

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –  
Part 2-12: Tests – Impact**

**Dispositifs d'interconnexion et composants passifs à fibres optiques –  
Méthodes fondamentales d'essais et de mesures –  
Partie 2-12: Essais – Impact**



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## 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,
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# 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