

INTERNATIONAL STANDARD

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

**Fibres optiques –
Partie 2-50: Spécifications de produits – Spécification intermédiaire pour les
fibres unimodales de classe B**



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CONTENTS

FOREWORD.....	5
1 Scope.....	7
2 Normative references	7
3 Terms and definitions	8
4 Abbreviations and symbols	8
5 Specifications	9
5.1 General.....	9
5.2 Dimensional requirements.....	9
5.3 Mechanical requirements	10
5.4 Transmission requirements	10
5.5 Environmental requirements	11
5.5.1 General	11
5.5.2 Optical environmental requirements – Attenuation	12
5.5.3 Mechanical environmental requirements	12
Annex A (normative) Family specification for category B1.1 single-mode fibres	14
A.1 General.....	14
A.2 Dimensional requirements.....	14
A.3 Mechanical requirements	14
A.4 Transmission requirements	14
A.5 Environmental requirements	15
Annex B (normative) Family specification for category B1.2 single-mode fibres	16
B.1 General.....	16
B.2 Dimensional requirements.....	16
B.3 Mechanical requirements	16
B.4 Transmission requirements	17
B.5 Environmental requirements	17
Annex C (normative) Family specification for category B1.3 single-mode fibres	18
C.1 General.....	18
C.2 Dimensional requirements.....	18
C.3 Mechanical requirements	18
C.4 Transmission requirements	18
C.5 Hydrogen ageing for category B1.3.....	19
C.6 Environmental requirements	20
Annex D (normative) Family specification for category B2 single-mode fibres	21
D.1 General.....	21
D.2 Dimensional requirements.....	21
D.3 Mechanical requirements	21
D.4 Transmission requirements	22
D.4.1 General	22
D.4.2 Chromatic dispersion coefficient requirement for sub-category B2_a fibres	22
D.4.3 Chromatic dispersion coefficient requirement for sub-category B2_b fibres	22
D.5 Environmental requirements	23
Annex E (normative) Family specification for category B4 single-mode fibres	24
E.1 General.....	24

E.2	Dimensional requirements.....	24
E.3	Mechanical requirements	24
E.4	Transmission requirements	25
E.4.1	General	25
E.4.2	Chromatic dispersion coefficient limits for sub-category B4_c fibres	25
E.4.3	Chromatic dispersion coefficient limits for sub-category B4_d fibres	26
E.4.4	Chromatic dispersion coefficient limits for sub-category B4_e fibres	26
E.5	Environmental requirements	26
Annex F (normative)	Family specification for category B5 single-mode fibres.....	27
F.1	General.....	27
F.2	Dimensional requirements.....	27
F.3	Mechanical requirements	27
F.4	Transmission requirements	28
F.4.1	General	28
F.4.2	Chromatic dispersion coefficient for category B5 fibres.....	28
F.5	Environmental requirements	28
Annex G (normative)	Family specification for category B6 single-mode fibres	29
G.1	General.....	29
G.2	Dimensional requirements.....	29
G.3	Mechanical requirements	30
G.4	Transmission requirements	30
G.5	Environmental requirements	31
Annex H (informative)	System design information for category B4 single-mode fibres	32
H.1	General.....	32
H.2	One standard deviation limits for sub-category B4_d fibres	32
H.3	One standard deviation limits for sub-category B4_e fibres	33
Annex I (informative)	Map from IEC nomenclature to ITU-T recommendations	34
Bibliography.....		35
Figure H.1	– Sub-category B4_d chromatic dispersion coefficient limits	33
Figure H.2	– Sub-category B4_e chromatic dispersion coefficient limits	33
Table 1	– Dimensional attributes and measurement methods.....	9
Table 2	– Dimensional requirements common to all category B fibres	9
Table 3	– Mechanical attributes and test methods.....	10
Table 4	– Mechanical requirements common to all class B fibres	10
Table 5	– Transmission attributes and measurement methods	10
Table 6	– Transmission, requirements common to all class B fibres	11
Table 7	– Additional transmission attributes required in the family specifications	11
Table 8	– Environmental exposure tests	11
Table 9	– Attributes measured in environmental exposure tests	12
Table 10	– Change in attenuation for environmental tests.....	12
Table 11	– Coating strip force for environmental tests.....	12
Table 12	– Tensile strength for environmental tests	13
Table 13	– Stress corrosion susceptibility for environmental tests.....	13
Table A.1	– Dimensional requirements specific to category B1.1 fibres	14

Table A.2 – Mechanical requirements specific to category B1.1 fibres	14
Table A.3 – Transmission requirements specific to category B1.1 fibres	15
Table B.1 – Dimensional requirements specific to category B1.2 fibres	16
Table B.2 – Mechanical requirements specific to category B1.2 fibres	16
Table B.3 – Transmission requirements specific to category B1.2 fibres	17
Table C.1 – Dimensional requirements specific to category B1.3 fibres.....	18
Table C.2 – Mechanical requirements specific to category B1.3 fibres	18
Table C.3 – Transmission requirements specific to category B1.3 fibres	19
Table D.1 – Dimensional requirements specific to category B2 fibres.....	21
Table D.2 – Mechanical requirements specific to category B2 fibres	22
Table D.3 – Transmission requirements specific to category B2 fibres	22
Table E.1 – Dimensional requirements specific to category B4 fibres.....	24
Table E.2 – Mechanical requirements specific to category B4 fibres	25
Table E.3 – Transmission requirements specific to category B4 fibres	25
Table F.1 – Dimensional requirements specific to category B5 fibres.....	27
Table F.2 – Mechanical requirements specific to category B5 fibres.....	27
Table F.3 – Transmission requirements specific to category B5 fibres	28
Table G.1 – Dimensional requirements specific to category B6 fibres	30
Table G.2 – Mechanical requirements specific to category B6 fibres	30
Table G.3 – Transmission requirements specific to category B6 fibres.....	31
Table H.1 – Examples for $\lambda_{\min} = 1\,530\text{ nm}$ and $\lambda_{\max} = 1\,565\text{ nm}$	32
Table I.1 – Map of IEC to ITU	34

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OPTICAL FIBRES –

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

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International Standard IEC 60793-2-50 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

This fifth edition cancels and replaces the fourth edition, published in 2012. This edition constitutes a technical revision.

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

- a) aligns the requirements with the ITU-T Recommendations G.654 (2012-10) and G.657 (2012-10);
- b) adds a new sub-category B1.2_d;
- c) modifies B6 sub-categories in terms of attenuation and chromatic dispersion coefficient.

This bilingual version (2016-11) corresponds to the English version, published in 2015-11.

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

CDV	Report on voting
86A/1571/CDV	86A/1614/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.

The French version of this standard has not been voted upon.

This publication 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 publication will remain unchanged until the stability 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
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OPTICAL FIBRES –

Part 2-50: Product specifications – Sectional specification for class B single-mode fibres

1 Scope

This part of IEC 60793 is applicable to optical fibre categories B1.1, B1.2, B1.3, B2, B4, B5 and B6. A map illustrating the connection of IEC designations to ITU-T designations is shown in Annex I. These fibres are used or can be incorporated in information transmission equipment and optical fibre cables.

Three types of requirements apply to these fibres:

- general requirements, as defined in IEC 60793-2;
- specific requirements common to the class B single-mode fibres covered in this standard and which are given in Clause 5;
- particular requirements applicable to individual fibre categories or specific applications, which are defined in Annexes A to G.

For some fibre categories (shown in the relevant family specifications), there are sub-categories that are distinguished on the basis of difference in transmission attribute specifications. The designations for these sub-categories are documented in the individual family specifications.

2 Normative references

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.

IEC 60793-1 (all parts), *Optical fibres – Measurement methods and test procedures*

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

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 60793-1-32, *Optical fibres – Part 1-32: Measurement methods and test procedures – Coating strippability*

IEC 60793-1-33, *Optical fibres – Part 1-33: Measurement methods and test procedures – Stress corrosion susceptibility*