

# INTERNATIONAL STANDARD

Optical fibre cables –  
Part 1-3: Generic specification – Optical cable elements

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INTERNATIONAL  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## OPTICAL FIBRE CABLES –

## Part 1-3: Generic specification – Optical cable elements

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International Standard IEC 60794-1-3 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/1764/CDV | 86A/1791/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 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 "<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- withdrawn,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
- amended.

A bilingual version of this publication may be issued at a later date.

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## OPTICAL FIBRE CABLES –

### Part 1-3: Generic specification – Optical cable elements

#### 1 Scope

This part of IEC 60794 is a generic specification covering optical cable elements. Requirements which are described in this document apply to elements of optical fibre cables for use with telecommunication equipment and devices employing similar techniques. The elements which are the subject of this document are those which apply to several cable types of IEC 60794 (all parts) and as defined by sectional specifications IEC 60794-2, IEC 60794-3, IEC 60794-4, and IEC 60794-5. The requirements for cable elements are described in the IEC 60794-1-3X series for which the IEC 60794-1-31<sup>1</sup> is the first one, and family specifications and detailed specifications of the aforementioned sectional specifications can define specific cables families and types.

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

IEC 60794-1-2, *Optical fibre cables – Part 1-2: Generic specification – Basic optical cable test procedures – General guidance*

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*

#### 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.

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<sup>1</sup> Under preparation. Stage at the time of publication: IEC PCC 60794-1-31:2017.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

## **4 Requirements**

### **4.1 General**

Optical cable elements shall be defined in sectional specifications subordinate to this general specification.

Elements so defined should be of a sufficiently general nature to be applicable to cables in more than one of the cable sectional specifications IEC 60794-2, IEC 60794-3, IEC 60794-4, and IEC 60794-5.

Specific test methods, materials, construction attributes, dimensions, and the like shall be as defined in the specifications subordinate to this general specification.

### **4.2 Test methods**

Test methods are defined in generic specification IEC 60794-1-2 and its subordinate sectional specifications. In particular, IEC 60794-1-23 addresses test methods specific to defined cable elements.

### **4.3 Cable elements**

Cable elements include, but are not limited to, the following:

- optical fibre ribbons;
- buffered fibres;
- ruggedized fibre/ruggedized fibre element;
- polymeric tube;
- micro modules (definition is to be determined).

## Bibliography

IEC 60794 (all parts), *Optical fibre cables*

IEC 60794-1-31, *Optical fibre cables – Part 1-31: Sectional specification for cable element – Optical fibre ribbons*<sup>2</sup>

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<sup>2</sup> Under preparation. Stage at the time of publication: IEC PCC 60794-1-31:2017.