

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fibre optic interconnecting devices and passive components – Fibre optic
connector interfaces –
Part 20: Type LC connector family**

**Dispositifs d'interconnexion et composants passifs fibroniques – Interfaces de
connecteurs à fibres optiques –
Partie 20: Famille de connecteurs de type LC**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC INTERCONNECTING DEVICES
AND PASSIVE COMPONENTS –
FIBRE OPTIC CONNECTOR INTERFACES –****Part 20: Type LC connector family**

FOREWORD

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International Standard IEC 61754-20 has been prepared by subcommittee SC86B: Fibre optic interconnecting devices and passive components.

This trilingual version (2019-08) corresponds to the monolingual English version, published in 2017-04.

This second edition cancels and replaces the first edition published in 2002. It constitutes a technical revision. The changes with respect to the previous edition are to reconsider the whole document and to add Interface IEC 61754-20-9 to IEC 61754-20-16 for a plastic optical fibre (POF).

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

FDIS	Report on voting
86B/3343/FDIS	86B/3393/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.

The French version of this standard has not been voted upon.

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

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

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INTRODUCTION

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

Part 20: Type LC connector family

1 Scope

This International Standard defines the standard interface dimensions for the type LC 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 series, *Fibre optic interconnecting devices and passive components – Fibre optic connector optical interfaces*

3 Description

The parent connector for type LC connector family is a simplex plug connector set of plug/adaptor/plug configuration which is characterized by:

- A 1,25 mm nominal diameter ferrule or in the case of 1 mm OD POF, the fibre acts as the ferrule.
- The connector includes a single coupling latch and a ferrule spring loaded in the direction of the optical axis
- The plug has a single mark 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 a rigid bore sleeve or a resilient sleeve.

Drawings and dimensions provided consist of those minimum features that are functionally critical during the mating and unmating sequences of the plug with its adapter/receptacle counterpart component. The provided dimensions might cause intermateability problems with plugs not compliant to the standard.

4 Interfaces

This standard contains the following standard interfaces:

Interface 20-1: simplex plug connector interface – PC

Interface 20-2: simplex adaptor interface

Interface 20-3: simplex active device receptacle interface

Interface 20-4: duplex plug connector interface – PC

Interface 20-5: duplex adaptor interface