

Optical fibre cables - Part 1-129: Generic specification
- Basic optical cable test procedures - Mechanical tests
methods - Straight midspan access to optical elements,
method e29

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>See Eesti standard EVS-EN IEC 60794-1-129:2025 sisaldab Euroopa standardi EN IEC 60794-1-129:2025 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 19.12.2025.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN IEC 60794-1-129:2025 consists of the English text of the European standard EN IEC 60794-1-129:2025.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 19.12.2025.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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Supersedes EN 60794-1-21:2015 (partially); EN 60794-1-21:2015/A1:2020 (partially)

English Version

Optical fibre cables - Part 1-129: Generic specification - Basic optical cable test procedures - Mechanical tests methods - Straight midspan access to optical elements, Method E29 (IEC 60794-1-129:2025)

Câbles à fibres optiques - Partie 1-129: Spécification générique - Procédures fondamentales d'essais des câbles optiques - Méthodes d'essais mécaniques - Accès à mi-portée rectiligne vers les éléments optiques, Méthode E29 (IEC 60794-1-129:2025)

Lichtwellenleiterkabel - Teil 1-129: Fachgrundspezifikation - Grundlegende Prüfverfahren für Lichtwellenleiterkabel - Mechanische Prüfverfahren - Gerader Zugang zu optischen Elementen in der Mitte des Kabelstrangs, Verfahren E29 (IEC 60794-1-129:2025)

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European foreword

The text of document 86A/2613/FDIS, future edition 1 of IEC 60794-1-129, prepared by SC 86A "Fibres and cables" of IEC/TC 86 "Fibre optics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60794-1-129:2025.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2026-12-31
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IEC 60794-1-2 NOTE Approved as EN IEC 60794-1-2

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Optical fibre cables -
Part 1-129: Generic specification - Basic optical cable test procedures -
Mechanical tests methods - Straight midspan access to optical elements,
Method E29**

**Câbles à fibres optiques -
Partie 1-129 : Spécification générique - Procédures fondamentales d'essais des
câbles optiques - Méthodes d'essais mécaniques - Accès à mi-portée rectiligne
vers les éléments optiques, Méthode E29**



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CONTENTS

FOREWORD.....	2
1 Scope.....	4
2 Normative references.....	4
3 Terms and definitions.....	4
4 Method E29 – Straight midspan access.....	4
4.1 Object.....	4
4.2 Sample.....	4
4.3 Apparatus.....	5
4.4 Procedure.....	5
4.4.1 General.....	5
4.4.2 Procedure 1.....	6
4.4.3 Procedure 2.....	7
4.4.4 Visual examination.....	7
4.5 Requirements.....	7
4.6 Details to be specified.....	8
4.7 Details to be reported.....	8
Bibliography.....	9
Figure 1 – Concept of straight midspan access.....	5
Figure 2 – Straight midspan access – Procedure 1.....	6
Figure 3 – Straight midspan access – Procedure 2.....	7

INTERNATIONAL ELECTROTECHNICAL COMMISSION

Optical fibre cables -
Part 1-129: Generic specification - Basic optical cable test procedures -
Mechanical test methods - Straight midspan access
to optical elements, Method E29

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IEC 60794-1-129 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 partially replaces the first edition IEC 60794-1-21 published in 2015 and Amendment 1:2020. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC 60794-1-21:2015 and IEC 60794-1-21:2015/AMD 1:2020:

- a) this document cancels and replaces method E29 of IEC 60794-1-21:2015 and IEC 60794-1-21:2015/AMD 1:2020;
- b) addition of the description for applicable cable types;
- c) update of Figure 2a), Figure 2b) and Figure 3;

- d) addition of the displacement measure description;
- e) addition of the details to be reported.

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

Draft	Report on voting
86A/2613/FDIS	86A/2625/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.

1 Scope

This part of IEC 60794 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.

The document defines test procedures used in establishing uniform requirements for mechanical performance-straight midspan access to optical elements.

Throughout this document, the wording "optical cable" also includes optical fibre units, microduct fibre units, etc.

NOTE See IEC 60794-1-2 for a reference guide to test methods of all types and for general requirements and definitions.

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 60793-1-46, *Optical fibres - Part 1-46: Measurement methods and test procedures - Monitoring of changes in attenuation*

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

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/>
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4 Method E29 – Straight midspan access to optical elements

4.1 Object

This test is to evaluate if an optical element can be effectively removed from a cable by midspan access. A substantially straight cable being tested is subjected to two types of controlled minor bends for the test. This test is intended to evaluate a cable type which is designed for withdrawal of cable elements through removed sheath windows at the midspan section of the cable.

NOTE The optical element can be a fibre, a cord, a ribbon, a micro-module, or other, as appropriate.

4.2 Sample

A single cable sample of at least 50 m in length is recommended. Alternatively, two samples from the same cable design of at least 20 m in length may be used.