

STN	Optické káble Časť 1-107: Kmeňová špecifikácia Základné skúšobné postupy pre optické káble Mechanické skúšobné metódy Krut, metóda E7	STN EN IEC 60794-1-107 35 9223
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Optical fibre cables - Part 1-107: Generic specification - Basic optical cable test procedures - Mechanical test methods - Torsion, method E7

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/26

Táto norma čiastočne nahrádza normu STN EN 60794-1-21 zo septembra 2015. Súbežná platnosť do 31. 12. 2028.

Obsahuje: EN IEC 60794-1-107:2025, IEC 60794-1-107:2025

142167



EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN IEC 60794-1-107

December 2025

ICS 33.180.10

Supersedes EN 60794-1-21:2015 (partially); EN 60794-1-21:2015/A1:2020 (partially)

English Version

**Optical fibre cables - Part 1-107: Generic specification - Basic
optical cable test procedures - Mechanical test methods -
Torsion, method E7
(IEC 60794-1-107:2025)**

Câbles à fibres optiques - Partie 1-107 : Spécification
générique - Procédures fondamentales d'essais des câbles
optiques - Méthodes d'essais mécaniques - Torsion,
méthode E7
(IEC 60794-1-107:2025)

Lichtwellenleiterkabel - Teil 1-107: Fachgrundspezifikation -
Grundlegende Prüfverfahren für Lichtwellenleiterkabel -
Mechanische Prüfverfahren - Torsion, Verfahren E7
(IEC 60794-1-107:2025)

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EN IEC 60794-1-107:2025 (E)**European foreword**

The text of document 86A/2615/FDIS, future edition 1 of IEC 60794-1-107, 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 60794-1-107:2025.

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
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2028-12-31

This document partially supersedes EN IEC 60794-1-21:2015 and all of its amendments and corrigenda (if any).

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In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60794-1-2 NOTE Approved as EN IEC 60794-1-2

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cencenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60793-1-46	2024	Optical fibres - Part 1-46: Measurement methods and test procedures - Monitoring of changes in attenuation	EN IEC 60793-1-46	2024
IEC 60794-1-1	-	Optical fibre cables - Part 1-1: Generic specification - General	EN IEC 60794-1-1	-



IEC 60794-1-107

Edition 1.0 2025-10

INTERNATIONAL STANDARD

**Optical fibre cables -
Part 1-107: Generic specification - Basic optical cable test procedures -
Mechanical test methods - Torsion, method E7**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**Optical fibre cables -
Part 1-107: Generic specification - Basic optical cable test procedures -
Mechanical test methods - Torsion, method E7**

FOREWORD

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IEC 60794-1-107 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics. It is an International Standard.

This first edition partially cancels and replaces IEC 60794-1-21:2015. This edition constitutes a technical revision.

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

- a) Update of the typical test length according to the different types of cables;
- b) Update of Figure 2 by loading weights to cable gripping fixture.

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

Draft	Report on voting
86A/2615/FDIS	86A/2627/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.

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INTRODUCTION

This document cancels and replaces method E7 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. Additionally, technical changes were implemented. The mechanical tests contained in IEC 60794-1-21:2015 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. Full cross-reference details are given in IEC 60794-1-2.

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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.

This document defines test procedures used in establishing uniform requirements for torsion performance.

Refer to IEC 60794-1-2 for a reference guide to test methods and for general requirements and definitions.

NOTE Throughout this document, the wording "optical cable" also includes 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 60793-1-46:2024, *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*

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