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STN	**Súbory konektorov a spájacie prvky pre optovláknové komunikačné systémy Špecifikácie výrobku Časť 14-1: Simplex a duplex šnúry so simplex vidlicami s cylindrickými ferulami, s jednovidovými vláknami kategórie B1 alebo B6 podľa EN 60793-2-50 pre kategóriu C podľa EN 61753-1**	**STN EN 50377-14-1** 35 9242

Connector sets and interconnect components to be used in optical fibre communication systems - Product specifications - Part 14-1: Simplex and duplex cords made from simplex plugs with cylindrical ferrules, using EN 60793 2 50 single-mode B1 or B6 fibre for Category C according to EN 61753 1

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. 12/18

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English Version

Connector sets and interconnect components to be used in optical fibre communication systems - Product specifications - Part 14-1: Simplex and duplex cords made from simplex plugs with cylindrical ferrules, using EN 60793 2 50 single-mode B1 or B6 fibre for Category C according to EN 61753-1

Jeux de connecteurs et composants d'interconnexion à utiliser dans les systèmes de communication par fibres optiques - Spécifications de produit - Partie 14 1: Cordons simplex et duplex constitués de fiches simplex avec férules cylindriques, utilisant les fibres unimodales B1 ou B6 de l'EN 60793-2-50 pour la catégorie C conformément à l'EN 61753-1

Steckverbindersätze und Verbindungsbauelemente für Lichtwellenleiter-Datenübertragungssysteme - Produktnormen - Teil 14-1: Simplex- und Duplex-Kabel mit Simplex-Steckverbindern mit zylindrischen Ferrulen mit Einmodenfasern vom Typ B1 oder B6 nach EN 60793-2-50 für Kategorie C nach EN 61753-1

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

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European foreword

This document (EN 50377-14-1:2018) has been prepared by CLC/TC 86BXA "*Fibre optic interconnect, passive and connectorised components*".

The following dates are fixed:

• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2019-02-14
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2019-05-14

This document supersedes EN 50377-14-1:2011.

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Connector sets and interconnect components to be used in optical fibre communication systems – product specifications

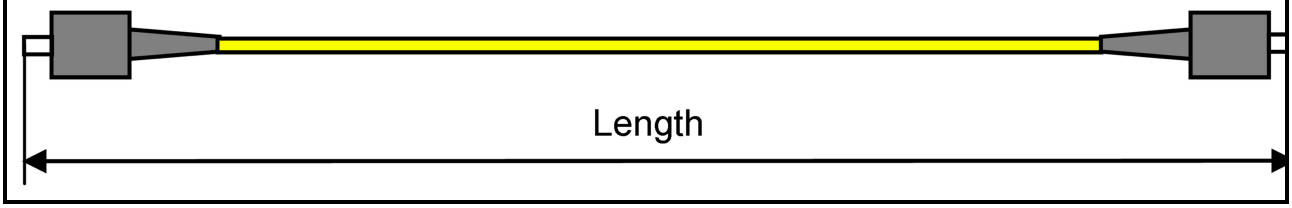
Part 14–1: Simplex and duplex cords made from simplex plugs with cylindrical ferrules, using EN 60793-2-50 **single-mode B1 or B6 fibre for Category C according to** EN 61753-1

Description		**Performance**	
Fibre category:	EN 60793-2-50 Types B1 and B6	**Application:**	For use indoors (EN Category C: controlled environment)
Cable type:	EN 60794-2-50 EN 60794-2-51	**Attenuation grades: (random mate)**	B: ≤ 0,12 dB mean ≤ 0,25 dB for ≥ 97 % of measurements C: ≤ 0,25 dB mean ≤ 0,50 dB for ≥ 97 % of measurements
		Return loss grade: (random mate)	1: ≥ 60 dB 2: ≥ 45 dB

Related documents:

EN 50377 series	Connector sets and interconnect components to be used in optical fibre communication systems – Product specifications
EN 60793-2-50	Optical fibres – Part 2–50: Product specifications – Sectional specification for category B single-mode fibres (IEC 60793-2-50)
EN 60794-2-50	Optical fibre cables – Part 2–50: Indoor cables – Family specification for simplex and duplex cables for use in terminated cable assemblies (IEC 60794-2-50)
EN 60794-2-51	Indoor optical fibre cables – Part 2–51: Detail specification for simplex and duplex cables for use in patchcords for controlled environment
EN 61300 series	Fibre optic interconnecting devices and passive components – Basic test and measurement procedures (IEC 61300 series)
EN 61753-1	Fibre optic interconnecting devices and passive components performance standard – Part 1: General and guidance for performance standards (IEC 61753-1)

Outline and maximum dimensions:



1 Scope

1.1 Product definition

This document contains the initial, start of life dimensional, optical, mechanical and environmental performance requirements for an assembled single mode cord with cylindrical ferruled connectors to meet in order for it to be categorized as an EN standard product.

Since different variants and grades of performance are permitted, product marking details are given in 4.5 and Clause 5.

1.2 Intermateability of the plugs

Although all products conforming to the requirements of this standard are meant to intermate, the resulting level of random attenuation performance will only be expected in accordance with Table 1. The intention is that this will be true irrespective of the manufacturing source(s) of the product.

When intermating plug variants having different attenuation grades as specified in EN 61755-1, the resulting level of attenuation cannot be ensured to be any better than the worst attenuation grade.

The intermating of a grade C plug with a grade B plug will result in a grade C level of random attenuation performance.

Table 1 — Ensured level of random attenuation

Plug variant / Attenuation grade		**Plug 2**	
		C	**B**
Plug 1	**C**	**C**	**C**
	B	**C**	**B**

1.3 Operating environment

The tests selected combined with the severities and durations are representative of an EN 61753-1 Category C environment.

1.4 Reliability

Whilst the anticipated service life expectancy of the product in this environment is 20 years, compliance with this standard does not guarantee the reliability of the product. This should be predicted using a recognized reliability assessment programme.

1.5 Quality assurance

Compliance with this standard does not guarantee the manufacturing consistency of the product. This should be maintained using a recognized quality assurance programme.

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.

EN 50377 (series), *Connector sets and interconnect components to be used in optical fibre communication systems – Product specifications*

EN 60794-2-50, *Optical fibre cables - Part 2-50: Indoor cables - Family specification for simplex and duplex cables for use in terminated cable assemblies* (IEC 60794-2-50)

EN 60794-2-51, *Optical fibre cables - Part 2-51: Indoor cables - Detail specification for simplex and duplex cables for use in cords for controlled environment (IEC 60794-2-51)*

EN 61300-2-4, *Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-4: Tests - Fibre/cable retention* (IEC 61300-2-4)

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

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

EN 61300-2-42, *Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-42: Tests - Static side load for strain relief* (IEC 61300-2-42)

EN 61300-2-44, *Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-44: Tests - Flexing of the strain relief of fibre optic devices (IEC 61300-2-44)*

EN 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 61300-3-3)

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

EN 61300-3-6, *Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-6: Examinations and measurements - Return loss* (IEC 61300-3-6)

EN 61300-3-22, *Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-22: Examinations and measurements - Ferrule compression force* (IEC 61300-3-22)

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

EN 61300-3-34, *Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-34: Examinations and measurements - Attenuation of random mated connectors* (IEC 61300-3-34)

EN 61300-3-35, *Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-35: Examinations and measurements - Visual inspection of fibre optic connectors and fibre-stub transceivers* (IEC 61300-3-35)

EN 61300-3-47, *Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-47: Examinations and measurements - End face geometry of PC/APC spherically polished ferrules using interferometry* (IEC 61300-3-47)

EN 61753-1, *Fibre optic interconnecting devices and passive components performance standard - Part 1: General and guidance for performance standards* (IEC 61753-1)

EN 61755-1, *Fibre optic connector optical interfaces - Part 1: Optical interfaces for single mode non-dispersion shifted fibres - General and guidance (IEC 61755-1)*