



NSAI
Standards

Irish Standard
I.S. EN 61300-2-52:2013

Fibre optic interconnecting devices and
passive components - Basic test and
measurement procedures -- Part 2-52:
Tests - Bending test for cords (IEC
61300-2-52:2013 (EQV))

I.S. EN 61300-2-52:2013

Incorporating amendments/corrigenda issued since publication:

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I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

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SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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EUROPEAN STANDARD
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EN 61300-2-52

May 2013

ICS 33.180.20

English version

**Fibre optic interconnecting devices and passive components -
Basic test and measurement procedures -
Part 2-52: Tests -
Bending test for cords
(IEC 61300-2-52:2013)**

Dispositifs d'interconnexion et
composants passifs à fibres optiques -
Procédures fondamentales d'essais et de
mesures -
Partie 2-52: Essais -
Essai de courbure pour les cordons
(CEI 61300-2-52:2013)

Lichtwellenleiter -
Verbindungselemente und passive
Bauteile -
Grundlegende Prüf- und Messverfahren -
Teil 2-52: Prüfungen -
Biegeprüfung für konfektionierte Kabel
(IEC 61300-2-52:2013)

This European Standard was approved by CENELEC on 2013-03-28. 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.

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CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 86B/3547/FDIS, future edition 1 of IEC 61300-2-52, 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 61300-2-52:2013.

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) 2013-12-28
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2016-03-28

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 61300-2-52:2013 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

- | | | |
|----------------|------|------------------------------|
| IEC 60794-1-2 | NOTE | Harmonized as EN 60794-1-2. |
| IEC 61300-3-28 | NOTE | Harmonized as EN 61300-3-28. |

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	-
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	-

CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references.....	5
3 General description.....	5
4 Apparatus.....	5
4.1 General.....	5
4.2 Cord.....	5
4.3 Specimen.....	6
4.4 Optical measurements.....	6
5 Procedure.....	6
5.1 General.....	6
5.2 Preconditioning.....	6
5.3 Initial examinations and measurements.....	6
5.4 Procedure.....	6
5.5 Final examinations and measurements.....	7
6 Severity.....	7
7 Details to be specified.....	8
Bibliography.....	9
Figure 1 – Specimen fixed onto mandrel.....	7
Figure 2 – Cable wrapped around mandrel.....	7
Figure 3 – Required number of mandrel rotations applied.....	7
Table 1 – Severity.....	8

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 2-52: Tests – Bending test for cords

FOREWORD

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International Standard IEC 61300-2-52 has been prepared by sub-committee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

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

FDIS	Report on voting
86B/3547/FDIS	86B/3590/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 the 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 2-52: Tests – Bending test for cords

1 Scope

This part of the IEC 61300 series describes a procedure to determine the suitability of a cord to withstand bending around a mandrel of the sort to be applied during normal use. This test is only applied to single fibre cables and multiple fibre circular cables. It is not applicable to ribbon cables.

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*

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 purpose of this test is to determine the capability of the cord when repeatedly bent. Optical measurements are made before and after the test to screen for evidence of damage to the fibre/cable.

4 Apparatus

4.1 General

A single mandrel apparatus shall enable the sample to be wrapped tangentially in a close helix around a single test mandrel.

4.2 Cord

A cord is a fibre optic cable terminated with any passive fibre optic connector on both ends, regardless of its expected use. Examples include equipment cords, work area cords or patchcords.

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