
**Vmesniki optičnih konektorjev – 10. del: Konektorska družina tipa Mini-MPO
(IEC 61754-10:2005)**

Fibre optic connector interfaces - Part 10: Type Mini-MPO connector family (IEC 61754-10:2005)

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EUROPEAN STANDARD

EN 61754-10

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2005

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Supersedes EN 61754-10:2001

English version

**Fibre optic connector interfaces
Part 10: Type Mini-MPO connector family
(IEC 61754-10:2005)**

Interfaces de connecteurs
pour fibres optiques
Partie 10: Famille de connecteurs
de type Mini-MPO
(CEI 61754-10:2005)

Steckgesichter von
Lichtwellenleiter-Steckverbindern
Teil 10: Steckverbinderfamilie
der Bauart Mini-MPO
(IEC 61754-10:2005)

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SIST EN 61754-10:2006
The document has been reviewed by CENELEC and is valid for 10 years.
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CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 86B/2127/FDIS, future edition 2 of IEC 61754-10, 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 was approved by CENELEC as EN 61754-10 on 2005-10-01.

This European Standard supersedes EN 61754-10:2001.

Specific technical changes involve addition of intermateability dimensions for male plug connectors.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2006-07-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2008-10-01

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Endorsement notice

The text of the International Standard IEC 61754-10:2005 was approved by CENELEC as a European Standard without any modification.

NORME INTERNATIONALE INTERNATIONAL STANDARD

CEI
IEC
61754-10

Deuxième édition
Second edition
2005-07

Interfaces de connecteurs pour fibres optiques –

Partie 10: Famille de connecteurs de type Mini-MPO

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Fibre optic connector interfaces –

Part 10: SIST EN 61754-10:2006

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International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIBRE OPTIC CONNECTOR INTERFACES –

Part 10: Type Mini-MPO connector family

FOREWORD

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International Standard IEC 61754-10 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

This second edition cancels and replaces the first edition published in 2000, of which it constitutes a minor revision. Specific technical changes involve addition of intermateability dimensions for male plug connectors."

The text of this standard is based on the following documents:

FDIS	Report on voting
86B/2127/FDIS	86B/2169/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.

IEC 61754 consists of multiple parts, under the general title *Fibre optic connector interfaces*.

- Part 1, entitled *General and guidance*, covers general information.
- Subsequent parts contain interfaces for various connector families.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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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FIBRE OPTIC CONNECTOR INTERFACES –

Part 10: Type Mini-MPO connector family

1 Scope

This part of IEC 61754 defines the standard interface dimensions for the type Mini-MPO family of connectors.

2 Description

The parent connector for the type Mini-MPO connector family is a multiway plug connector characterized by a rectangular ferrule nominally $4,4 \times 2,5$ mm which utilises two pins of 0,7 mm diameter as its alignment. It is capable of joining up to four fibres by arraying them between two pin-positioning holes in the ferrule. 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 fixed pins and an adaptor as shown in Figure 1. The female plug is intermateable with the male plug.

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3 Interfaces

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This standard contains the following standard interfaces:

Interface 10-1: Mini-MPO female plug connector angled interface – Push/pull consisting of:

- Interface 10-1-1 for single fibre
- Interface 10-1-2 for two fibres with a pitch of 0,25 mm
- Interface 10-1-3 for two fibres with a pitch of 0,75 mm
- Interface 10-1-4 for four fibres with a pitch of 0,25 mm

Interface 10-2: Mini-MPO male plug connector angled interface – Push/pull consisting of:

- Interface 10-2-1 for single fibre
- Interface 10-2-2 for two fibres with a pitch of 0,25 mm
- Interface 10-2-3 for two fibres with a pitch of 0,75 mm
- Interface 10-2-4 for four fibres with a pitch of 0,25 mm

Interface 10-3: Mini-MPO adaptor interface – Push/pull

Interface 10-4: Mini-MPO female plug connector flat interface – Push/pull consisting of:

- Interface 10-4-1 for single fibre
- Interface 10-4-2 for two fibres with a pitch of 0,25 mm
- Interface 10-4-3 for two fibres with a pitch of 0,75 mm
- Interface 10-4-4 for four fibres with a pitch of 0,25 mm

Interface 10-5: Mini-MPO male plug connector flat interface – Push/pull consisting of:

- Interface 10-5-1 for single fibre
- Interface 10-5-2 for two fibres with a pitch of 0,25 mm
- Interface 10-5-3 for two fibres with a pitch of 0,75 mm
- Interface 10-5-4 for four fibres with a pitch of 0,25 mm

The following standards are intermateable.

Female plugs	Adaptors	Male plugs
10-1-1	10-3	10-2-1
10-1-2	10-3	10-2-2
10-1-3	10-3	10-2-3
10-1-4	10-3	10-2-4
10-4-1	10-3	10-5-1
10-4-2	10-3	10-5-2
10-4-3	10-3	10-5-3
10-4-4	10-3	10-5-4

NOTE Connector interfaces between two fibres and four fibres will intermate and will correctly align the lower defined numbers of optical datum targets.



Figure 1 – Mini-MPO connector configurations

