

INTERNATIONAL STANDARD



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





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CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references	6
3 Terms and definitions	7
4 Specifications	7
4.1 General.....	7
4.2 Dimensional requirements.....	7
4.3 Mechanical requirement.....	8
4.4 Transmission requirements	8
4.5 Environmental requirements	9
Annex A (normative) Family specification for category D1 polarization-maintaining fibres	10
A.1 General.....	10
A.2 Dimensional requirements.....	10
A.3 Mechanical requirement.....	10
A.4 Transmission requirements	10
A.5 Environmental requirements	11
Annex B (normative) Family specification for category D2 polarization-maintaining fibres	12
B.1 General.....	12
B.2 Dimensional requirements.....	12
B.3 Mechanical requirement.....	12
B.4 Transmission requirements	12
B.5 Environmental requirements	13
Annex C (normative) Family specification for category D3 polarization- maintaining fibres	14
C.1 General.....	14
C.2 Dimensional requirements.....	14
C.3 Mechanical requirement.....	14
C.4 Transmission requirements	14
C.5 Environmental requirements	15
Annex D (normative) Mode field diameter (MFD) measurement of PM fibre.....	16
Annex E (informative) Cut-off wavelength of PM fibre and SM fibre.....	17
Bibliography.....	19
Figure E.1 – Cut-off wavelength profiles of PM fibre and SM fibre.....	17
Figure E.2 – Cut-off wavelength profile of PM fibre with extra bending.....	18
Table 1 – Categories of glass core/glass clad polarization-maintaining fibres.....	6
Table 2 – Dimensional attributes and measurement methods.....	8
Table 3 – Mechanical attribute and test method	8
Table 4 – Transmission attributes and measurement methods	9
Table 5 – Environmental exposure tests	9
Table 6 – Attributes measured	9
Table A.1 – Dimensional requirements specific to D1 fibres	10

Table A.2 – Mechanical requirement specific to D1 fibres 10

Table A.3 – Transmission requirements specific to D1 fibres 11

Table A.4 – Environmental requirements specific to D1 fibres 11

Table B.1 – Dimensional requirements specific to D2 fibres 12

Table B.2 – Mechanical requirement specific to D2 fibres 12

Table B.3 – Transmission requirements specific to D2 fibres 13

Table B.4 – Environmental requirements specific to D2 fibres 13

Table C.1 – Dimensional requirements specific to D3 fibres 14

Table C.2 – Mechanical requirement specific to D3 fibres 14

Table C.3 – Transmission requirements specific to D3 fibres 15

Table C.4 – Environmental requirements specific to D3 fibres 15

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

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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

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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*