



Irish Standard  
I.S. EN 61300-2-11:2013

# Fibre optic interconnecting devices and passive components - Basic test and measurement procedures -- Part 2-11: Tests - Axial compression (IEC 61300-2-11:2012 (EQV))

## I.S. EN 61300-2-11:2013

*Incorporating amendments/corrigenda issued since publication:*

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EUROPEAN STANDARD  
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**EN 61300-2-11**

February 2013

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Supersedes EN 61300-2-11:1997

English version

**Fibre optic interconnecting devices and passive components -  
Basic test and measurement procedures -  
Part 2-11: Tests -  
Axial compression  
(IEC 61300-2-11:2012)**

Dispositifs d'interconnexion et composants  
passifs à fibres optiques -  
Procédures fondamentales d'essais et de  
mesures -  
Partie 2-11: Essais -  
Compression axiale  
(CEI 61300-2-11:2012)

Lichtwellenleiter -  
Verbindungselemente und passive  
Bauteile -  
Grundlegende Prüf- und Messverfahren -  
Teil 2-11: Prüfungen -  
Axialer Druck  
(IEC 61300-2-11:2012)

This European Standard was approved by CENELEC on 2012-12-12. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

**I.S. EN 61300-2-11:2013**

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**Foreword**

The text of document 86B/3487/FDIS, future edition 2 of IEC 61300-2-11, prepared by SC 86B, "Fibre optic interconnecting devices and passive components", of IEC TC 86, "Fibre optics", was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61300-2-11:2013.

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) 2013-09-12
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2013-12-12

This document supersedes EN 61300-2-11:1997.

EN 61300-2-11:2013 includes the following significant technical changes with respect to EN 61300-2-11:1997:

- a) the procedure and details to be specified have been reconsidered;
- b) the severity of the test has been modified according to the cable diameter;
- c) the apparatus and mount for the device under test have been reconsidered in the sense of clamping device placement and this datum has been indicated in an appropriate figure.

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.

**Endorsement notice**

The text of the International Standard IEC 61300-2-11:2012 was approved by CENELEC as a European Standard without any modification.

## **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 61300-1	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 1: General and guidance	EN 61300-1	-
IEC 61300-3-1	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-1: Examinations and measurements - Visual examination	EN 61300-3-1	-

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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### **FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – BASIC TEST AND MEASUREMENT PROCEDURES –**

#### **Part 2-11: Tests – Axial compression**

#### FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61300-2-11 has been prepared by subcommittee SC 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

This second edition cancels and replaces the first edition published in 1995. It constitutes a technical revision.

The changes with respect to the previous edition are as follows:

- a) the procedure and details to be specified have been reconsidered;
- b) the severity of the test has been modified according to the cable diameter;
- c) the apparatus and mount for the device under test have been reconsidered in the sense of clamping device placement and this datum has been indicated in an appropriate figure.



The text of this standard is based on the following documents:

FDIS	Report on voting
86B/3487/FDIS	86B/3532/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 61300 series, published under the general title *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

## **FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – BASIC TEST AND MEASUREMENT PROCEDURES –**

### **Part 2-11: Tests – Axial compression**

#### **1 Scope**

The purpose of this part of IEC 61300 is to ensure that the captivation or the attachment of the cable to the fibre optic devices such as fibre optic closures will withstand compressive axial loads likely to be applied during normal service.

#### **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 61300-1, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 1: General and guidance*

IEC 61300-3-1, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-1: Examinations and measurements – Visual examination*

#### **3 General description**

The specimen is rigidly clamped and an axial compressive load is applied to the cable.

#### **4 Apparatus**

##### **4.1 General**

The test apparatus shall be capable of applying an axial compression load between a clamped specimen and a cable. The apparatus consists of the elements described in 4.2 to 4.5.

##### **4.2 Clamping device**

A suitable clamping device which grips a length of fibre optic cable over a distance equivalent to at least three times the cable diameter (see Figure 1, Dimension A), and which is capable of providing an axial load without slipping, causing damage to the cable or increasing attenuation.

##### **4.3 Fixed clamping device**

A fixed clamping device capable of gripping the specimen without altering any of its mechanical properties.

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