

INTERNATIONAL STANDARD

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Optical fibre cables –

Part 2-22: Indoor cables – Detail specification for multi-simplex breakout optical cables to be terminated with connectors

Câbles à fibres optiques –

Partie 2-22: Câbles intérieurs – Spécification particulière pour câbles optiques épanouis simplex multiples munis de connecteurs



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL FIBRE CABLES –

**Part 2-22: Indoor cables –
Detail specification for multi-simplex breakout
optical cables to be terminated with connectors**

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International Standard IEC 60794-2-22 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

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

FDIS	Report on voting
86A/1765/FDIS	86A/1773/RVD

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

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- withdrawn,
- replaced by a revised edition, or
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OPTICAL FIBRE CABLES –

Part 2-22: Indoor cables – Detail specification for multi-simplex breakout optical cables to be terminated with connectors

1 Scope

This part of IEC 60794 is a detail specification and specifies breakout optical cables with multiple simplex fibre cables for termination with connectors.

The requirements of the sectional specification IEC 60794-2 are applicable to cables covered by this document.

The requirements of the family specification IEC 60794-2-20 are applicable to breakout cables to be installed without terminated connectors.

Fan-out kits used for cable systems are not covered by this document.

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 60811-202, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 202: General tests – Measurement of thickness of non-metallic sheath*

IEC 60811-203, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 203: General tests – Measurement of overall dimensions*

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

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 60793-2, *Optical fibres – Part 2: Product specifications – General*

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 60794-1-21, *Optical fibre cables – Part 1-21: Generic specification – Basic optical cable test procedures – Mechanical tests methods*

IEC 60794-1-22, *Optical fibre cables – Part 1-22: Generic specification – Basic optical cable test procedures – Environmental test methods*

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

IEC 60794-2-20, *Optical fibre cables – Part 2-20: Indoor cables – Family specification for multi-fibre optical cables*

IEC 60794-2-50, *Optical fibre cables – Part 2-50: Indoor cables – Family specification for simplex and duplex cables for use in terminated cable assemblies*

IEC 60794-2-51, *Optical fibre cables – Part 2-51: Indoor cables – Detail specification for simplex and duplex cables for use in cords for controlled environment*

3 Terms and definitions

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

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>

3.1

breakout cable

cable consisting of multiple simplex fibre cables, stranded together under a common sheath, which may be stranded in one layer or multi-layers or bundled to subunits around a central member as necessary

3.2

simplex fibre cable

cable including a secondary coated fibre that is surrounded with either metallic or non-metallic strength members within a sheath of suitable material

4 Construction

4.1 General

In addition to the constructional requirements in IEC 60794-2 and IEC 60794-2-20, the following considerations apply to multi-simplex breakout cables for use in terminated breakout cable assemblies.

It is not the intention of this document to specify the finished terminated breakout cable assembly complete with terminations.

There shall be no fibre splice in any delivery length. It shall be possible to identify each individual fibre throughout the length of the cable.