

INTERNATIONAL STANDARD

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

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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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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This consolidated version of the official IEC Standard and its amendment has been prepared for user convenience.

IEC 61754-20 edition 2.1 contains the second edition (2012-04) [documents 86B/3343/FDIS and 86B/3393/RVD] and its amendment 1 (2022-06) [documents 86B/4534/CDV and 86B/4595A/RVC].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

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

This second edition 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).

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.

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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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 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 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~~ document contains the following standard interfaces:

Interface 61754-20-1: simplex plug connector interface – physical contact (PC)

Interface 61754-20-2: simplex adaptor interface

Interface 61754-20-3: simplex active device receptacle interface