnecting devices and passive components.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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Amendments/corrigenda issued since publication

Date	Text affected

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English Version

Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 4-100: Type SC connector family - Simplified receptacle SC-PC connector interfaces (IEC 61754-4-100:2015)

Dispositifs d'interconnexion et composants passifs à fibres optiques - Interfaces de connecteurs à fibres optiques - Partie 4-100: Famille de connecteurs de type SC - Interfaces de connecteur SC-PC à embase simplifiée (IEC 61754-4-100:2015)

Lichtwellenleiter - Verbindungselemente und passive Bauteile - Steckgesichter von Lichtwellenleiter-Steckverbindern - Teil 4-100: Steckverbinderfamilie der Bauart SC - Steckgesichter von vereinfachten SC-PC-Anschlussbuchsen (IEC 61754-4-100:2015)

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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

European foreword

The text of document 86B/3938/FDIS, future edition 1 of IEC 61754-4-100, prepared by SC 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 61754-4-100:2016.

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) 2016-09-10
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2016-12-10

This document supersedes EN 61754-4-1:2003.

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Endorsement notice

The text of the International Standard IEC 61754-4-100:2015 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 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 61300-3-22	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-22: Examinations and measurements - Ferrule compression force	EN 61300-3-22	-
IEC 61754-4	2013	Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 4: Type SC connector family	EN 61754-4	2013
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	EN 61755-3-1	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 4-100: Type SC connector family – Simplified receptacle SC-PC connector interfaces

FOREWORD

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International Standard IEC 61754-4-100 has been prepared by subcommittee SC86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

This first edition of IEC 61754-4-100 cancels and replaces the first edition of IEC 61754-4-1 published in 2003. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) change in the standard number;
b) change in the interface number;
c) addition of an intermateability table;

d) change in the pin gauge specification;

e) change in the specification of the ferrule outside diameter;

f) addition of multimode to the ferrule grade.

The text of this standard is based on the following documents:

FDIS	Report on voting
86B/3938/FDIS	86B/3959/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 61754 series, published under the general title *Fibre optic interconnecting devices and passive components – Fibre optic connector interfaces*, can be found on the IEC website.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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

Part 4-100: Type SC connector family – Simplified receptacle SC-PC connector interfaces

1 Scope

This part of IEC 61754 specifies the standard simplified receptacle interface dimensions for the type SC connector family. The receptacle assembly consists of a simplified receptacle housing and a simplified plug.

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 61300-3-22, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-22: Examinations and measurements – Ferrule compression force*

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

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*

3 Description

The parent connector for the type SC connector family is a single-position plug which is characterized by a cylindrical, spring-loaded butting ferrule of 2,5 mm typical diameter, and a push-pull coupling mechanism.

a) The simplified receptacles are made up of simplified receptacle housings and simplified plugs.
b) The simplified receptacle housings are used to retain the connector plug and mechanically maintain the optical datum target of the plugs at a defined position within the simplified receptacle housings.
c) A spring is not included in the simplified plug.
d) The simplified plug is removed with the aid of a tool.
e) The optical alignment mechanism of the connector is of a resilient sleeve style.
f) The simplified receptacle housings are to be mated with the plug specified in IEC 61754-4:2013, Figure 1 which is the mating part of the simplified plug.