Irish Standard
I.S. EN IEC 61754-7-3:2019

Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 7-3: Type MPO connector family - Two fibre rows 16 fibre wide

I.S. EN IEC 61754-7-3:2019

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National Foreword

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EN IEC 61754-7-3

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Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 7-3: Type MPO connector family - Two fibre rows 16 fibre wide (IEC 61754-7-3:2019)

Dispositifs d'interconnexion et composants passifs àfibres optiques - Interfaces de connecteurs à fibres optiques - Partie 7-3: Famille de connecteurs de type MPO - Deux rangées de 16 fibres (IEC 61754-7-3:2019)

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European foreword

The text of document 86B/4176/FDIS, future edition 1 of IEC 61754-7-3, prepared by 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 61754-7-3:2019.

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)	2020-02-10
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IEC 61754-7-3

Edition 1.0 2019-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Fibre optic interconnecting devices and passive components – Fibre optic connector interfaces –
Part 7-3: Type MPO connector family –Two fibre rows 16 fibre wide

Dispositifs d'interconnexion et composants passifs àfibres optiques – Interfaces de connecteurs à fibres optiques –
Partie 7-3: Famille de connecteurs de type MPO – Deux rangées de 16 fibres

IEC 61754-7-3:2019-04(en-fr)

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Fibre optic interconnecting devices and passive components – Fibre optic connector interfaces –
Part 7-3: Type MPO connector family –Two fibre rows 16 fibre wide

Dispositifs d'interconnexion et composants passifs àfibres optiques – Interfaces de connecteurs à fibres optiques –
Partie 7-3: Famille de connecteurs de type MPO – Deux rangées de 16 fibres

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CONTENTS

FOREWORD 3
INTRODUCTION 5
1 Scope 6
2 Normative references 6
3 Terms and definitions 6
4 Description 6
5 Interfaces 7

Figure 1 – MPO connector configurations 7
Figure 2 – Optical datum target location diagrams 8
Figure 3 – Gauge pin 8
Figure 4 – Gauge for plug 9
Figure 5 – MPO female plug, down-angled interface 10
Figure 6 – MPO female plug, up-angled interface 10
Figure 7 – MPO male plug, down-angled interface 12
Figure 8 – MPO male plug, up-angled interface 13
Figure 9 – MPO female plug, flat interface 15
Figure 10 – MPO male plug, flat interface 17
Figure 11 – MPO adaptor interface, opposed keyway configuration 19
Figure 12 – MPO adaptor interface, aligned keyway configuration 21
Figure 13 – MPO active device receptacle, angled interface 23
Figure 14 – MPO active device receptacle, flat interface 25

Table 1 – Intermateability between plugs and adaptors/housings/receptacles 7
Table 2 – Dimensions of the gauge pin 8
Table 3 – Dimensionsof the gauge for plug 9
Table 4 – Dimensions of the MPO female plug, down- or up-angled interface 11
Table 5 – Dimensions of the MPO male plug, down- or up-angled interface 13
Table 6 – Dimensions of the MPO female plug, flat interface 16
Table 7 – Dimensions of the MPO male plug, flat interface 18
Table 8 – Dimensions of the MPO adaptor interface, opposed keyway configuration 20
Table 9 – Dimensions of the MPO adaptor interface, aligned keyway configuration 22
Table 10 – Dimensions of the MPO active device receptacle, angled interface 24
Table 11 – Dimensions of the MPO active device receptacle, flat interface 26

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

Part 7-3: Type MPO connector family – Two fibre rows 16 fibre wide

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International Standard IEC 61754-7-3 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

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

FDIS	Report on voting
86B/4176/FDIS	86B/4190/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 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

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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 this patent right.

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

Part 7-3: Type MPO connector family – Two fibre rows 16 fibre wide

1 Scope

This part of IEC 61754 defines the standard interface dimensions for type MPO family of connectors with two rows of 16 fibres.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

No terms and definitions are listed in this document.

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4 Description

The parent connector for type MPO connector family is a multiway plug characterized by a rectangular ferrule normally 6,4 mm × 2,5 mm which utilizes two pins of 0,55 mm diameter as its alignment. The variant in this document provides a joint of 32 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 at the same orientation. When using an opposed keyway adaptor with angled interfaces, two down-angled plugs or two up-angled plugs shall be connected. For aligned keyway adaptors with angled interfaces, one down-angled plug and one up-angled plug shall be connected.

Additionally, the female plug interface is intermateable with the active device receptacle.