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STN	**Optické vlákna Časť 2-70: Špecifikácie výrobku Rámcová špecifikácia optických vláken s konštantnou polarizáciou**	**STN EN 60793-2-70 35 9213**

Optical fibres - Part 2-70: Product specifications - Sectional specification for polarization-maintaining fibres

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. 11/17

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English Version

Optical fibres - Part 2-70: Product specifications - Sectional specification for polarization-maintaining fibres (IEC 60793-2-70:2017)

Fibres optiques - Partie 2-70: Spécifications de produits - Spécification intermédiaire relative aux fibres à maintien de la polarisation (IEC 60793-2-70:2017)

Lichtwellenleiter - Teil 2-70: Produktspezifikationen - Rahmenspezifikation für polarisationserhaltende Fasern (IEC 60793-2-70:2017)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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

Ref. No. EN 60793-2-70:2017 E

European foreword

The text of document 86A/1741/CDV, future edition 1 of IEC 60793-2-70, prepared by SC 86A "Fibres and cables" of IEC/TC 86 "Fibre optics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60793-2-70:2017.

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)	2017-12-14
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2020-03-14

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Endorsement notice

The text of the International Standard IEC 60793-2-70:2017 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.

Publication	Year	Title	EN/HD	Year
IEC 60793-1-20	2014	Optical fibres - Part 1-20: Measurement methods and test procedures - Fibre geometry	EN 60793-1-20	2014
IEC 60793-1-21	-	Optical fibres - Part 1-21: Measurement methods and test procedures - Coating geometry	EN 60793-1-21	-
IEC 60793-1-22	-	Optical fibres - Part 1-22: Measurement methods and test procedures - Length measurement	EN 60793-1-22	-
IEC 60793-1-30	-	Optical fibres - Part 1-30: Measurement methods and test procedures - Fibre proof test	EN 60793-1-30	-
IEC 60793-1-40	-	Optical fibres - Part 1-40: Measurement methods and test procedures - Attenuation	EN 60793-1-40	-
IEC 60793-1-44	2011	Optical fibres - Part 1-44: Measurement methods and test procedures - Cut-off wavelength	EN 60793-1-44	2011
IEC 60793-1-45 (mod)	2001	Optical fibres - Part 1-45: Measurement methods and test procedures - Mode field diameter	EN 60793-1-45	2003
-	-		+ corr. Apr.	2004
IEC 60793-1-46	-	Optical fibres - Part 1-46: Measurement methods and test procedures - Monitoring of changes in optical transmittance	EN 60793-1-46	-
IEC 60793-1-52	-	Optical fibres - Part 1-52: Measurement methods and test procedures - Change of temperature tests	EN 60793-1-52	-

EN 60793-2-70:2017

Publication	Year	Title	EN/HD	Year
IEC 60793-1-60	-	Optical fibres - Part 1-60: Measurement methods and test procedures - Beat length	EN 60793-1-60	-
IEC 60793-1-61	-	Optical fibres - Part 1-61: Measurement methods and test procedures - Polarization crosstalk	EN 60793-1-61	-
IEC 60793-2	-	Optical fibres - Part 2: Product specifications - General	EN 60793-2	-

IEC 60793-2-70

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INTERNATIONAL STANDARD

colour inside

Optical fibres –
Part 2-70: Product specifications – Sectional specification for polarization-maintaining fibres

IEC 60793-2-70:2017-02(en)

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colour inside

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CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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OPTICAL FIBRES –

Part 2-70: Product specifications – Sectional specification for polarization-maintaining fibres

FOREWORD

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International Standard IEC 60793-2-70 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

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

CDV	Report on voting
86A/1741/CDV	86A/1780/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 60793 series, published under the general title *Optical fibres*, 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 "http://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.

A bilingual version of this publication may be issued at a later date.

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OPTICAL FIBRES –

Part 2-70: Product specifications – Sectional specification for polarization-maintaining fibres

1 Scope

This part of IEC 60793 is applicable to optical fibre types D1, D2, D3, as described in Table 1. These fibres are polarization-maintaining fibre types, and are used or can be incorporated in information transmission equipment and optical fibre cable. These fibres are available for use in optical transport networks. Three types of requirements apply to these fibres:

– general requirements defined in IEC 60793-2;

– specific requirements common to the category D polarization-maintaining fibres covered in this document and which are given in Clause 4;

– particular requirements applicable to individual fibre types or specific applications, which are defined in Annexes A to C.

Table 1 – Categories of glass core/glass clad polarization-maintaining fibres

Category	Type	Description
D1	Polarization-maintaining fibre suitable for use at 980 nm	This category of polarization-maintaining fibre is optimised for polarization-maintaining ability in the 980 nm region. This fibre is used for erbium-doped fibre amplifier.
D2	Polarization-maintaining fibre suitable for use at 1 310 nm	This category of polarization-maintaining fibre is optimised for polarization-maintaining ability and connection property of category B fibres in the 1 310 nm region.
D3	Polarization-maintaining fibre suitable for use at 1 550 nm	This category of polarization-maintaining fibre is optimised for polarization-maintaining ability and connection property of category B fibres in the 1 550 nm region.

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 60793-1-20:2014, *Optical fibres – Part 1-20: Measurement methods and test procedures – Fibre geometry*

IEC 60793-1-21, *Optical fibres – Part 1-21: Measurement methods and test procedures – Coating geometry*

IEC 60793-1-22, *Optical fibres – Part 1-22: Measurement methods and test procedures – Length measurement*

IEC 60793-1-30, *Optical fibres – Part 1-30: Measurement methods and test procedures – Fibre proof test*

IEC 60793-1-40, *Optical fibres – Part 1-40: Measurement methods and test procedures – Attenuation*

IEC 60793-1-44:2011, *Optical fibres – Part 1-44: Measurement methods and test procedures – Cut-off wavelength*

IEC 60793-1-45:2001, *Optical fibres – Part 1-45: Measurement methods and test procedures – Mode field diameter*

IEC 60793-1-46, *Optical fibres – Part 1-46: Measurement methods and test procedures – Monitoring of changes in optical transmittance*

IEC 60793-1-52, *Optical fibres – Part 1-52: Measurement methods and test procedures – Change of temperature tests*

IEC 60793-1-60[1], *Optical fibres – Part 1-60: Measurement methods and test procedures – Beat length*

IEC 60793-1-61[2], *Optical fibres – Part 1-61: Measurement methods and test procedures – Polarization crosstalk*

IEC 60793-2, *Optical fibres – Part 2: Product specifications – General*

[1] Under preparation. Stage at the time of publication: IEC 60793-1-60:2017.

[2] Under preparation. Stage at the time of publication: IEC 60793-1-61:2017.