

Irish Standard I.S. EN 61300-2-34:2009

Fibre optic interconnecting devices and passive components - Basic test and measurement procedures -- Part 2-34: Tests - Resistance to solvents and contaminating fluids of interconnecting components and closures (IEC 61300-2 -34:2009 (EQV))

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**EUROPEAN STANDARD** 

EN 61300-2-34

NORME EUROPÉENNE EUROPÄISCHE NORM

July 2009

ICS 33.180.20

Supersedes EN 61300-2-34:1997

English version

# Fibre optic interconnecting devices and passive components Basic test and measurement procedures Part 2-34: Tests -

### Resistance to solvents and contaminating fluids of interconnecting components and closures

(IEC 61300-2-34:2009)

Dispositifs d'interconnexion et composants passifs à fibres optiques -Procédures fondamentales d'essais et de mesures -Partie 2-34: Essais -Résistance des composants d'interconnexion et des boîtiers aux solvants et aux fluides contaminants (CEI 61300-2-34:2009) Lichtwellenleiter Verbindungselemente
und passive Bauteile Grundlegende Prüf- und Messverfahren Teil 2-34: Beständigkeit
von Verbindungsbauteilen
und Muffen gegen Lösemittel
und verschmutzende Flüssigkeiten
(IEC 61300-2-34:2009)

This European Standard was approved by CENELEC on 2009-06-01. 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 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

EN 61300-2-34:2009

### **Foreword**

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The text of document 86B/2826/FDIS, future edition 2 of IEC 61300-2-34, 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 61300-2-34 on 2009-06-01.

This European Standard supersedes EN 61300-2-34:1997.

The main changes from EN 61300-2-34:1997 are as follows: the procedure and severity have been reconsidered.

The following dates were fixed:

 latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement

(dop) 2010-03-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2010-06-01

Annex ZA has been added by CENELEC.

### **Endorsement notice**

The text of the International Standard IEC 61300-2-34:2009 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60068-2-74 NOTE Harmonized as EN 60068-2-74:1999 (not modified).

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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>	EN/HD	<u>Year</u>
IEC 61300-1	_ 1)	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 1: General and guidance	EN 61300-1	2003 2)

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

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

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### INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

# Part 2-34: Tests – Resistance to solvents and contaminating fluids of interconnecting components and closures

#### **FOREWORD**

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International Standard IEC 61300-2-34 has been prepared by subcommittee 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. The main changes from the previous edition are as follows: the procedure and severity have been reconsidered.

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

FDIS	Report on voting	
86B/2826/FDIS	86B/2851/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, 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.

A bilingual version of this publication may be issued at a later date.

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

## Part 2-34: Tests – Resistance to solvents and contaminating fluids of interconnecting components and closures

### 1 Scope

The purpose of this part of IEC 61300 is for testing fibre optic interconnecting components and closures. The object of this test is to define a standard test method to assess the effects of short term exposure to fluids and lubricants on fibre optic interconnecting components and closures.

#### 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

### 3 General description

This test method covers the effects of contaminating fluids on the properties of fibre optic interconnecting components and closures. Testing is performed by immersing specimens in a specified fluid for a specified period at a specified temperature. A separate specimen shall be used with each fluid. Properties are measured prior to and after exposure to the fluid.

**WARNING** – Intended users of this procedure are cautioned that tests of this nature may involve the use of certain hazardous material, operations and equipment. In particular, some of the fluids that may be used are flammable or may constitute health hazards, or both. Test temperatures should be at least 10 °C below the flashpoint of any fluid being used. Open flame heat sources should not be used with any organic solvents. Test personnel should consult the relevant material's safety data sheets when necessary.

### 4 Apparatus

### 4.1 Containers

A boro-silicate glass or stainless steel vessel of suitable volume for each test fluid shall be used. Vessels shall be of sufficient size and capacity to permit the specimen to be immersed until it is fully covered in the selected fluid without violating other physical constraints (e.g. minimum cable bend radius).

### 4.2 Fluids

Fluids used shall be in accordance with the relevant specification for the fluid.



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