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I.S. EN 61754-6:2013

# Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces -- Part 6: Type MU connector family

**I.S. EN 61754-6:2013**

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NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
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EUROPEAN STANDARD

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Supersedes EN 61754-6:1997 + A1:2001 + A2:2005

English version

**Fibre optic interconnecting devices and passive components -  
Fibre optic connector interfaces -  
Part 6: Type MU connector family  
(IEC 61754-6:2013)**

Dispositifs d'interconnexion et composants  
passifs à fibres optiques -  
Interfaces de connecteurs à fibres  
optiques  
(CEI 61754-6:2013)

Lichtwellenleiter -  
Verbindungselemente und passive  
Bauteile - Steckgesichter von  
Lichtwellenleiter-Steckverbindern -  
Teil 6: Bauart MU-Steckverbinderfamilie  
(IEC 61754-6:2013)

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Europäisches Komitee für Elektrotechnische Normung

**CEN-CENELEC Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## **Foreword**

The text of document 86B/3627/FDIS, future edition 2 of IEC 61754-6, prepared by subcommittee 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 61754-6:2013.

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) 2014-05-26
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2014-08-26

This document supersedes EN 61754-6:1997 + A1:2001 + A2:2005.

EN 61754-6:2013 includes the following significant technical changes with respect to EN 61754-6:1997 + A1:2001 + A2:2005 :

- a) addition of standard references;
- b) revision of intermateability.

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## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61755-3-1		Fibre optic interconnecting devices and passive components -Fibre optic connector optical interfaces - Part 3-1:Connectors with 2,5 mm and 1,25 mm diameter cylindrical full zirconia ferrule, non-angled single mode non-dispersion shifted fibres	prEN 61755-3-1 <sup>1)</sup>	
IEC 61755-3-2		Fibre optic interconnecting devices and passive components -Fibre optic connector optical interfaces - Part 3-2: Connectors with 2,5 mm and 1,25 mm diameter cylindrical full zirconia ferrule, angled single mode non-dispersion shifted fibres	prEN 61755-3-2 <sup>1)</sup>	

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<sup>1)</sup> At draft stage.

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**IEC 61754-6**

Edition 2.0 2013-07

# **INTERNATIONAL STANDARD**

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**Fibre optic interconnecting devices and passive components – Fibre optic  
connector interfaces –  
Part 6: Type MU connector family**





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IEC Central Office  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
Fax: +41 22 919 03 00  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

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**IEC 61754-6**

Edition 2.0 2013-07

# **INTERNATIONAL STANDARD**

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**Fibre optic interconnecting devices and passive components – Fibre optic  
connector interfaces –  
Part 6: Type MU connector family**

INTERNATIONAL  
ELECTROTECHNICAL  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

#### **Part 6: Type MU connector family**

#### FOREWORD

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International Standard IEC 61754-6 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 1997 and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) addition of standard references;
- b) revision of intermateability.

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

FDIS	Report on voting
86B/3627/FDIS	86B/3662/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.

A list of all parts of the IEC 61754 series, under the general title *Fibre optic interconnecting devices and passive components – Fibre optic connector interfaces*, can be found on the IEC website.

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

## Part 6: Type MU connector family

### 1 Scope

This part of IEC 61754 defines the standard interface dimensions for type MU family of connectors.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 61755-3-1, *Fibre optic connector optical interfaces – Part 3-1: Optical interface, 2,5 mm and 1,25 mm diameter cylindrical full zirconia PC ferrule, single mode fibre*

IEC 61755-3-2, *Fibre optic connector optical interfaces – Part 3-2: Optical interface, 2,5 mm and 1,25 mm diameter cylindrical full zirconia ferrules for 8 degrees angled-PC single mode fibres*

### 3 Description

The parent connector for type MU connector family is a miniature single-position plug which is characterized by a cylindrical, spring-loaded butting ferrule(s) of a 1,25 mm typical diameter, and a push-pull coupling mechanism. The optical alignment mechanism of the connectors is of a rigid hole or a resilient sleeve style.

This part 6 type MU connector family defines the standard interface dimensions of active device receptacles for the type MU connectors. The receptacles are used to retain the connector plugs and mechanically maintain the optical datum target of the plugs at a defined position within the receptacle housings.

### 4 Interfaces

This standard contains the following standard interfaces.

- Interface IEC 61754-6-1: Simplex plug connector interface – Push/pull (See Figure 1)
- Interface IEC 61754-6-2: 4,5 mm duplex plug connector interface – Push/pull (See Figure 2)
- Interface IEC 61754-6-3: Simplex adaptor connector interface – Push/pull (See Figure 3)
- Interface IEC 61754-6-4: 4,5 mm duplex adaptor connector interface – Push/pull (see Figure 5)
- Interface IEC 61754-6-5: 8-port adaptor connector interface – Push/pull (See Figure 6)
- Interface IEC 61754-6-6: Plug connector interface – for printed board housings (See Figure 7)
- Interface IEC 61754-6-7: Sleeve holder interface – for printed board housings (See Figure 8)
- Interface IEC 61754-6-8: 2-port backplane housing interface – Self-retentive (See Figure 9)

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