IEC 60794-1-312

Edition 1.0 2024-01

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Optical fibre cables –
Part 1-312: Generic specification – Basic optical cable test procedures – Cable element test methods – Elongation test for buffer tubes at low temperature, Method G11B

Câbles à fibres optiques –
Partie 1-312: Spécification générique – Procédures fondamentales d'essai des câbles optiques – Méthodes d'essais d'environnement – Essai d'allongement des tubes à basse température, Méthode G11B

IEC 60794-1-312:2024 (en-fr)

IEC Secretariat
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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FOREWORD

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IEC 60794-1-312 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics. It is an International Standard.

This document partially cancels and replaces method G11B of IEC 60794-1-23:2019.

This edition includes the following significant technical changes with respect to IEC 60794-1-23:2019:

- alignment of the title with the content of the method.

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

Draft	Report on voting
86A/2395/FDIS	86A/2414/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- withdrawn, or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This document contains method G11B of IEC 60794-1-23:2019, which will be withdrawn. The title of the test method G11B and the content were not in line with each other. In the title micro tubes are mentioned, but the text stated that the test is intended for buffer tubes circular cross-section having an external diameter greater than 12,5 mm and for sector-shaped cores large enough to prepare dumb-bells. In the new title, micro tubes are skipped with respect to IEC 60794-1-23:2019.

The system for optical fibre test methods have been restructured and renumbered. The optical cable element test methods contained in IEC 60794-1-23:2019 will now be individually numbered in the IEC 60794-1-3xx 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.

OPTICAL FIBRE CABLES –

Part 1-312: Generic specification – Basic optical cable test procedures – Cable element test methods – Elongation test for buffer tubes at low temperature, method G11B

1 Scope

This part of IEC 60794 describes test procedures to be used in establishing uniform requirements of optical fibre cable elements for the mechanical property – tensile strength and elongation at low temperature.

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.

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

IEC 60811-401, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 401: Miscellaneous tests – Thermal ageing methods – Ageing in an air oven*

IEC 60811-501, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 501: Mechanical tests – Tests for determining the mechanical properties of insulating and sheathing compounds*

IEC 60811-505, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 505: Mechanical tests – Elongation at low temperature for insulations and sheaths*

3 Terms and definitions

No terms and definitions are listed in this document.

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