

# **SLOVENSKI STANDARD**

## **SIST EN IEC 61300-2-43:2022**

**01-december-2022**

**Nadomešča:**

**SIST EN 61300-2-43:2014**

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**Optični spojni elementi in pasivne komponente - Osnovni preskusni in merilni postopki - 2-43. del: Preskusi - Presejalno preskušanje povratnih izgub za enorodovne optične konektorje PC (IEC 61300-2-43:2022)**

Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-43: Tests - Screen testing of return loss of single-mode PC optical fibre connectors (IEC 61300-2-43:2022)

Lichtwellenleiter - Verbindungselemente und passive Bauteile -Grundlegende Prüf- und Messverfahren - Teil 2-43: Prüfungen - Verfahren zur Sortierprüfung von Einmoden-PC-LWL-Steckverbindern in Abhängigkeit von der Rückflusdämpfung (IEC 61300-2-43:2022)

Dispositifs d'interconnexion et composants passifs à fibres optiques - Procédures fondamentales d'essais et de mesures - Partie 2-43: Essais - Sélection des connecteurs PC pour fibres optiques unimodales en fonction de leur affaiblissement de réflexion (IEC 61300-2-43:2022)

**Ta slovenski standard je istoveten z: EN IEC 61300-2-43:2022**

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**ICS:**

33.180.20	Povezovalne naprave za optična vlakna	Fibre optic interconnecting devices
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**SIST EN IEC 61300-2-43:2022**

**en**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

EN IEC 61300-2-43

October 2022

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Supersedes EN 61300-2-43:2014

English Version

Fibre optic interconnecting devices and passive components -  
Basic test and measurement procedures - Part 2-43: Tests -  
Screen testing of return loss of single-mode PC optical fibre  
connectors  
(IEC 61300-2-43:2022)

Dispositifs d'interconnexion et composants passifs  
fibroniques - Procédures fondamentales d'essais et de  
mesures - Partie 2-43: Essais - Sélection des connecteurs  
PC pour fibres optiques unimodales en fonction de leur  
affaiblissement de réflexion  
(IEC 61300-2-43:2022)

Lichtwellenleiter - Verbindungselemente und passive  
Bauteile - Grundlegende Prüf- und Messverfahren - Teil 2-  
43: Prüfungen - Verfahren zur Sortierprüfung von  
Einmoden-PC-LWL-Steckverbindern in Abhängigkeit von  
der Rückflusssdämpfung  
(IEC 61300-2-43:2022)

This European Standard was approved by CENELEC on 2022-10-06. 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.

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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 61300-2-43:2022 (E)****European foreword**

The text of document 86B/4628/FDIS, future edition 3 of IEC 61300-2-43, 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 61300-2-43:2022.

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) 2023-07-06
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-10-06

This document supersedes EN 61300-2-43:2014 and all of its amendments and corrigenda (if any).

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The text of the International Standard IEC 61300-2-43:2022 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61300-1 NOTE Harmonized as EN IEC 61300-1

IEC 61755-2-1 NOTE Harmonized as EN 61755-2-1

## 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 61300-3-6	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-6: Examinations and measurements - Return loss	EN 61300-3-6	-

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SIST EN IEC 61300-2-43:2022

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IEC 61300-2-43

Edition 3.0 2022-09

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –  
Part 2-43: Tests – Screen testing of return loss of single-mode PC optical fibre connectors**

**Dispositifs d'interconnexion et composants passifs fibroniques – Procédures fondamentales d'essais et de mesures –  
Partie 2-43: Essais – Sélection des connecteurs PC pour fibres optiques unimodales en fonction de leur affaiblissement de réflexion**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC INTERCONNECTING DEVICES  
AND PASSIVE COMPONENTS –  
BASIC TEST AND MEASUREMENT PROCEDURES –****Part 2-43: Tests – Screen testing of return loss of  
single-mode PC optical fibre connectors**

## FOREWORD

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IEC 61300-2-43 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 2014. This edition constitutes a technical revision.

This edition includes the following significant technical change with respect to the previous edition: addition of Clause 3 containing terms, definitions, and abbreviated terms.

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

Draft	Report on voting
86B/4628/FDIS	86B/4652/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.

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).

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.

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.

<https://standards.iteh.ai/catalog/standards/sist/9e9f7-2b15-485e-aa01-bcd72fe4f9b5/sist-en-iec-61300-2-43-2022>

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

## **Part 2-43: Tests – Screen testing of return loss of single-mode PC optical fibre connectors**

### **1 Scope**

This part of IEC 61300 aims at screening single-mode physical contact (PC) optical fibre connector plugs of an optical fibre patch cord or an optical fibre pigtail in terms of return loss, thus ensuring minimum return loss when the connector plugs are randomly mated with each other in the field. This document is intended to apply to cylindrical ferrule connector plugs.

### **2 Normative references**

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.

IEC 61300-3-6, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-6: Examinations and measurements – Return loss*

### **3 Terms, definitions, and abbreviated terms**

#### **3.1 Terms and definitions**

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databased for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

#### **3.2 Abbreviated terms**

BD	branching device
D	detector
DUT	device under test
PC	physical contact
PDL	polarization dependent loss
RSC	reflection standard cord
RSP	reflection standard plug
S	source
T	termination
TJ	temporary joint