

# SLOVENSKI STANDARD

## SIST EN IEC 61300-3-33:2022

01-maj-2022

Nadomešča:  
SIST EN 61300-3-33:2012

---

**Optični spojni elementi in pasivne komponente - Osnovni preskusni in merilni postopki - 3-33. del: Preverjanje in meritve - Sila za izvlečenje iz prožne poravnalne obojke z uporabo kalibrirnih trnov (IEC 61300-3-33:2022)**

Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-33: Examinations and measurements - Withdrawal force from a resilient alignment sleeve using pin gauges (IEC 61300-3-33:2022)

Lichtwellenleiter - Verbindungselemente und passive Bauteile - Grundlegende Prüf- und Messverfahren - Teil 3-33: Untersuchungen und Messungen - Ausziehungskraft aus einer verformbaren Zentrierhülse unter Verwendung von Stiftleeren (IEC 61300-3-33:2022)

Dispositifs d'interconnexion et composants passifs fibroniques - Procédures fondamentales d'essais et de mesures - Partie 3-33: Examens et mesurages - Force d'extraction d'un manchon d'alignement élastique, avec utilisation de calibres de broches (IEC 61300-3-33:2022)

**Ta slovenski standard je istoveten z: EN IEC 61300-3-33:2022**

---

**ICS:**

33.180.20	Povezovalne naprave za optična vlakna	Fibre optic interconnecting devices
-----------	---------------------------------------	-------------------------------------

**SIST EN IEC 61300-3-33:2022** en

**iTeh STANDARD  
PREVIEW  
(standards.iteh.ai)**

SIST EN IEC 61300-3-33:2022

<https://standards.iteh.ai/catalog/standards/sist/b75630bf-757e-4af9-8d88-b5beed6dcb52/sist-en-iec-61300-3-33-2022>

EUROPEAN STANDARD

EN IEC 61300-3-33

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2022

ICS 33.180.20

Supersedes EN 61300-3-33:2012 and all of its amendments and corrigenda (if any)

English Version

Fibre optic interconnecting devices and passive components -  
Basic test and measurement procedures - Part 3-33:  
Examinations and measurements - Withdrawal force from a  
resilient alignment sleeve using pin gauges  
(IEC 61300-3-33:2022)

Dispositifs d'interconnexion et composants passifs  
fibroniques - Procédures fondamentales d'essais et de  
mesures - Partie 3-33: Examens et mesures - Force  
d'extraction d'un manchon d'alignement élastique, avec  
utilisation de calibres de broches  
(IEC 61300-3-33:2022)

Lichtwellenleiter - Verbindungselemente und passive  
Bauteile - Grundlegende Prüf- und Messverfahren - Teil 3-  
33: Untersuchungen und Messungen - Ausziehkraft aus  
einer verformbaren Zentrierhülse unter Verwendung von  
Stiftleeren  
(IEC 61300-3-33:2022)

This European Standard was approved by CENELEC on 2022-03-04. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

**EN IEC 61300-3-33:2022 (E)****European foreword**

The text of document 86B/4559/FDIS, future edition 3 of IEC 61300-3-33, 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 IEC 61300-3-33:2022.

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) 2022-12-04
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-03-04

This document supersedes EN 61300-3-33:2012 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

**iteh STANDARD**  
**PREVIEW**  
**Endorsement notice**  
**(standards.iteh.ai)**

The text of the International Standard IEC 61300-3-33:2022 was approved by CENELEC as a European Standard without any modification.

<https://standards.iteh.ai/catalog/standards/sist/b75630bf-757e-4af9-8d88-b5beed6dcb52/sist-en-iec-61300-3-33-2022>

## Annex ZA (normative)

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

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<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 61754	series	Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces	EN 61754	series

SIST EN IEC 61300-3-33:2022

<https://standards.iteh.ai/catalog/standards/sist/b75630bf-757e-4af9-8d88-b5beed6dcb52/sist-en-iec-61300-3-33-2022>

**iTeh STANDARD  
PREVIEW  
(standards.iteh.ai)**

SIST EN IEC 61300-3-33:2022

<https://standards.iteh.ai/catalog/standards/sist/b75630bf-757e-4af9-8d88-b5beed6dcb52/sist-en-iec-61300-3-33-2022>



IEC 61300-3-33

Edition 3.0 2022-01

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

---

**iTeh STANDARD**

**Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –  
Part 3-33: Examinations and measurements – Withdrawal force from a resilient alignment sleeve using pin gauges**

**Dispositifs d'interconnexion et composants passifs fibroniques – Procédures fondamentales d'essais et de mesures –  
Partie 3-33: Examens et mesures – Force d'extraction d'un manchon d'alignement élastique, avec utilisation de calibres de broches**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

ICS 33.180.20

ISBN 978-2-8322-1073-9

**Warning! Make sure that you obtained this publication from an authorized distributor.  
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.**

## CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references .....	5
3 Terms and definitions .....	5
4 General description .....	5
5 Apparatus.....	6
5.1 General.....	6
5.2 Pin gauges.....	6
5.3 Stopper.....	7
5.4 Force generator .....	7
5.5 Force gauge .....	7
5.6 Flexible joints.....	7
6 Procedure.....	7
6.1 General.....	7
6.2 Preconditioning.....	7
6.3 Testing .....	8
7 Details to be specified and reported.....	8
Annex A (normative) Loading velocity.....	9
Annex B (informative) Round-robin test results of zirconia alignment sleeves .....	10
B.1 Test configuration.....	10
B.1.1 Specimen .....	10
B.1.2 Apparatus.....	10
B.2 Test results.....	11
Bibliography.....	12
Figure 1 – Example of test apparatus.....	6
Figure B.1 – Test apparatus.....	10
Figure B.2 – Round-robin test results.....	11
Table 1 – Minimum requirements of pin gauge.....	7
Table B.1 – Pin gauge specification .....	10

STANDARD  
PREVIEW  
(standards.iteh.ai)

SIST EN IEC 61300-3-33:2022  
<https://standards.iteh.ai/catalog/standards/sist/b75630bf-757e-4af9-8d88-b5beed6dcb52/sist-en-iec-61300-3-33-2022>



## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC INTERCONNECTING  
DEVICES AND PASSIVE COMPONENTS –  
BASIC TEST AND MEASUREMENT PROCEDURES –****Part 3-33: Examinations and measurements –  
Withdrawal force from a resilient alignment sleeve using pin gauges**

## FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 61300-3-33 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics. It is an International Standard.

This third edition cancels and replaces the second edition published in 2012. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) harmonize "gauge pin" to "pin gauge";
- b) update test apparatus in Figure 1;
- c) change of clause structure;
- d) specified pin gauge requirements in Table 1.

The text of this International Standard is based on the following documents:

Draft	Report on voting
86B/4559/FDIS	86B/4583/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

A list of all 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.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under [webstore.iec.ch](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

IEC STANDARD  
PREVIEW  
(standards.iteh.ai)

SIST EN IEC 61300-3-33:2022  
<https://standards.iteh.ai/catalog/standards/sist/b75630bf-757e-4af9-8d88-b5beed6dcb52/sist-en-iec-61300-3-33-2022>