

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Optical fibre cables –
Part 2-23: Indoor cables – Detail specification for multi-fibre cables for use in
MPO connector terminated cable assemblies**

**Câbles à fibres optiques –
Partie 2-23: Câbles intérieurs – Spécification particulière pour les câbles
multifibres utilisés dans les câbles assemblés équipés de connecteurs MPO**



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CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references	5
3 Terms and definitions	6
4 Construction	6
4.1 General.....	6
4.2 Optical fibres	7
4.3 Ribbon structure	7
4.4 Strength and anti-buckling members	7
4.5 Ripcord.....	7
4.6 Cable sheath	7
4.7 Sheath marking.....	7
4.8 Example of cable construction	7
5 Tests	7
5.1 General.....	7
5.2 Dimensions	8
5.3 Mechanical requirements	8
5.3.1 General	8
5.3.2 Tensile performance	8
5.3.3 Crush	9
5.3.4 Impact	9
5.3.5 Bending	9
5.3.6 Repeated bending	10
5.3.7 Torsion	10
5.3.8 Kink	10
5.3.9 Abrasion resistance of cable marking	11
5.4 Environmental requirements	11
5.4.1 Temperature cycling	11
5.4.2 Sheath shrinkage.....	12
6 Transmission requirements.....	12
7 Fire performance	12
Annex A (normative) Cable sample preparation for bending and temperature cycling test	13
Annex B (informative) Examples of cable constructions	14
B.1 Optical cables for use in MPO connector terminated cable assemblies, with single sheath	14
B.2 Optical cables for use in MPO connector terminated cable assemblies, with double sheath	14
Bibliography.....	15
Figure A.1 – Sample preparation and length for multi-fibre cables for use in MPO connector terminated cable assemblies.....	13
Figure B.1 – Example of a cross-section of a 12-fibre cable with single sheath	14
Figure B.2 – Example of a cross-section of a 12-fibre cable with double sheath.....	14
Table 1 – Preferred low and high temperatures	11

INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL FIBRE CABLES –

**Part 2-23: Indoor cables –
Detail specification for multi-fibre cables for use
in MPO connector terminated cable assemblies**

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IEC 60794-2-23 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics. It is an International Standard.

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

Draft	Report on voting
86A/2392/FDIS	86A/2412/RVD

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/publications.

A list of all the 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 2-23: Indoor cables – Detail specification for multi-fibre cables for use in MPO connector terminated cable assemblies

1 Scope

This part of IEC 60794 is a detail specification and specifies indoor multi-fibre cables for use in MPO (multi-fibre push on) connector terminated cable assemblies.

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 60793-1-40, *Optical fibres – Part 1-40: Attenuation measurement methods*

IEC 60793-1-46, *Optical fibres – Part 1-46: Measurement methods and test procedures – Monitoring of changes in optical transmittance*

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

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 60794-1-31, *Optical fibre cables – Part 1-31: Generic specification – Optical cable elements – Optical fibre ribbon*

IEC 60794-1-211, *Optical fibre cables – Part 1-211: Generic specification – Basic optical cable test procedures – Environmental test methods – Sheath shrinkage, method F11*

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 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*

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 terminology databases for use in standardization at the following addresses:

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

3.1

cable for trunk cabling

cable to be used as part of the backbone routing in a cabling system

Note 1 to entry: Cables for trunk cabling normally forms cable assemblies that are tens or hundreds of meters length. The cable assemblies are installed in ladder racks, conduit or under raised floors.

3.2

cable for cords

cable to be cut into small lengths and used in cords

Note 1 to entry: The cords are normally installed inside a housing/frame or between nearby housings/frames as patch cords or jumpers and is used to create cross-connects or inter-connects within a cabling system.

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-fibre optical cables for use in MPO connector terminated cable assemblies.

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

There shall be no fibre splice in any delivery length unless otherwise agreed by the customer and the supplier.

It shall be possible to identify each individual fibre throughout the length of the cable.