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**Optični spojni elementi in pasivne komponente - Vmesniki optičnih konektorjev - 3-2. del: Parametri konektorjev za disperzijsko nespremenjena optična vlakna s kotnim fizičnim stikom 2,5 mm in cirkonijevimi cilindričnimi tulkami premera 1,25 mm (IEC 61755-3-2:2024)**

Fibre optic interconnecting devices and passive components - Connector optical interfaces - Part 3-2: Connector parameters of dispersion unshifted single-mode physically contacting fibres - angled 2,5 mm and 1,25 mm diameter cylindrical full zirconia ferrules (IEC 61755-3-2:2024)

Lichtwellenleiter - Verbindungselemente und passive Bauteile - Optische Schnittstellen für Lichtwellenleiter-Steckverbinder - Teil 3-2: Steckverbinder mit abgeschrägten zylindrischen Zirkonium-Ferrulen mit 2,5 mm und 1,25 mm Durchmesser für nicht-dispersionsverschobene Einmodenfasern mit physikalischem Kontakt (IEC 61755-3-2:2024)

[SIST EN IEC 61755-3-2:2024](https://standards.iteh.ai/SIST/EN/IEC/61755-3-2:2024)

<https://standards.iteh.ai/catalog/standards/sist/2f53a55b-5348-4160-bafa-65c7b4fe021e/sist-en-iec-61755-3-2-2024>

Dispositifs d'interconnexion et composants passifs fibroniques - Interfaces optiques de connecteurs - Partie 3-2: Paramètres des connecteurs pour fibres unimodales à dispersion non décalée en contact physique - Ferrules cylindriques avec angle en zircone pleine de 2,5 mm et 1,25 mm de diamètre (IEC 61755-3-2:2024)

**Ta slovenski standard je istoveten z: EN IEC 61755-3-2:2024**

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English Version

Fibre optic interconnecting devices and passive components -  
Connector optical interfaces - Part 3-2: Connector parameters of  
dispersion unshifted single-mode physically contacting fibres -  
Angled 2,5 mm and 1,25 mm diameter cylindrical full zirconia  
ferrules  
(IEC 61755-3-2:2024)

Dispositifs d'interconnexion et composants passifs  
fibroniques - Interfaces optiques de connecteurs - Partie 3-  
2: Paramètres des connecteurs pour fibres unimodales à  
dispersion non décalée en contact physique - Ferrules  
cylindriques avec angle en zircone pleine de 2,5 mm et 1,25  
mm de diamètre  
(IEC 61755-3-2:2024)

Lichtwellenleiter - Verbindungselemente und passive  
Bauteile - Optische Schnittstellen für Lichtwellenleiter-  
Steckverbinder - Teil 3-2: Steckverbinder mit  
abgeschrägten zylindrischen Zirkonium-Ferrulen mit 2,5  
mm und 1,25 mm Durchmesser für nicht-  
dispersionsverschobene Einmodenfasern mit  
physikalischem Kontakt  
(IEC 61755-3-2:2024)

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**EN IEC 61755-3-2:2024 (E)****European foreword**

The text of document 86B/4864/FDIS, future edition 2 of IEC 61755-3-2, 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 IEC 61755-3-2:2024.

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) 2025-02-16
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2025-05-16

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In the official version, for Bibliography, the following notes have to be added for the standard indicated:

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IEC 61755-2-5 NOTE Approved as EN 61755-2-5

## Annex ZA (normative)

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

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 Where 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.cencenelec.eu](http://www.cencenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61755-1	-	Fibre optic interconnecting devices and passive components - Connector optical interfaces for single-mode fibres - Part 1: Optical interfaces for dispersion unshifted fibres - General and guidance	EN IEC 61755-1	-

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IEC 61755-3-2

Edition 2.0 2024-04

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Fibre optic interconnecting devices and passive components – Connector optical interfaces –  
Part 3-2: Connector parameters of dispersion unshifted single-mode physically contacting fibres – Angled 2,5 mm and 1,25 mm diameter cylindrical full zirconia ferrules**

**Dispositifs d'interconnexion et composants passifs fibroniques – Interfaces optiques de connecteurs –  
Partie 3-2: Paramètres des connecteurs pour fibres unimodales à dispersion non décalée en contact physique – Ferrules cylindriques avec angle en zircone pleine de 2,5 mm et 1,25 mm de diamètre**

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## CONTENTS

FOREWORD .....	3
1 Scope .....	6
2 Normative references .....	6
3 Terms and definitions .....	6
4 Description .....	7
5 Interface parameters .....	7
Annex A (informative) Maximum allowed spherical fibre undercut .....	12
Annex B (informative) Expected attenuation when mated to reference connector plugs.....	14
Annex C (informative) Guidance related to simulation of optical interface attenuation .....	15
Annex D (informative) Estimation of average fibre core eccentricity limits as a function of batch size .....	20
Bibliography.....	23
Figure 1 – Connector plug endface dimensions.....	8
Figure 2 – Geometric requirements for fibre core location after termination.....	8
Figure 3 – Ferrule dimensions.....	11
Figure A.1 – Allowable undercut as a function of endface radius and apex offset – 4,9 N minimum contact force.....	13
Figure A.2 – Allowable undercut as a function of endface radius and apex offset – 2,9 N minimum contact force.....	13
Figure C.1 – MFD distribution used in the design curve calculation.....	16
Figure C.2 – Resultant fibre core to ferrule eccentricity distribution for Grade B attenuation.....	17
Figure C.3 – Resultant fibre angle distribution for Grade B attenuation .....	17
Figure C.4 – Scatterplot of fibre core eccentricities for oriented Grade B interfaces .....	18
Figure C.5 – Histogram indicating attenuation distribution of a Grade B optical interface .....	19
Figure D.1 – Example histogram showing fibre core eccentricity mean distribution for Grade B interfaces with a batch size of 25 .....	20
Figure D.2 – Illustrative run chart of fibre core eccentricity for different batch sizes which all conform to the mean and maximum limits .....	22
Table 1 – Optical interface parameter values for 2,5 mm diameter ferrule .....	9
Table 2 – Optical interface parameter values for 1,25 mm diameter ferrule .....	10
Table 3 – Optical interface parameter values for APC ferrules .....	11
Table B.1 – Descriptive statistics when performance grades are mated against a Grade R1 reference interface.....	14
Table C.1 – MFD and fibre core nominal index of refraction.....	16
Table D.1 – Maximum allowable average fibre core eccentricity limit for different batch sizes.....	21



## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC INTERCONNECTING  
DEVICES AND PASSIVE COMPONENTS –  
CONNECTOR OPTICAL INTERFACES –****Part 3-2: Connector parameters of dispersion unshifted single-mode  
physically contacting fibres – Angled 2,5 mm and 1,25 mm diameter  
cylindrical full zirconia ferrules**

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IEC 61755-3-2 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics. It is an International Standard.

This second edition cancels and replaces the first edition published in 2006. This edition constitutes a technical revision.

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

- a) normative references have been added;
- b) The introduction of an additional optical interface with a different fibre core eccentricity profile. The previous revision of optical interface standard is named "Variant 1: with fibre core axis oriented towards the connector guide key". The additional optical interface is named "Variant 2: with fibre core axis not oriented towards the connector guide key";
- c) statements added related to interoperability, where both variants remain intermateable within a given performance grade and are fully backwards compatible to IEC 61755-3-2:2006;
- d) The addition of Grade B and Grade C interface requirements for both variants;
- e) The addition of a descriptive statistic for the mean fibre core eccentricity (mean value) to describe the distribution of fibre core eccentricity to ensure interoperability;
- f) A new informative Annex B to give guidance on the expected attenuation when mated to a reference connector plug;
- g) A new informative Annex C to give guidance related to the simulation of optical interface attenuation;
- h) A new informative Annex D to give guidance related to estimation of mean fibre eccentricity limits for finite production batch sizes.

The text of this International Standard is based on the following documents:

Draft	Report on voting
86B/4864/FDIS	86B/4890/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

A list of all parts of the IEC 61755 series, under the general title *Fibre optic interconnecting devices and passive components – Connector optical interfaces for single-mode fibres*, can be found on the IEC website.

Future documents in this series will carry the new general title as cited above. Titles of existing documents in this series will be updated at the time of the next edition.