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Part 1-122: Generic specification - Basic optical cable test procedures - Mechanical tests methods - Buffered fibre movement under compression in optical fibre cables for use in patch cords, Method E22

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IEC 60794-1-122 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics. It is an International Standard.

This first edition cancels and replaces Method E22 of the first edition of IEC 60794-1-21 published in 2015. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC 60794-1-21:2015:

a) addition of "11 Details to be reported".

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

Draft	Report on voting
86A/2726/FDIS	86A/2738/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 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

– reconfirmed,
– withdrawn, or
– revised.

INTRODUCTION

This document cancels and replaces test method E22 of IEC 60794-1-21:2015, which will be withdrawn. It includes an editorial revision, based on the new structure and numbering system for optical fibre cable test methods. The mechanical tests contained in IEC 60794-1-21 will be individually numbered in the IEC 60794-1-1xx series. Each test method is now considered to be an individual document rather than part of a multi-test method compendium. IEC 60794-1-21 will be withdrawn when the entire IEC 60794-1-1xx series is fully published. Full cross-reference details are given in IEC 60794-1-2.

1 Scope

This part of IEC 60794 specifies the test procedures used to establish uniform requirements for optical fibre cables on the mechanical properties. This document is used to check the buffered fibre movement under compression in optical fibre cables for use in patch cords.

This document applies to optical fibre cables for use with telecommunication equipment and devices employing similar techniques, and to cables having a combination of both optical fibres and electrical conductors.

NOTE Throughout the document, the wording “optical cable” can also include optical fibre units, microduct fibre units, etc.

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 fibres - 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*

3 Terms and definitions

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

4 General requirements

IEC 60794-1-2 shall be used for general requirements and definitions and for a complete reference guide to test method of all types.

5 Object

The purpose of the test is to examine the attenuation behaviour (attenuation change) and the reaction force when a buffered fibre in a cable intended for use in patch cords moves under axial compression only.

6 Sample

A 5,0 m long cable sample shall be taken from a finished cable length. At both ends of the sample, 2,0 m of the cable sheath and other cable elements shall be removed leaving a central cable sheath length of 1,0 m on the sample.