

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fibre optic interconnecting devices and passive components – Fibre optic
connector interfaces –
Part 13: Type FC-PC connector family**

**Dispositifs d'interconnexion et composants passifs fibroniques – Interfaces de
connecteurs fibroniques –
Partie 13: Famille de connecteurs de type FC-PC**



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CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references	5
3 Terms and definitions	5
4 Description	5
5 Interfaces	6
5.1 General.....	6
5.2 Intermateability	6
5.3 Interfaces and dimensions	6
Bibliography.....	15
Figure 1 – Plug connector interface	7
Figure 2 – Adaptor connector interface	10
Figure 3 – Pin gauge for adaptor.....	11
Figure 4 – Active device receptacle interface.....	12
Figure 5 – Pin gauge for active device receptacle	14
Table 1 – Intermateability of interfaces	6
Table 2 – Dimensions of the plug connector interface	8
Table 3 – Grade characteristics for plug connector	9
Table 4 – Dimensions of the adaptor connector interface	11
Table 5 – Pin gauge dimensions	11
Table 6 – Dimensions of the active device receptacle interface.....	13
Table 7 – Alignment feature grade of the active device receptacle interface.....	13
Table 8 – Pin gauge dimensions	14

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC INTERCONNECTING
DEVICES AND PASSIVE COMPONENTS –
FIBRE OPTIC CONNECTOR INTERFACES –****Part 13: Type FC-PC connector family**

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IEC 61754-13 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 2006. This edition constitutes a technical revision.

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

- a) Revising normative reference reflecting the latest documents;
- b) Addition of intermateability in 5.2;

- c) Changes of dimensions of the plug connector interface in Table 2 and Table 3;
- d) Addition of Grade A_m, B_m and C_m in Table 3.

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

Draft	Report on voting
86B/4874/FDIS	86B/4911/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.

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.

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. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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

Part 13: Type FC-PC connector family

1 Scope

This part of IEC 61754 defines the standard interface dimensions for the type FC-PC 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 61754-1, *Fibre optic interconnecting devices and passive components – Fibre optic connector interfaces – Part 1: General and guidance*

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 Terms and definitions

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

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

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

3.1

screw coupling mechanism

coupling mechanism in which a plug connector is inserted into an adaptor connector or an active device receptacle, and a female screw formed on a coupling nut of the plug connector is tightened with a male screw formed on the adaptor connector or the active device receptacle

4 Description

The parent connector for type FC connector family is a single position plug connector set of plug and adaptor configuration which is characterized by a 2,5 mm nominal ferrule diameter. It includes a screw coupling mechanism, which is spring loaded relative to the ferrule in the direction of the optical axis. The coupling can be released by loosening the screw, and the plug connector can be detached from the optical adapter, the adaptor connector, or the active device receptacle. 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 connectors is of a rigid bore sleeve or a resilient sleeve style.