

STN	Optovláknové spájacie prvky a pasívne súčiastky Prevádzkové vlastnosti Časť 131-03: Mechanické spoje jednovidových vlákien pre kategóriu OP Vonkajšie chránené prostredie	STN EN IEC 61753-131-03 35 9254
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Fibre optic interconnecting devices and passive components - Performance standard - Part 131-03: Single-mode mechanical fibre splice for category OP - Outdoor protected environment

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/22

Obsahuje: EN IEC 61753-131-03:2021, IEC 61753-131-03:2021

Oznámením tejto normy sa od 08.11.2022 ruší
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EUROPEAN STANDARD

EN IEC 61753-131-03

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2021

ICS 33.180.20

Supersedes EN 61753-131-3:2011 and all of its amendments and corrigenda (if any)

English Version

**Fibre optic interconnecting devices and passive components -
Performance standard - Part 131-03: Single-mode mechanical
fibre splice for category OP - Outdoor protected environment
(IEC 61753-131-03:2021)**

Dispositifs d'interconnexion et composants passifs
fibroniques - Norme de performance - Partie 131-03:
Épissure mécanique de fibres unimodales pour catégorie
OP - Environnement extérieur protégé
(IEC 61753-131-03:2021)

Lichtwellenleiter - Verbindungselemente und passive
Bauteile - Betriebsverhalten - Teil 131-3: Mechanische
Spleiße für Einmoden- Lichtwellenleiter für die Kategorie
OP - Freiluft, geschützte Umgebung
(IEC 61753-131-03:2021)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 61753-131-03:2021 (E)**European foreword**

The text of document 86B/4500/FDIS, future edition 1 of IEC 61753-131-03, 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 61753-131-03:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2022-08-08 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2022-11-08 document have to be withdrawn

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Endorsement notice

The text of the International Standard IEC 61753-131-03:2021 was approved by CENELEC as a European Standard without any modification.

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

IEC 60721-3-1 NOTE Harmonized as EN IEC 60721-3-1

IEC 60721-3-2 NOTE Harmonized as EN IEC 60721-3-2

IEC 62005 (series) NOTE Harmonized as EN IEC 62005 (series)

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.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-10	-	Environmental testing - Part 2-10: Tests - Test J and guidance: Mould growth	-EN 60068-2-10	-
IEC 60793-2-50	-	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN IEC 60793-2-50	-
IEC 61073-1	-	Fibre optic interconnecting devices and passive components - Mechanical splices and fusion splice protectors for optical fibres and cables - Part 1: Generic specification	EN 61073-1	-
IEC 61300	series	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures	EN 61300	series
IEC 61300-1	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 1: General and guidance	EN 61300-1	-
IEC 61300-2-1	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-1: Tests - Vibration (sinusoidal)	EN 61300-2-1	-
IEC 61300-2-4	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-4: Tests - Fibre or cable retention	EN IEC 61300-2-4	-
IEC 61300-2-5	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-5: Tests - Torsion	EN 61300-2-5	-
IEC 61300-2-7	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-7: Tests - Bending moment	EN 61300-2-7	-

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IEC 61300-2-9	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-9: Tests - Shock	and EN 61300-2-9	-
IEC 61300-2-17	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-17: Tests - Cold	and EN 61300-2-17	-
IEC 61300-2-18	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-18: Tests - Dry heat - High temperature endurance	and EN 61300-2-18	-
IEC 61300-2-22	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-22: Tests - Change of temperature		-
IEC 61300-2-26	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-26: Tests - Salt mist	and EN 61300-2-26	-
IEC 61300-2-27	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-27: Tests - Dust - Laminar flow	and EN 61300-2-27	-
IEC 61300-2-33	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-33: Tests - Assembly and disassembly of fibre optic mechanical splices, fibre management systems and closures	and EN 61300-2-33	-
IEC 61300-2-46	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-46: Tests - Damp heat, cyclic	and EN IEC 61300-2-46	-
IEC 61300-3-3	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-3: Examinations and measurements - Active monitoring of changes in attenuation and return loss	and EN 61300-3-3	-
IEC 61300-3-4	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-4: Examinations and measurements - Attenuation	and EN 61300-3-4	-
IEC 61300-3-6	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-6: Examinations and measurements - Return loss	and EN 61300-3-6	-

EN IEC 61753-131-03:2021 (E)

IEC 61300-3-7	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-7: Examinations and measurements - Wavelength dependence of attenuation and return loss of single mode components	and EN IEC 61300-3-7	-
IEC 61300-3-28	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-28: Examinations and measurements - Transient loss	and EN 61300-3-28	-
IEC 61753-1	-	Fibre optic interconnecting devices and passive components - Performance standard - Part 1: General and guidance	and EN IEC 61753-1	-
IEC 61756-1	-	Fibre optic interconnecting devices and passive components - Interface standard for fibre management systems - Part 1: General and guidance	and EN IEC 61756-1	-



IEC 61753-131-03

Edition 1.0 2021-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fibre optic interconnecting devices and passive components – Performance standard –
Part 131-03: Single-mode mechanical fibre splice for category OP – Outdoor protected environment**

**Dispositifs d'interconnexion et composants passifs fibroniques – Norme de performance –
Partie 131-03: Épissure mécanique de fibres unimodales pour catégorie OP – Environnement extérieur protégé**





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Edition 1.0 2021-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fibre optic interconnecting devices and passive components – Performance standard –
Part 131-03: Single-mode mechanical fibre splice for category OP – Outdoor protected environment**

**Dispositifs d'interconnexion et composants passifs fibroniques – Norme de performance –
Partie 131-03: Épissure mécanique de fibres unimodales pour catégorie OP – Environnement extérieur protégé**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC INTERCONNECTING DEVICES AND
PASSIVE COMPONENTS – PERFORMANCE STANDARD –****Part 131-03: Single-mode mechanical fibre splice
for category OP – Outdoor protected environment**

FOREWORD

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IEC 61753-131-03 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 first edition cancels and replaces IEC 61753-131-3 first edition published in 2010. This edition constitutes a technical revision.

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

- a) addition of definitions;
- b) addition of IEC 60068-2-10 mould growth test and test severities for materials;
- c) replacement of the IEC 61753-1:2007 category U tests and test severities by the IEC 61753-1:2018 category OP tests;

- d) addition of the requirement that dimensions are in accordance with IEC 61756-1;
- e) addition of the bending moment test;
- f) change of low temperature in cold test and change of temperature test to -25°C . If 40°C is required, the user can refer to category OP+.

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

Draft	Report on voting
86B/4500/FDIS	86B/4524/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. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

A list of all parts in the IEC 61753 series, published under the general title *Fibre optic interconnecting devices and passive components – Performance standard*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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

FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – PERFORMANCE STANDARD –

Part 131-03: Single-mode mechanical fibre splice for category OP – Outdoor protected environment

1 Scope

This part of IEC 61753 contains the minimum tests, test severities and measurement requirements which a mechanical fibre splice need to satisfy in order to be categorised as meeting the requirements of single-mode fibre splice for use in category OP (Outdoor protected) environments, as defined in IEC 61753-1.

This document for mechanical splices defines the requirements for standard optical performance under a set of specified conditions. The standard contains a series or a set of tests and measurements with clearly stated conditions, severities and pass/fail criteria. The series of tests, commonly referred to as an operating service environment or performance category, is intended to be a basis to prove the product's ability to satisfy the requirements of a specific application, market sector or user group.

2 Normative references

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.

IEC 60068-2-10, *Environmental testing – Part 2-10: Tests – Test J and guidance: Mould growth*

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

IEC 61073-1, *Fibre optic interconnecting devices and passive components – Mechanical splices and fusion splice protectors for optical fibres and cables – Part 1: Generic specification*

IEC 61300 (all parts), *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures*

IEC 61300-1, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 1: General and guidance*

IEC 61300-2-1, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-1: Tests – Vibration (sinusoidal)*

IEC 61300-2-4, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-4: Tests – Fibre or cable retention*

IEC 61300-2-5, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-5: Tests – Torsion*

IEC 61300-2-7, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-7: Tests – Bending moment*

IEC 61300-2-9, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-9: Tests – Shock*

IEC 61300-2-17, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-17: Tests – Cold*

IEC 61300-2-18, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-18: Tests – Dry heat – High temperature endurance*

IEC 61300-2-22, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-22: Tests – Change of temperature*

IEC 61300-2-26, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-26: Tests – Salt mist*

IEC 61300-2-27, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-27: Tests – Dust – Laminar flow*

IEC 61300-2-33, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-33: Tests – Assembly and disassembly of fibre optic mechanical splices, fibre management systems and closures*

IEC 61300-2-46, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-46: Tests – Damp heat, cyclic*

IEC 61300-3-3, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-3: Examinations and measurements – Active monitoring of changes in attenuation and return loss*

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

IEC 61300-3-6, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-6: Examinations and measurements – Return Loss*

IEC 61300-3-7, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-7: Examinations and measurements – Wavelength dependence of attenuation and return loss of single mode components*

IEC 61300-3-28, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-28: Examinations and measurements – Transient loss*

IEC 61753-1, *Fibre optic interconnecting devices and passive components – Performance standard – Part 1: General and guidance*

IEC 61756-1, *Fibre optic interconnecting devices and passive components – Interface standard for fibre management systems – Part 1: General and guidance*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN