

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

EESTI STANDARDI EESSÕNA

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ICS 33.180.20

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EUROPEAN STANDARD

EN IEC 61754-7-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

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)

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

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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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2019-01-17

This document partially supersedes EN 61754-7:2008.

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.

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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.

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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.

3 Terms and definitions

No terms and definitions are listed in this document.

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

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

4 Description

The parent connector for the type MPO connector family is a multiway plug connector characterized by a rectangular ferrule normally 6,4 mm × 2,5 mm which utilizes two pins of 0,7 mm diameter as its alignment. The variant in this document provides a joint of 16 to 24 fibres by arraying them between two pin-positioning holes in the ferrule in a two-layer (two-row) arrangement. The connector includes a push-pull coupling mechanism and a ferrule spring loaded in the direction of the optical axis. The connector 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.

Connector interfaces are configured using a female plug without pins, a male plug with pins fixed and an adaptor as shown in Figure 1. The female plug is intermateable with the male plug. There are two angled-interface plugs, one called down-angled and the other up-angled. They are defined for both male and female plugs. The up and down descriptors refer to the tilt direction of the ferrule's angled end face relative to the fibre axis when looking toward the end face with the plug's key feature on the top. For down-angled plugs, the angled surface faces slightly downward. For up-angled plugs, the angled surface faces slightly upward. These different angles affect intermateability for the two adaptor types. An opposed keyway adaptor mates two plugs with the keys in opposite orientations, for example one side keyway-up and the other keyway-down. In contrast, an aligned keyway adaptor mates two plugs with the keys