

# SLOVENSKI STANDARD

## SIST EN 61300-3-10:2007

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Fibre optic interconnecting devices and passive components - Basic test and measurement procedures -- Part 3-10: Examinations and measurements - Gauge retention force (IEC 61300-3-10:2006)

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Lichtwellenleiter - Verbindungselemente und passive Bauteile - Grundlegende Prüf- und Messverfahren -- Teil 3-10: Untersuchungen und Messungen - Lehrenhaltekraft (IEC 61300-3-10:2006)

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Dispositifs d'interconnexion et composants passifs a fibres optiques - Méthodes fondamentales d'essais et de mesures -- Partie 3-10: Examens et mesures - Force de rétention du calibre (IEC 61300-3-10:2006)

Ta slovenski standard je istoveten z: EN 61300-3-10:2007

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English version

**Fibre optic interconnecting devices and passive components -  
Basic test and measurement procedures -  
Part 3-10: Examinations and measurements -  
Gauge retention force  
(IEC 61300-3-10:2006)**

Dispositifs d'interconnexion  
et composants passifs à fibres optiques -  
Méthodes fondamentales d'essais  
et de mesures -  
Partie 3-10: Examens et mesures -  
Force de rétention du calibre  
(CEI 61300-3-10:2006)

Lichtwellenleiter -  
Verbindungselemente  
und passive Bauteile -  
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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.

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**CENELEC**

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Foreword

The text of document 86B/2410/FDIS, future edition 2 of IEC 61300-3-10, 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 61300-3-10 on 2007-02-01.

This European Standard supersedes EN 61300-3-10:1997.

Specific technical changes from EN 61300-3-10:1997 include the use of tensiometer for the measurement as well as more detailed gauge characteristics.

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) | 2007-12-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn   | (dow) | 2010-02-01 |

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## Endorsement notice

The text of the International Standard IEC 61300-3-10:2006 was approved by CENELEC as a European Standard without any modification.

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**NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD**

**CEI  
IEC**

**61300-3-10**

Deuxième édition  
Second edition  
2006-12

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**Dispositifs d'interconnexion  
et composants passifs à fibres optiques –  
Méthodes fondamentales d'essais et de mesures –**

**Partie 3-10:**

**Examens et mesures –  
Force de rétention du calibre**

**Fibre optic interconnecting  
devices and passive components –  
Basic test and measurement procedures –**

**Part 3-10:**

**Examinations and measurements –  
Gauge retention force**

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

CODE PRIX  
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Pour prix, voir catalogue en vigueur  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC INTERCONNECTING DEVICES  
AND PASSIVE COMPONENTS –  
BASIC TEST AND MEASUREMENT PROCEDURES –****Part 3-10: Examinations and measurements –  
Gauge retention force**

## FOREWORD

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International Standard IEC 61300-3-10 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. It constitutes a technical revision. Specific technical changes from the previous edition include the use of tensiometer for the measurement as well as more detailed gauge characteristics.

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

FDIS	Report on voting
86B/2410/FDIS	86B/2449/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 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 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.

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

## **Part 3-10: Examinations and measurements – Gauge retention force**

### **1 Scope**

This part of IEC 61300 provides a method to ensure that the characteristics of resilient members, usually contained in optical connector sleeves, couplings or plugs, are satisfactory when it is impractical to specify them using size dimensions.

### **2 Normative references**

None.

### **3 General description**

A weighted gauge is used to determine the acceptable retention forces of the resilient member. The method is applicable to either male or female resilient members.

### **4 Apparatus**

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The apparatus shall consist of the following elements.

#### **4.1 Gauge**

A ring gauge is used for male features and a pin gauge is used for female features.

The gauge is generally produced to the maximum material size of the resilient feature. The gauge shall be defined in the detail specification. The definition shall include dimensions, material, the surface hardness and roughness for the area of the gauge in contact with the resilient member. For gauge pins and ring gauge also the cylindricity shall be specified.

#### **4.2 Solvent**

The solvent(s) shall be capable of removing all traces of lubricant from the bearing surfaces of the gauge and the resilient member. A solvent shall be selected which will not damage the gauge or the resilient material of the specimen.

It is recommended to choose solvents and cleaning agents in the observance of safety rules.

### **5 Procedure**

#### **5.1 Pre-condition the specimen as specified.**