

SLOVENSKI STANDARD

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Nadomešča:

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Optični spojni elementi in pasivne komponente - Konektorski vmesniki optičnih vlaken - 20. del: Družina konektorjev tipa LC (IEC 61754-20:2012)

Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 20: Type LC connector family (IEC 61754-20:2012)

Lichtwellenleiter - Verbindungselemente und passive Bauteile - Steckgesichter von Lichtwellenleiter-Steckverbindern - Teil 20: Steckverbinderfamilie der Bauart LC (IEC 61754-20:2012)

Dispositifs d'interconnexion et composants passifs à fibres optiques - Interfaces de connecteurs pour fibres optiques - Partie 20: Famille de connecteurs de type LC (CEI 61754-20:2012)

Ta slovenski standard je istoveten z: EN 61754-20:2012

ICS:

33.180.20	Povezovalne naprave za optična vlakna	Fibre optic interconnecting devices
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EUROPEAN STANDARD
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English version

Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 20: Type LC connector family (IEC 61754-20:2012)

Dispositifs d'interconnexion
et composants passifs à fibres optiques -
Interfaces de connecteurs
pour fibres optiques -
Partie 20: Famille de connecteurs
de type LC
(CEI 61754-20:2012)

Lichtwellenleiter - Verbindungselemente
und passive Bauteile - Steckgesichter
von Lichtwellenleiter- Steckverbindern -
Teil 20: Steckverbinderfamilie
der Bauart LC
(IEC 61754-20:2012)

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 86B/3343/FDIS, future edition 2 of IEC 61754-20, prepared by IEC/SC 86B "Fibre optic interconnecting devices and passive components" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61754-20:2012.

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) 2013-02-10
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2013-05-10

This document supersedes EN 61754-20:2002.

EN 61754-20:2012 includes the following significant technical changes with respect to EN 61754-20:2002:

The changes are to reconsider the whole document and to add Interface IEC 61754-20-9 to IEC 61754-20-16 for plastic optical fibre (POF).

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Endorsement notice

The text of the International Standard IEC 61754-20:2012 was approved by CENELEC as a European Standard without any modification.

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

IEC 60793-2-40	NOTE	Harmonised as EN 60793-2-40.
IEC 60794-2-50	NOTE	Harmonised as EN 60794-2-50.

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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61755-3	Series	Fibre optic interconnecting devices and passive components - Fibre optic connector optical interfaces	EN 61755-3	Series

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IEC 61754-20

Edition 2.0 2012-04

INTERNATIONAL STANDARD

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

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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 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.

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.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site 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.

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A bilingual version of this publication may be issued at a later date.

INTRODUCTION

The International Electrotechnical Commission (IEC) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent concerning IEC 61754-20.

IEC takes no position concerning the evidence, validity and scope of this patent right.

The holder of this patent right has assured the IEC that he/she is willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with IEC. Information may be obtained from:

OFS Fitel LLC, Inc.,
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ISO (www.iso.org/patents) and IEC (http://www.iec.ch/tctools/patent_decl.htm) maintain on-line data bases of patents relevant to their standards. Users are encouraged to consult the data bases for the most up to date information concerning patents.

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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 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