SLOVENSKI STANDARD
SIST EN 61754-10:2002

01-september-2002

Fibre optic connector interfaces - Part 10: Type Mini-MPO connector family (IEC 61754-10:2000)

Fibre optic connector interfaces -- Part 10: Type Mini-MPO connector family

Steckgesichter von Lichtwellenleiter-Steckverbindern -- Teil 10: Bauart Mini-MPO Steckverbinderfamilie

Interfaces de connecteurs pour fibres optiques -- Partie 10: Famille de connecteurs de type Mini-MPO

Ta slovenski standard je istoveten z: **EN 61754-10:2001**

ICS:

33.180.20	Povezovalne naprave za optiļ na vlakna	Fibre optic interconnecting devices

SIST EN 61754-10:2002 **en**

EUROPEAN STANDARD **EN 61754-10**

NORME EUROPÉENNE

EUROPÄISCHE NORM August 2001

ICS 33.180.20

English version

Fibre optic connector interfaces
Part 10: Type Mini-MPO connector family
(IEC 61754-10:2000)

Interfaces de connecteurs pour fibres optiques
Partie 10: Famille de connecteurs de type Mini-MPO
(CEI 61754-10:2000)

Steckgesichter von Lichtwellenleiter-Steckverbindern
Teil 10: Bauart Mini-MPO Steckverbinderfamilie
(IEC 61754-10:2000)

This European Standard was approved by CENELEC on 2000-11-01. 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.

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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

Ref. No. EN 61754-10:2001 E

Foreword

The text of document 86B/1318/FDIS, future edition 1 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 2000-11-01.

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) 2002-02-01

– latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2003-11-01

The International Electrotechnical Commission (IEC) and CENELEC draw attention to the fact that it is claimed that compliance with this International Standard/European Standard may involve the use of a patent concerning Mini-MPO connectors.

The IEC and CENELEC take no position concerning the evidence, validity and scope of this patent right.

The holder of this patent right has assured the IEC that he 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 the IEC. Information may be obtained from:

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Endorsement notice

The text of the International Standard IEC 61754-10:2000 was approved by CENELEC as a European Standard without any modification.

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INTERNATIONAL STANDARD

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61754-10

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Interfaces de connecteurs pour fibres optiques –

Partie 10:
Famille de connecteurs de type Mini-MPO

Fibre optic connector interfaces –

Part 10:
Type Mini-MPO connector family

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIBRE OPTIC CONNECTOR INTERFACES –

Part 10: Type Mini-MPO connector family

FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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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.

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

FDIS	Report on voting
86B/1318/FDIS	86B/1360/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 3.

The committee has decided that the contents of this publication will remain unchanged until 2004. At this date, the publication will be

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

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 × 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.

3 Interfaces

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.

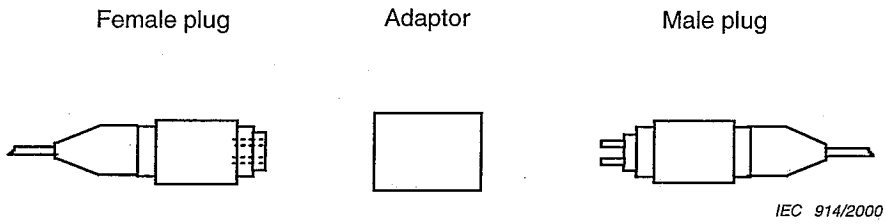

Figure 1 – Mini-MPO connector configurations

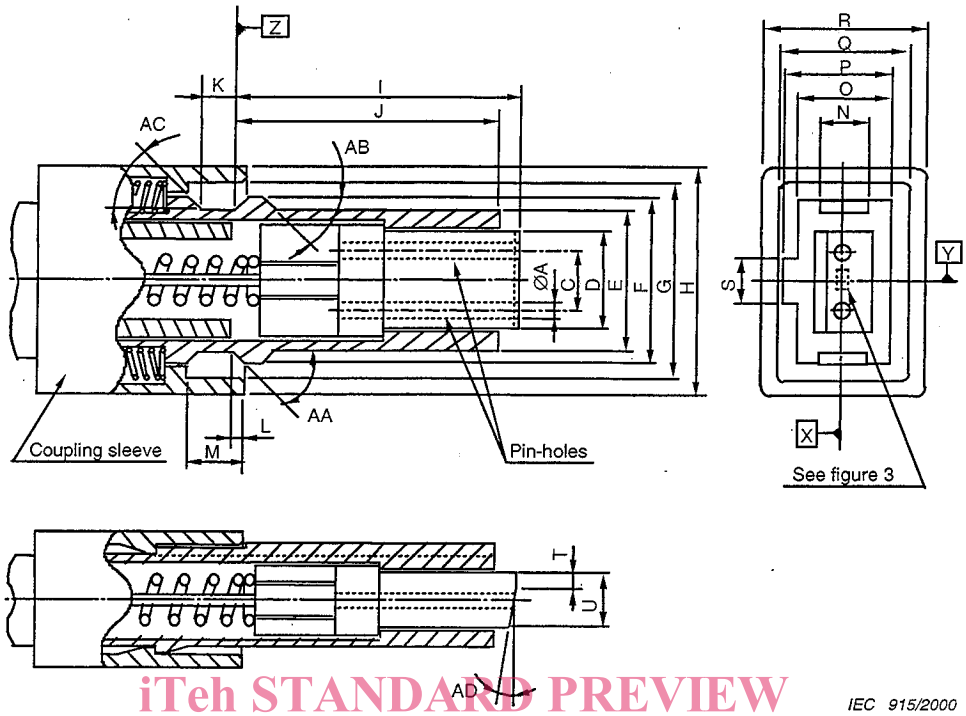

Figure 2 – Mini-MPO female plug connector angled interface