



NSAI
Standards

Irish Standard
I.S. EN 61300-2-42:2014

Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-42: Tests - Static side load for strain relief

I.S. EN 61300-2-42:2014

Incorporating amendments/corrigenda/National Annexes issued since publication:

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EUROPEAN STANDARD

EN 61300-2-42

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2014

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Supersedes EN 61300-2-42:2005

English Version

**Fibre optic interconnecting devices and passive components -
Basic test and measurement procedures - Part 2-42: Tests -
Static side load for strain relief
(IEC 61300-2-42:2014)**

Dispositifs d'interconnexion et composants passifs à fibres
optiques - Procédures fondamentales d'essais et de
mesures - Partie 2-42: Essais - Charge latérale statique
pour serre-câble
(CEI 61300-2-42:2014)

Lichtwellenleiter - Verbindungselemente und passive
Bauteile - Grundlegende Prüf- und Messverfahren -
Teil 2-42: Prüfungen - Statische Seitenlast für die
Zugentlastung
(IEC 61300-2-42:2014)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of document 86B/3699/FDIS, future edition 3 of IEC 61300-2-42, 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 61300-2-42:2014.

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) 2014-12-13
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-03-13

This document supersedes EN 61300-2-42:2005.

EN 61300-2-42:2014 includes the following significant technical changes with respect to EN 61300-2-42:2005:

- modification of the severity according to cable configurations.

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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NOTE 1 When 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.cenelec.eu.

<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	-
IEC 61300-3-3	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures Part 3-3: Examinations and measurements - Active monitoring of changes in attenuation and return loss	EN 61300-3-3	-
IEC 61300-3-4	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures Part 3-4: Examinations and measurements - Attenuation	EN 61300-3-4	-

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IEC 61300-2-42

Edition 3.0 2014-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –
Part 2-42: Tests – Static side load for strain relief**

**Dispositifs d'interconnexion et composants passifs à fibres optiques –
Procédures fondamentales d'essais et de mesures –
Partie 2-42: Essais – Charge latérale statique pour serre-câble**





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IEC 61300-2-42

Edition 3.0 2014-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –
Part 2-42: Tests – Static side load for strain relief**

**Dispositifs d'interconnexion et composants passifs à fibres optiques –
Procédures fondamentales d'essais et de mesures –
Partie 2-42: Essais – Charge latérale statique pour serre-câble**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 2-42: Tests – Static side load for strain relief

FOREWORD

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International Standard IEC 61300-2-42 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

This third edition cancels and replaces the second edition published in 2005 and constitutes a technical revision.

This edition includes the following significant technical change with respect to the previous edition:

- modification of the severity according to cable configurations.

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

FDIS	Report on voting
86B/3699/FDIS	86B/3721/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 of IEC 61300 series, published under the general title *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures*, ¹can 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.

¹ This footnote only applies to the French title.

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

Part 2-42: Tests – Static side load for strain relief

1 Scope

This part of IEC 61300 specifies a test to determine the influence of a side load applied to a cord assembled with a strain relief. The intention is to simulate a static load, due to a length of fibre cable, which would typically be experienced during service. Components should withstand side loads during optical transmission without degradation of the optical performance. Besides a boot, any feature that controls the bending radius of the fibre can be considered as strain relief.

2 Normative references

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

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IEC 61300-3-3, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-3: Examinations and measurements – Active monitoring of changes in attenuation and return loss*

IEC 61300-3-4, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-4: Examinations and measurements – Attenuation*

3 General description

The specimen is inserted into the test apparatus as shown in Figure 1. A load, equivalent to several metres of cable, is applied to the cable attached to the device under test and any changes in optical attenuation are recorded during the specified period of the test.

NOTE This test is applicable only to those passive optical components where the product design incorporates fibre cable pigtailed.

4 Apparatus

4.1 Load generator

The load generator consists of a mass and a means of clamping the mass to the cable. The clamping shall not introduce micro- or macro-bending losses in the cable.

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