STN

Optovláknové spájacie prvky a pasívne súčiastky Rozhrania optických konektorov Časť 7-2: Skupina konektorov typu MPO Dva rady vlákien

STN EN IEC 61754-7-2

35 9244

Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 7-2: Type MPO connector family - Two fibre rows

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 09/18

Obsahuje: EN IEC 61754-7-2:2018, IEC 61754-7-2:2017

Spolu s STN EN 61754-7-1 od 17.01.2019 ruší STN EN 61754-7 (35 9244) z marca 2009

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN IEC 61754-7-2

March 2018

ICS 33.180.20

Supersedes EN 61754-7:2008 (partially)

English Version

Fibre optic interconnecting devices and passive components Fibre optic connector interfaces - Part 7-2: Type MPO connector
family - Two fibre rows
(IEC 61754-7-2:2017)

Dispositifs d'interconnexion et composants passifs fibroniques - Interfaces de connecteurs fibroniques - Partie 7-2: Famille de connecteurs de type MPO - Deux rangées de fibres (IEC 61754-7-2:2017)

Steckgesichter von Lichtwellenleiter-Steckverbindern - Teil 7-2: Steckverbinderfamilie der Bauart MPO - Zwei Faserreihen (IEC 61754-7-2:2017)

This European Standard was approved by CENELEC on 2018-01-17. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

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

EN IEC 61754-7-2:2018 (E)

European foreword

The text of document (86B/4099/FDIS), future edition 1 of IEC 61754-7-2, prepared by IEC/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 61754-7-2:2018.

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)	2018-10-17
•	latest date by which the national standards conflicting with the	(dow)	2019-01-17

This document partially supersedes EN 61754-7:2008.

document have to be withdrawn

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 61754-7-2:2017 was approved by CENELEC as a European Standard without any modification.



IEC 61754-7-2

Edition 1.0 2017-12

INTERNATIONAL STANDARD

Fibre optic interconnecting devices and passive components – Fibre optic connector interfaces –

Part 7-2: Type MPO connector family – Two fibre rows





THIS PUBLICATION IS COPYRIGHT PROTECTED Copyright © 2017 IEC, Geneva, Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester. If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

IEC Central Office Tel.: +41 22 919 02 11 3, rue de Varembé Fax: +41 22 919 03 00

CH-1211 Geneva 20 info@iec.ch Switzerland www.iec.ch

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigenda or an amendment might have been published.

IEC Catalogue - webstore.iec.ch/catalogue

The stand-alone application for consulting the entire bibliographical information on IEC International Standards, Technical Specifications, Technical Reports and other documents. Available for PC, Mac OS, Android Tablets and iPad.

IEC publications search - www.iec.ch/searchpub

The advanced search enables to find IEC publications by a variety of criteria (reference number, text, technical committee,...). It also gives information on projects, replaced and withdrawn publications.

IEC Just Published - webstore.iec.ch/justpublished

Stay up to date on all new IEC publications. Just Published details all new publications released. Available online and also once a month by email.

Electropedia - www.electropedia.org

The world's leading online dictionary of electronic and electrical terms containing 20 000 terms and definitions in English and French, with equivalent terms in 16 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

IEC Glossary - std.iec.ch/glossary

65 000 electrotechnical terminology entries in English and French extracted from the Terms and Definitions clause of IEC publications issued since 2002. Some entries have been collected from earlier publications of IEC TC 37, 77, 86 and CISPR.

IEC Customer Service Centre - webstore.iec.ch/csc

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: csc@iec.ch.



IEC 61754-7-2

Edition 1.0 2017-12

INTERNATIONAL STANDARD

Fibre optic interconnecting devices and passive components – Fibre optic connector interfaces –

Part 7-2: Type MPO connector family – Two fibre rows

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 33.180.20 ISBN 978-2-8322-5066-2

Warning! Make sure that you obtained this publication from an authorized distributor.

-2-

IEC 61754-7-2:2017 © IEC 2017

CONTENTS

FU	REWORD	3
INT	FRODUCTION	5
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Description	6
5	Interfaces	7
_	ure 1 – MPO connector configurations	
	MPO female plug, down-angled interface	
Fig	ure 3 – MPO female plug, up-angled interface	9
_		
Fig	ure 5 – Gauge pin	13
Fig	ure 6 – Gauge for plug	13
Fig	ure 7 – MPO male plug, down-angled interface	14
_	, , ,	
Fig	ure 9 – MPO adaptor interface, opposed keyway configuration	18
Fig	ure 10 – MPO female plug, flat interface	20
Fig	ure 11 – MPO male plug, flat interface	22
Fig	ure 12 – MPO backplane housing interface (1 of 2)	24
Fig	ure 13 – MPO printed board housing interface (1 of 2)	28
Fig	ure 14 – MPO adaptor interface, aligned keyway configuration	31
Fig	ure 15 – MPO active device receptacle, angled interface	33
Fig	ure 16 – MPO active device receptacle, flat interface	35
	ble 1 – Intermateability between plugs and adapters/housings/receptacles	
Tab	ble 2 – Dimensions of the MPO female plug, down or up-angled interface	10
Tab	ble 3 – Dimensions of the gauge pin	13
	ble 4 – Dimensions of the gauge for plug	
Tab	ble 5 – Dimensions of the MPO male plug, down- or up-angled interface	16
Tab	ble 6 – Dimensions of the MPO adaptor interface, opposed keyway configuration	19
Tab	ble 7 – Dimensions of the MPO female plug, flat interface	21
Tab	ole 8 – Dimensions of the MPO male plug, flat interface	23
Tab	ble 9 – Dimensions of the MPO backplane housing	26
Tab	ble 10 – Grade	27
Tab	ole 11 – Dimensions of the MPO printed board housing interface	30
Tak	ole 12 – Dimensions of the MPO adaptor interface, aligned keyway configuration	32
Tak	ole 13 – Dimensions of the MPO active device receptacle, angled interface	34
Tab	ole 14 – Dimensions of the MPO active device receptacle, flat interface	36

IEC 61754-7-2:2017 © IEC 2017

– 3 –

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 7-2: Type MPO connector family – Two fibre rows

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61754-7-2 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

This first edition of IEC 61754-7-2, along with the first edition of IEC 61754-7-1, cancels and replaces the third edition of IEC 61754-7 published in 2008.

This first edition of IEC 61754-7-2 includes the two fibre row MPO variants including the addition of active device receptacles and up-angled plugs.

The first edition of IEC 61754-7-1 includes the one fibre row MPO variants and related active device receptacles and up-angled plugs.

- 4 - IEC 61754-7-2:2017 © IEC 2017

Following the publication of both IEC 61754-7-1 and IEC 61754-7-2, IEC 61754-7 will be withdrawn.

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

FDIS	Report on voting
86B/4099/FDIS	86B/4110/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

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

A list of all the 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.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

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

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

IEC 61754-7-2:2017 © IEC 2017

- 5 -

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 patents concerning MPO connectors.

The IEC takes no position concerning the evidence, validity and scope of these patent rights.

The holders of these patent rights have assured the IEC that they are willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holders of these patent rights is registered with the IEC. Information may be obtained from:

Intellectual Property Department, NTT Nippon Telegraph and Telephone Corporation, 3-19-2, Nishishinjuku, Shinjuku-ku JP – Tokyo 163-19

Assistant Secretary Laura Thomas CommScope, Inc. of North Carolina Hickory, North Carolina, USA

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights other than those identified above. IEC shall not be held responsible for identifying any or all such patent rights.

ISO (www.iso.org/patents) and IEC (http://patents.iec.ch) 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.

- 6 **-**

IEC 61754-7-2:2017 © IEC 2017

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

Part 7-2: Type MPO connector family – Two fibre rows

1 Scope

This part of IEC 61754 defines the standard interface dimensions for the type MPO family of connectors with two rows of fibres.

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.

There are no normative references in this document.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN