

# INTERNATIONAL STANDARD

**IEC**  
**1754-7**

First edition  
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**Fibre optic connector interfaces –**  
**Part 7:**  
**Type MPO connector family**

*Interfaces de connecteurs  
pour fibres optiques –*

*Partie 7:*  
*Famille de connecteurs de type MPO*



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- la CEI 878: *Symboles graphiques pour équipements électriques en pratique médicale.*

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- IEC 27: *Letter symbols to be used in electrical technology;*
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and for medical electrical equipment,

- IEC 878: *Graphical symbols for electromedical equipment in medical practice.*

The symbols and signs contained in the present publication have either been taken from IEC 27, IEC 417, IEC 617 and/or IEC 878, or have been specifically approved for the purpose of this publication.

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The attention of readers is drawn to the end pages of this publication which list the IEC publications issued by the technical committee which has prepared the present publication.

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## Fibre optic connector interfaces – Part 7: Type MPO connector family

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**FIBRE OPTIC CONNECTOR INTERFACES –  
Part 7: Type 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 1754-7 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/836/FDIS	86B/926/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.

## FIBRE OPTIC CONNECTOR INTERFACES – Part 7: Type MPO connector family

### 1 Scope

This part of IEC 1754 defines the standard interface dimensions for type MPO family of connectors.

### 2 Description

The parent connector for 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. It is applicable to a joint of multiple fibres up to 12 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 pins fixed and an adaptor as shown in figure 1. The female plug is intermateable with the male plug.

Connector interfaces with different numbers of optical datum targets will intermate and will correctly align the lower defined numbers of optical datum targets.

### 3 Interfaces

This standard contains the following standard interfaces.

Interface 7-1: MPO female plug connector angled interface – Push/pull

Interface 7-2: MPO male plug connector angled interface – Push/pull

Interface 7-3: MPO adaptor interface – Push/pull