



# SLOVENSKI STANDARD SIST EN 60793-2-20:2009

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Optical fibres - Part 2-20: Product specifications - Sectional specification for category A2 multimode fibres (IEC 60793-2-20:2007)

Lichtwellenleiter - Teil 2-20: Produktspezifikationen - Rahmenspezifikation für Mehrmodenfasern der Kategorie A2 (IEC 60793-2-20:2007)

Fibres optiques - Partie 2-20: Spécifications de produits - Spécification intermédiaire pour les fibres multimodales de catégorie A2 (CEI 60793-2-20:2007)

Ta slovenski standard je istoveten z: EN 60793-2-20:2009

**ICS:**

33.180.10      Fibres and cables

**SIST EN 60793-2-20:2009**      en,fr

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60793-2-20**

April 2009

ICS 33.180.10

Supersedes EN 60793-2-20:2002

English version

**Optical fibres -  
Part 2-20: Product specifications -  
Sectional specification for category A2 multimode fibres  
(IEC 60793-2-20:2007)**

Fibres optiques -  
Partie 2-20: Spécifications de produits -  
Spécification intermédiaire  
pour les fibres multimodales  
de catégorie A2  
(CEI 60793-2-20:2007)

Lichtwellenleiter -  
Teil 2-20: Produktspezifikationen -  
Rahmenspezifikation  
für Mehrmodenfasern  
der Kategorie A2  
(IEC 60793-2-20:2007)

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This European Standard was approved by CENELEC on 2009-04-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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**CENELEC**

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

**Central Secretariat: avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of document 86A/1129/CDV, future edition 2 of IEC 60793-2-20, prepared by SC 86A, Fibres and cables, of IEC TC 86, Fibre optics, was submitted to the IEC-CENELEC Parallel Unique Acceptance Procedure and was approved by CENELEC as EN 60793-2-20 on 2009-04-01.

This European Standard supersedes EN 60793-2-20:2002.

The main changes from EN 60793-2-20:2002 are:

- the addition of tensile strength requirement;
- the removal of water immersion requirement;
- the addition of environmental requirements.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2010-01-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2012-04-01

Annex ZA has been added by CENELEC.

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### Endorsement notice

SIST EN 60793-2-20:2009

The text of the International Standard IEC 60793-2-20:2007 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60793-1-1 NOTE Harmonized as EN 60793-1-1:2008 (not modified).

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## Annex ZA (normative)

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

The following referenced documents are indispensable for the application 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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60793-1-20	- <sup>1)</sup>	Optical fibres - Part 1-20: Measurement methods and test procedures - Fibre geometry	EN 60793-1-20	2002 <sup>2)</sup>
IEC 60793-1-21	- <sup>1)</sup>	Optical fibres - Part 1-21: Measurement methods and test procedures - Coating geometry	EN 60793-1-21	2002 <sup>2)</sup>
IEC 60793-1-22	- <sup>1)</sup>	Optical fibres - Part 1-22: Measurement methods and test procedures - Length measurement	EN 60793-1-22	2002 <sup>2)</sup>
IEC 60793-1-30	- <sup>1)</sup>	Optical fibres - Part 1-30: Measurement methods and test procedures - Fibre proof test	EN 60793-1-30	2002 <sup>2)</sup>
IEC 60793-1-31	- <sup>1)</sup>	Optical fibres - Part 1-31: Measurement methods and test procedures - Tensile strength	EN 60793-1-31	2002 <sup>2)</sup>
IEC 60793-1-40 (mod)	- <sup>1)</sup>	Optical fibres - Part 1-40: Measurement methods and test procedures - Attenuation	EN 60793-1-40	2003 <sup>2)</sup>
IEC 60793-1-41	- <sup>1)</sup>	Optical fibres - Part 1-41: Measurement methods and test procedures - Bandwidth	EN 60793-1-41	2003 <sup>2)</sup>
IEC 60793-1-43	- <sup>1)</sup>	Optical fibres - Part 1-43: Measurement methods and test procedures - Numerical aperture	EN 60793-1-43	2002 <sup>2)</sup>
IEC 60793-1-46	- <sup>1)</sup>	Optical fibres - Part 1-46: Measurement methods and test procedures - Monitoring of changes in optical transmittance	EN 60793-1-46	2002 <sup>2)</sup>
IEC 60793-1-50	- <sup>1)</sup>	Optical fibres - Part 1-50: Measurement methods and test procedures - Damp heat (steady state)	EN 60793-1-50	2002 <sup>2)</sup>
IEC 60793-1-51	- <sup>1)</sup>	Optical fibres - Part 1-51: Measurement methods and test procedures - Dry heat	EN 60793-1-51	2002 <sup>2)</sup>
IEC 60793-1-52	- <sup>1)</sup>	Optical fibres - Part 1-52: Measurement methods and test procedures - Change of temperature	EN 60793-1-52	2002 <sup>2)</sup>

<sup>1)</sup> Undated reference.

<sup>2)</sup> Valid edition at date of issue.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60793-2	2003	Optical fibres - Part 2: Product specifications - General	EN 60793-2	2004 <sup>3)</sup>
IEC/TR 62048	- <sup>1)</sup>	Optical fibres - Reliability - Power law theory -	-	-

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<sup>3)</sup> EN 60793-2:2004 is superseded by EN 60793-2:2008, which is based on IEC 60793-2:2007.



IEC 60793-2-20

Edition 2.0 2007-10

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

Optical fibres – **iTeh STANDARD PREVIEW**  
Part 2-20: Product specifications – Sectional specification for category A2  
multimode fibres  
(standards.iteh.ai)

<https://standards.iteh.ai/catalog/standards/sist/c9851a21-f7ad-4ac6-b377-36e4497e1e1e/sist-en-60793-2-20>  
SIST EN 60793-2-20:2009  
Fibres optiques –  
Partie 2-20: Spécifications de produits – Spécification intermédiaire pour les  
fibres multimodales de catégorie A2

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

PRICE CODE  
CODE PRIX

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## OPTICAL FIBRES –

**Part 2-20: Product specifications –  
Sectional specification for category A2 multimode fibres**

## FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60793-2-20 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

This second edition cancels and replaces the first edition, published in 2002. It constitutes a technical revision.

The main changes from the previous edition are:

- the addition of tensile strength requirement;
- the removal of water immersion requirement;
- the addition of environmental requirements.

The text of this standard is based on the following documents:

CDV	Result of voting
86A/1129/CDV	86A/1151/RVC

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

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

A list of all parts of 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 publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

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## OPTICAL FIBRES –

### Part 2-20: Product specifications – Sectional specification for category A2 multimode fibres

#### 1 Scope

This part of IEC 60793-2 is applicable to optical fibres type A2a, A2b, and A2c. These fibres are used or can be incorporated in information transmission equipment and optical fibre cables (typically up to 2 km).

Three types of requirements apply to these fibres:

- general requirements as defined in IEC 60793-2;
- specific requirements common to the category A2 multimodal fibres covered in this standard and which are given in Clause 3;
- particular requirements applicable to individual fibre types or specific applications, which are defined in the normative family specification annexes.

#### 2 Normative references

The following referenced documents are indispensable for the application 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, *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 60793-1-31, *Optical fibres – Part 1-31: Measurement methods and test procedures – Tensile strength*

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

IEC 60793-1-41, *Optical fibres – Part 1-41: Measurement methods and test procedures – Bandwidth*

IEC 60793-1-43, *Optical fibres – Part 1-43: Measurement methods and test procedures – Numerical aperture*

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