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Standards

Irish Standard  
I.S. EN IEC 61754-4:2022

# Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 4: Type SC connector family

**I.S. EN IEC 61754-4:2022**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
F +353 1 857 6729  
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## National Foreword

I.S. EN IEC 61754-4:2022 is the adopted Irish version of the European Document EN IEC 61754-4:2022, Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 4: Type SC connector family

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
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**EN IEC 61754-4**

April 2022

ICS 33.180.20

Supersedes EN 61754-4:2013 and all of its amendments  
and corrigenda (if any)

English Version

**Fibre optic interconnecting devices and passive components -  
Fibre optic connector interfaces - Part 4: Type SC connector  
family  
(IEC 61754-4:2022)**

Dispositifs d'interconnexion et composants passifs  
fibroniques - Interfaces de connecteurs fibroniques -  
Partie 4: Famille de connecteurs de type SC  
(IEC 61754-4:2022)

Lichtwellenleiter - Verbindungselemente und passive  
Bauteile - Steckgesichter von Lichtwellenleiter-  
Steckverbindern - Teil 4: Steckverbinderfamilie der Bauart  
SC  
(IEC 61754-4:2022)

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

## **EN IEC 61754-4:2022 (E)**

### **European foreword**

The text of document 86B/4563/FDIS, future edition 3 of IEC 61754-4, 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 IEC 61754-4:2022.

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) 2023-01-04
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-04-04

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61300-2-55    NOTE    Harmonized as EN 61300-2-55

IEC 61755-3-1    NOTE    Harmonized as EN 61755-3-1

IEC 61755-3-2    NOTE    Harmonized as EN 61755-3-2

## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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 61754-1	-	Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 1: General and guidance	EN 61754-1	-

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**IEC 61754-4**

Edition 3.0 2022-02

# **INTERNATIONAL STANDARD**

## **NORME INTERNATIONALE**

**Fibre optic interconnecting devices and passive components – Fibre optic  
connector interfaces –  
Part 4: Type SC connector family**

**Dispositifs d'interconnexion et composants passifs fibroniques – Interfaces de  
connecteurs fibroniques –  
Partie 4: Famille de connecteurs de type SC**



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IEC Secretariat  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
[info@iec.ch](mailto:info@iec.ch)  
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**IEC 61754-4**

Edition 3.0 2022-02

# **INTERNATIONAL STANDARD**

## **NORME INTERNATIONALE**

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**Fibre optic interconnecting devices and passive components – Fibre optic  
connector interfaces –  
Part 4: Type SC connector family**

**Dispositifs d'interconnexion et composants passifs fibroniques – Interfaces de  
connecteurs fibroniques –  
Partie 4: Famille de connecteurs de type SC**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

#### **Part 4: Type SC connector family**

#### **FOREWORD**

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

This third edition cancels and replaces the second edition published in 2013 and constitutes a technical revision.

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

- a) the test method IEC 61300-3-22 for the compression force of the ferrule was added;
- b) Annex A (informative) with cut out dimension requirements for testing the strength of mounted adaptors was added.

The text of this International Standard is based on the following documents:

Draft	Report on voting
86B/4563/FDIS	86B/4584/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

A list of all parts of the IEC 61754 series, 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.

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

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

## **Part 4: Type SC connector family**

### **1 Scope**

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

### **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.

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 61754-1, *Fibre optic interconnecting devices and passive components – Fibre optic connector interfaces – Part 1: General and guidance*

### **3 Terms and definitions**

For the purposes of this document, the terms and definitions given in IEC 61754-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

### **4 Description**

The parent connector for the type SC connector family is a single position plug connector 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 sleeve style.

This document 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.



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