IEC 60793-1-1

Edition 4.0 2017-01

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Optical fibres –
Part 1-1: Measurement methods and test procedures – General and guidance

Fibres optiques –
Partie 1-1: Méthodes de mesure et procédures d'essai – Généralités et recommandations

IEC 60793-1-1:2017-01(en-fr)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL FIBRES –

Part 1-1: Measurement methods and test procedures – General and guidance

FOREWORD

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International Standard IEC 60793-1-1 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

This fourth edition cancels and replaces the third edition published in 2008. This edition constitutes a technical revision.

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

a) addition of rounding rules in Clause 4;

b) addition of two packaging requirements in Clause 10 d) and e).

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

CDV	Report on voting
86A/1747/CDV	86A/1774/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- withdrawn,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
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INTRODUCTION

Publications in the IEC 60793-1 series concern measurement methods and test procedures as they apply to optical fibres.

Within the same series, several different areas are grouped, as follows:

Parts 1-10 to 1-19:	General
Parts 1-20 to 1-29:	Measurement methods and test procedures for dimensions
Parts 1-30 to 1-39:	Measurement methods and test procedures for mechanical characteristics
Parts 1-40 to 1-49:	Measurement methods and test procedures for transmission and optical characteristics
Parts 1-50 to 1-59:	Measurement methods and test procedures for environmental characteristics.

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OPTICAL FIBRES –

Part 1-1: Measurement methods and test procedures – General and guidance

1 Scope

This part of IEC 60793 lists and gives guidance on the use of documents giving the uniform requirements for measuring and testing optical fibres, thereby assisting in the inspection of fibres and cables for commercial (mostly telecommunications) purposes.

The individual measurement and test methods are contained in the different parts of the IEC 60793 series. They are identified as IEC 60793-1-X, where "X" is an assigned sub-part number, indicating its affiliation to the IEC 60793-1 series.

In general, measurements and tests methods apply to all class A multimode fibres and class B and class C single-mode optical fibres covered by IEC 60793-2 (all parts) relating to product specifications, although there can be exceptions. Clause 1 of each part of the IEC 60793 series contains the scope for each particular attribute.

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, *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*

IEC 60793-1-34, *Optical fibres – Part 1-34: Measurement methods and test procedures – Fibre curl*

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

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