



NSAI
Standards

Irish Standard
I.S. EN 60793-2:2016

Optical fibres - Part 2: Product specifications - General

I.S. EN 60793-2:2016

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN 60793-2:2016 is the adopted Irish version of the European Document EN 60793-2:2016, Optical fibres - Part 2: Product specifications - General

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EUROPEAN STANDARD

EN 60793-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2016

ICS 33.180.10

Supersedes EN 60793-2:2012

English Version

Optical fibres - Part 2: Product specifications - General (IEC 60793-2:2015)

Fibres optiques - Partie 2: Spécifications de produits -
Généralités
(IEC 60793-2:2015)

Lichtwellenleiter - Teil 2: Produktspezifikationen -
Allgemeines
(IEC 60793-2:2015)

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

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

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

EN 60793-2:2016

European foreword

The text of document 86A/1645/CDV, future edition 8 of IEC 60793-2, 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 60793-2:2016.

The following dates are fixed:

- latest date by which the document has to be (dop) 2016-12-17
implemented at national level by
publication of an identical national
standard or by endorsement
- latest date by which the national (dow) 2019-06-17
standards conflicting with the
document have to be withdrawn

This document supersedes EN 60793-2:2012.

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Endorsement notice

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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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60304	-	Standard colours for insulation for low-frequency cables and wires	HD 402 S2	-
IEC 60793-1	series	Optical fibres	EN 60793-1	series
IEC 60793-2-10	-		EN 60793-2-10	-
IEC 60793-2-20	-		EN 60793-2-20	-
IEC 60793-2-30	-		EN 60793-2-30	-
IEC 60793-2-40	-	Optical fibres -- Part 40: Product specifications - Sectional specification for category A4 multimode fibres	EN 60793-2-40	-
IEC 60793-2-50	-	Optical fibres -- Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN 60793-2-50	-
IEC 60793-2-60	-	Optical fibres -- Part 2-60: Product specifications - Sectional specification for category C single-mode intraconnection fibres	EN 60793-2-60	-

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IEC 60793-2

Edition 8.0 2015-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Optical fibres –
Part 2: Product specifications – General**

**Fibres optiques –
Partie 2: Spécifications de produits – Généralités**



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IEC 60793-2

Edition 8.0 2015-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Optical fibres –
Part 2: Product specifications – General**

**Fibres optiques –
Partie 2: Spécifications de produits – Généralités**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL FIBRES –

Part 2: Product specifications – General

FOREWORD

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

This eighth edition cancels and replaces the seventh edition published in 2011. This edition constitutes a technical revision which was necessary due to the addition of new fibre models to the A1 category in IEC 60793-2-10.

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

- a) addition of two new sub-categories A3f and A3g indicated “under consideration” as they have not yet been fully standardized at the moment of finalizing this document;
- b) modification of the Numerical aperture heading in Table 3 in line with recent modifications in all A1, A2, A3 and A4 multimode product specifications (NA_{ff} only).

This standard is to be read in conjunction with the IEC 60793-1 series.

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

CDV	Report on voting
86A/1645/CDV	86A/1663/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 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 website 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: Product specifications – General

1 Scope

This part of IEC 60793 contains the general specifications for both multimode and single-mode optical fibres.

Sectional specifications for each of the four categories multimode fibres: A1, A2, A3, and A4 (part of the multimode fibre class A) contain requirements specific to each category.

Sectional specifications for each of the two single-mode fibre classes, B and C, contain requirements common to each class.

Each sectional specification includes family specifications (in normative annexes) that contain requirements for the applicable category or sub-categories. These sub-categories are distinguished on the basis of different fibre types or applications.

The requirements of this standard apply to all classes.

Each sectional specification contains the requirements that are common to all the family specifications that are within it. These common requirements are copied to the family specification for ease of reference.

Tests or measurement methods are defined for each specified attribute. Where possible, these definitions are by reference to an IEC standard – otherwise the test or measurement method is outlined in the relevant sectional specification.

Table 1 defines the sectional specifications. The relevant family specifications are defined within the sectional specifications as normative annexes (see Tables 2 to 5).

Annexes A and B summarize the existing fibre specifications.

Table 1 – Sectional specifications

Document ID	Fibre category / class	Cladding material	Core material	Index profile
IEC 60793-2-10	A1 multimode	Glass	Glass	Graded
IEC 60793-2-20	A2 multimode	Glass	Glass	Quasi-step or step
IEC 60793-2-30	A3 multimode	Plastic	Glass	Step or graded (under consideration)
IEC 60793-2-40	A4 multimode	Plastic	Plastic	Step, multi-step or graded
IEC 60793-2-50	B single-mode	Glass	Glass	Not applicable
IEC 60793-2-60	C single-mode	Glass	Glass	Not applicable

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