

**Elektrilised kaablid ja optilised kiudkaablid.
Mittemetallmaterjalide katsetusviisid. Osa 502:
Mehaanilised katsetused. Isolatsiooni kokkutõmbuvuse
katsetamine**

**Electric and optical fibre cables - Test methods for non-
metallic materials - Part 502: Mechanical tests -
Shrinkage test for insulations**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 60811-502:2012 sisaldab Euroopa standardi EN 60811-502:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 60811-502:2012 consists of the English text of the European standard EN 60811-502:2012.
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**Electric and optical fibre cables -
Test methods for non-metallic materials -
Part 502: Mechanical tests -
Shrinkage test for insulations
(IEC 60811-502:2012)**

Câbles électriques et à fibres optiques -
Méthodes d'essai pour les matériaux
non-métalliques -
Partie 502: Essais mécaniques -
Essai de rétraction des enveloppes
isolantes
(CEI 60811-502:2012)

Kabel, isolierte Leitungen
und Glasfaserkabel -
Prüfverfahren für nichtmetallene
Werkstoffe -
Teil 502: Mechanische Prüfungen
Schrumpfungsprüfung für Isolierhüllen
(IEC 60811-502:2012)

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

The text of document 20/1298/FDIS, future edition 1 of IEC 60811-502, prepared by IEC/TC 20 "Electric cables" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60811-502:2012.

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) 2013-01-17
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-04-17

This document supersedes Clause 10 of EN 60811-1-3:1995 + A1:2001(partially). Full details of the replacements are shown in Annex A of EN 60811-100:2012.

There are no technical changes with respect to EN 60811-1-3:1995, but see the Foreword to EN 60811-100.

This standard is to be read in conjunction with EN 60811-100.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

Endorsement notice

The text of the International Standard IEC 60811-502:2012 was approved by CENELEC as a European Standard without any modification.

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

IEC 60811-1-3:1993 NOTE Harmonized as EN 60811-1-3:1995 (not modified).

Annex ZA
(normative)

**Normative references to international publications
with their corresponding European publications**

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60811-100	2012	Electric and optical fibre cables - Test methods for non-metallic materials - Part 100: General	EN 60811-100	2012

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INTRODUCTION

The IEC 60811 series specifies the test methods to be used for testing non-metallic materials of all types of cables. These test methods are intended to be referenced in standards for cable construction and for cable materials.

NOTE 1 Non-metallic materials are typically used for insulating, sheathing, bedding, filling or taping within cables.

NOTE 2 These test methods are accepted as basic and fundamental and have been developed and used over many years principally for the materials in all energy cables. They have also been widely accepted and used for other cables, in particular optical fibre cables, communication and control cables and cables for ships and offshore applications.

ELECTRIC AND OPTICAL FIBRE CABLES – TEST METHODS FOR NON-METALLIC MATERIALS –

Part 502: Mechanical tests – Shrinkage test for insulations

1 Scope

This Part 502 of IEC 60811 gives the test method for the shrinkage for insulations.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60811-100:2012, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 100: General*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60811-100 apply.

4 Test method

4.1 General

This part of IEC 60811 shall be used in conjunction with IEC 60811-100.

4.2 Test equipment

The test equipment shall be as follows:

- an air oven, electrically heated, capable of maintaining the test temperature;
- a measuring device with a scale division of 0,5 mm.

4.3 Sampling

One sample about 1,5 L mm in length of each core to be tested shall be taken at least 0,5 m away from the end of the cable length.

L is the length given in the relevant cable standard.

4.4 Preparation of test pieces

All coverings, except adherent, extruded semi-conducting screens, if any, shall be removed from the samples of insulated conductor.

Within an interval of not more than 5 min from the time of cutting the samples, a test length of $L \pm 5$ mm shall be marked on the middle part of each piece of core. The distance between the marks shall be measured to an accuracy of 0,5 mm. Each test piece shall then be