



Irish Standard  
I.S. EN 61300-2-12:2009

# Fibre optic interconnecting devices and passive components - Basic test and measurement procedures -- Part 2-12: Tests - Impact (IEC 61300-2-12:2009 (EQV))

## I.S. EN 61300-2-12:2009

*Incorporating amendments/corrigenda issued since publication:*

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**EN 61300-2-12**

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Supersedes EN 61300-2-12:2005

English version

**Fibre optic interconnecting devices and passive components -  
Basic test and measurement procedures -  
Part 2-12: Tests -  
Impact  
(IEC 61300-2-12:2009)**

Dispositifs d'interconnexion  
et composants passifs à fibres optiques -  
Méthodes fondamentales d'essais  
et de mesures -  
Partie 2-12: Essais -  
Impact  
(CEI 61300-2-12:2009)

Lichtwellenleiter -  
Verbindungselemente  
und passive Bauteile -  
Grundlegende Prüf- und Meßverfahren -  
Teil 2-12: Prüfungen -  
Schlag  
(IEC 61300-2-12:2009)

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

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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**CENELEC**

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

**Central Secretariat: Avenue Marnix 17, B - 1000 Brussels**

**I.S. EN 61300-2-12:2009**

EN 61300-2-12:2009

- 2 -

**Foreword**

The text of document 86B/2784/CDV, future edition 3 of IEC 61300-2-12, 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 was approved by CENELEC as EN 61300-2-12 on 2009-10-01.

This European Standard supersedes EN 61300-2-12:2005.

In EN 61300-2-12:2009, the impact test with a steel ball has been added.

The following dates were fixed:

- |  |       |            |
|--|-------|------------|
| – latest date by which the EN has to be implemented<br>at national level by publication of an identical<br>national standard or by endorsement | (dop) | 2010-07-01 |
| – latest date by which the national standards conflicting<br>with the EN have to be withdrawn  | (dow) | 2010-10-01 |

Annex ZA has been added by CENELEC.

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**Endorsement notice**

The text of the International Standard IEC 61300-2-12:2009 was approved by CENELEC as a European Standard without any modification.

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## **Annex ZA**

(normative)

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

The following referenced documents are indispensable for the application 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.

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	- <sup>1)</sup>	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 1: General and guidance	EN 61300-1	2003 <sup>2)</sup>
IEC 61300-3-1	- <sup>1)</sup>	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-1: Examinations and measurements - Visual examination	EN 61300-3-1	2005 <sup>2)</sup>
IEC 61753-1	- <sup>1)</sup>	Fibre optic interconnecting devices and passive components performance standard - Part 1: General and guidance for performance standards	EN 61753-1	2007 <sup>2)</sup>

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<sup>1)</sup> Undated reference.

<sup>2)</sup> Valid edition at date of issue.

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## CONTENTS

FOREWORD .....	3
1 Scope .....	5
2 Normative references .....	5
3 General description .....	5
4 Apparatus .....	5
4.1 Method A – Pendulum drop .....	5
4.1.1 Attaching fixture .....	5
4.1.2 Surface plate .....	6
4.2 Method B – Impact with steel ball .....	6
4.2.1 Impact tool .....	6
4.2.2 Surface .....	6
4.2.3 Drop apparatus .....	6
4.3 Method C – Free drop of specimen .....	7
4.3.1 Attaching fixture .....	7
4.3.2 Impact surface .....	7
5 Procedure .....	7
5.1 Preparation of specimen .....	7
5.2 Preconditioning .....	7
5.3 Initial examinations and measurements .....	8
5.4 Test method .....	8
5.4.1 General .....	8
5.4.2 Method A .....	8
5.4.3 Method B .....	8
5.4.4 Method C .....	9
5.4.5 Severity .....	10
5.5 Recovery .....	10
5.6 Final examinations and measurements .....	10
6 Details to be specified .....	10
6.1 Method A .....	10
6.2 Method B .....	10
6.3 Method C .....	11
Figure 1 – Method A – Apparatus .....	6
Figure 2 – Method B – Apparatus .....	7
Figure 3 – Orientations for edge and corner drops .....	9
Table 1 – Drop height .....	8
Table 2 – Drop height and specimen mass .....	9

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

## **Part 2-12: Tests – Impact**

### FOREWORD

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International Standard IEC 61300-2-12 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

This third edition of IEC 61300-2-12 cancels and replaces the second edition published in 2005. In this third edition, the impact test with a steel ball has been added.

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

CDV	Report on voting
86B/2784/CDV	86B/2848/RVC

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* can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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 2-12: Tests – Impact**

#### **1 Scope**

This part of IEC 61300 is to evaluate the ability of a passive fibre optic device or a closure to withstand impacts likely to be encountered during usage. The impact may be a localized impact, a series of impacts with hard objects, or an impact normally associated with dropping the device.

#### **2 Normative references**

The following referenced documents are indispensable for the application 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 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 61753-1, *Fibre optic interconnecting devices and passive components performance standard – Part 1: General and guidance for performance standards*

#### **3 General description**

Three methods are described:

- Method A: a specimen with an attached length of cable is freely swung in a pendular motion and allowed to strike an impact surface.
- Method B: a steel ball is dropped on the specimen which is placed on a smooth hard rigid surface of concrete or steel.
- Method C: the specimen is released such as to allow free fall drops from the position of suspension.

Impairment of function to the extent that the device fails to meet the requirements of the relevant specification constitutes failure.

#### **4 Apparatus**

##### **4.1 Method A – Pendulum drop**

###### **4.1.1 Attaching fixture**

The attaching fixture shall be capable of being mounted on any convenient, rigid, vertical structure. If the device has an attached cable, the cable shall be mounted to the fixture in such a manner as to allow it to swing freely from a horizontal to a vertical position. An

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