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**Optical fibre cables –
Part 1-31: Generic specification – Optical cable elements – Optical fibre ribbon**

**Câbles à fibres optiques –
Partie 1-31: Spécification générique – Éléments de câbles optiques – Rubans
de fibres optiques**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL FIBRE CABLES –

**Part 1-31: Generic specification – Optical cable elements –
Optical fibre ribbon**

FOREWORD

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IEC 60794-1-31 has been prepared by subcommittee SC86A: Fibres and cables, of IEC technical committee 86: Fibre optics. It is an International Standard.

This second edition cancels and replaces the first edition published in 2018. This edition constitutes a technical revision.

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

- a) The geometrical requirements for optical fibre ribbon with typically 250 μm coating diameter have been modified and those for the optical fibre ribbon with typically 200 μm coating diameter have been added.
- b) "Identification by positional identification" and "Identification by ribbon coding and fibre colouring" are moved to a new informative Annex A.

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

CDV	Report on voting
86A/2071/CDV	86A/2109/RVC

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

A list of all parts in the IEC 60794 series, published under the general title *Optical fibre cables*, 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 webstore.iec.ch in the data related to the specific document. At this date, the document will be

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OPTICAL FIBRE CABLES –

Part 1-31: Generic specification – Optical cable elements – Optical fibre ribbon

1 Scope

This part of IEC 60794, which is a generic specification, covers optical fibre ribbons. Requirements which are described in this part apply to optical fibre ribbon cables for use with telecommunication equipment and devices employing similar techniques, in particular optical fibre cables in IEC 60794-2 for indoor use, in IEC 60794-3 for outdoor use, in IEC 60794-4 for self-supporting overhead use, in IEC 60794-5 for air blown use and in IEC 60794-6 for indoor/outdoor use. The detailed specification can be verified in specifications for each application such as IEC 60794-2 and IEC 60794-3.

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 60793-2-10, *Optical fibres – Part 2-10: Product specifications – Sectional specification for category A1 multimode fibres*

IEC 60793-2-50, *Optical fibres – Part 2-50: Product specifications – Sectional specification for class B single-mode fibres*

IEC 60794-1-1, *Optical fibre cables – Part 1-1: Generic specification – General*

IEC 60794-1-23, *Optical fibre cables – Part 1-23: Generic specification – Basic optical cable test procedures – Cable element test methods*

IEC 60794-2, *Optical fibre cables – Part 2: Indoor cables – Sectional specification*

IEC 60794-3, *Optical fibre cables – Part 3: Outdoor cables – Sectional specification*

IEC 60794-4, *Optical fibre cables – Part 4: Sectional specification – Aerial optical cables along electrical power lines*

IEC 60794-5, *Optical fibre cables – Part 5: Sectional specification – Microduct cabling for installation by blowing*

IEC 60794-6, *Optical fibre cables – Part 6: Indoor-outdoor cables – Sectional specification for indoor-outdoor cables*

3 Terms, definitions, symbols and abbreviated terms

For the purposes of this document, the terms, definitions, symbols and abbreviated terms given in IEC 60794-1-1 apply.