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Fibre optic interconnecting devices and passive components - Connector optical interfaces - Part 2-5: Connection parameters of non-dispersion shifted single-mode physically contacting fibres - Angled for reference connection applications

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 61755-2-5:2015 sisaldb Euroopa standardi EN 61755-2-5:2015 ingliskeelset teksti.	This Estonian standard EVS-EN 61755-2-5:2015 consists of the English text of the European standard EN 61755-2-5:2015.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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ICS 33.180.20

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February 2015

ICS 33.180.20

English Version

Fibre optic interconnecting devices and passive components -
Connector optical interfaces - Part 2-5: Connection parameters
of non-dispersion shifted single-mode physically contacting
fibres - Angled for reference connection applications
(IEC 61755-2-5:2015)

Dispositifs d'interconnexion et composants passifs à fibres
optiques - Interfaces optiques de connecteurs pour fibres
optiques - Partie 2-5: Connexion de fibres unimodales à
dispersion non décalée en contact physique avec angle,
avec polissage, pour applications en tant que connecteurs
de référence
(IEC 61755-2-5:2015)

Lichtwellenleiter - Verbindungselemente und passive
Bauteile -Optische Schnittstellen von Lichtwellenleiter-
Steckverbindern - Teil 2-4: Optische Schnittstelle von nicht-
dispersionsverschobenen, abgeschrägten Einmodenfasern
mit physikalischem Kontakt für die Anwendung mit
Referenzsteckverbindern
(IEC 61755-2-5:2015)

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

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

Foreword

The text of document 86B/3846/FDIS, future edition 1 of IEC 61755-2-5, 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 61755-2-5:2015.

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) 2015-11-12
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-02-12

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Endorsement notice

The text of the International Standard IEC 61755-2-5:2015 was approved by CENELEC as a European Standard without any modification.

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 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60793-2-50	-	Optical fibres -- Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN 60793-2-50	-
IEC 61300-3-4	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures -- Part 3-4: Examinations and measurements - Attenuation	EN 61300-3-4	-
IEC 61300-3-42	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures -- Part 3-42: Examinations and measurements - Attenuation of single mode alignment sleeves and or adaptors with resilient alignment sleeves	EN 61300-3-42	-
IEC 61755-2-1	-	Fibre optic connector optical interfaces -- Part 2-1: Optical interface standard single mode non-angled physically contacting fibres	EN 61755-2-1	-
IEC 61755-2-2	-	Fibre optic connector optical interfaces -- Part 2-2: Optical interface standard single mode 8 degrees angled physically contacting fibres	EN 61755-2-2	-
IEC 61755-3 (mod) series		Fibre optic connector optical interfaces	EN 61755-3	series
IEC/TR 62627-04	-	Fibre optic interconnecting devices and passive components - Part 04: Example of uncertainty calculation: Measurement of the attenuation of an optical connector	-	-

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

Part 2-5: Connection parameters of non-dispersion shifted single-mode physically contacting fibres – Angled for reference connection applications

1 Scope

This part of IEC 61755 defines a set of prescribed conditions that should be maintained in order to satisfy the requirements of angled polished reference connections.

The prescribed conditions include dimensional limits and optical fibre requirements of the optical interface to meet specific requirements for reference connection (plugs and adaptors) used for attenuation measurements.

Two different grades for reference connections are defined in this standard. The use of each of these grades depends on the application and on the targeted attenuation measurement uncertainty. The model uses a Gaussian distribution of light intensity over the specified restricted mode field diameter (MFD) range.

This standard is intended to be used for shipping and acceptance inspections.

The reference connector plug is specified for B1.1, B1.3 and B6 fibres as specified in IEC 60793-2-50.

The use of the reference connector plug would not be recommended where classification of fibre is difficult, for example construction and maintenance of cable plant.

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 60793-2-50, *Optical fibres – Part 2-50: Product specifications – Sectional specification for class B single-mode fibres*

IEC 61300-3-4, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-4: Examinations and measurements – Attenuation*

IEC 61300-3-42, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-42: Examinations and measurements – Attenuation of single mode alignment sleeves and or adaptors with resilient alignment sleeves*

IEC 61755-2-1, *Fibre optic interconnecting devices and passive components – Connector optical interfaces – Part 2-1: Connection parameters of non-dispersion shifted single-mode physically contacting fibres – Non-angled*