SLOVENSKI STANDARD
SIST EN 61300-3-52:2014

01-junij-2014

Optični spojni elementi in pasivne komponente - Osnovni preskusni in merilni postopki - 3-52. del: Meritve - Vodilna luknja in konstanta deformacije poravnalnega trna, CD za pravokotno PC-tulko z 8-stopinjskim kotom, enorodna vlakna (IEC 61300-3-52:2014)

Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-52: Measurement - Guide hole and alignment pin deformation constant, CD for 8 degree angled PC rectangle ferrule, single mode fibres

Dispositifs d'interconnexion et composants passifs à fibres optiques - Méthodes fondamentales d'essais et de mesures - Partie 3-52: Mesure - Constante CD de déformation de l'alésage de guidage et de la broche d'alignement, pour férule rectangulaire PC avec angle de 8 degrés, fibres unimodales

Ta slovenski standard je istoveten z: **EN 61300-3-52:2014**

ICS:

33.180.20	Povezovalne naprave za optična vlakna	Fibre optic interconnecting devices

SIST EN 61300-3-52:2014 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61300-3-52

April 2014

ICS 33.180.20

English version

Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-52: Examinations and measurements - Guide hole and alignment pin deformation constant, CD for 8 degree angled PC rectangular ferrule, single mode fibres

(IEC 61300-3-52:2014)

Dispositifs d'interconnexion et composants passifs à fibres optiques - Procédures fondamentales d'essais et de mesures - Partie 3-52: Examens et mesures - Constante CD de déformation de l'alésage de guidage et de la broche d'alignement, pour férule rectangulaire PC avec angle de 8 degrés, fibres unimodales (CEI 61300-3-52:2014)

Lichtwellenleiter - Verbindungselemente und passive Bauteile - Grundlegende Prüf- und Messverfahren - Teil 3-52: Messung - Deformationskonstante CD der Führungsbohrung und des Führungsstifts einer 8° abgeschrägten Rechteckferrule mit physikalischem Kontakt für Einmodenfasern (IEC 61300-3-52:2014)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 86B/3704/FDIS, future edition 1 of IEC 61300-3-52, 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 61300-3-52:2014.

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)	2014-12-13
–	latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2017-03-13

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The text of the International Standard IEC 61300-3-52:2014 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 61754-7	NOTE	Harmonized as EN 61754-7.
IEC 61754-10	NOTE	Harmonized as EN 61754-10.

IEC 61300-3-52

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –
Part 3-52: Examinations and measurements – Guide hole and alignment pin deformation constant, CD for 8 degree angled PC rectangular ferrule, single mode fibres

Dispositifs d'interconnexion et composants passifs à fibres optiques – Procédures fondamentales d'essais et de mesures –
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FOREWORD

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International Standard IEC 61300-3-52 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

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

FDIS	Report on voting
86B/3704/FDIS	86B/3727/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 in the IEC 61300 series, published under the general title, *Fibre optic interconnecting 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 stability 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.

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

Part 3-52: Examinations and measurements – Guide hole and alignment pin deformation constant, C_D for 8 degree angled PC rectangular ferrule, single mode fibres

1 Scope

This part of IEC 61300 describes a procedure to measure guide hole and alignment pin deformation constant, C_D for 8 degree angled PC rectangular ferrule multi-fibre connectors.

2 General description

2.1 General

Alignment pin and ferrule deformation dependence on applied force at the pin edge can vary for different ferrule design attributes including material properties, internal geometry and surface roughness. The amount of deformation influences the amount of y-direction translation and therefore the nominal y-offset location of the fibre cores, Y_i.

Y_i is described by the next expression and shown in Figure 1:

$$Y_i = \alpha\,(ID-OD)/2 + C_D$$

where

α is the coefficient that depends on the difference between guide hole pitches for mated plugs;

ID is the inside diameter of the guide hole;

OD is the outside diameter of the alignment pin;

C_D is the alignment pin and guide hole deformation constant for an applied force of 0,7 N to each hole corresponding to the nominal mating force value of 9,8 N.

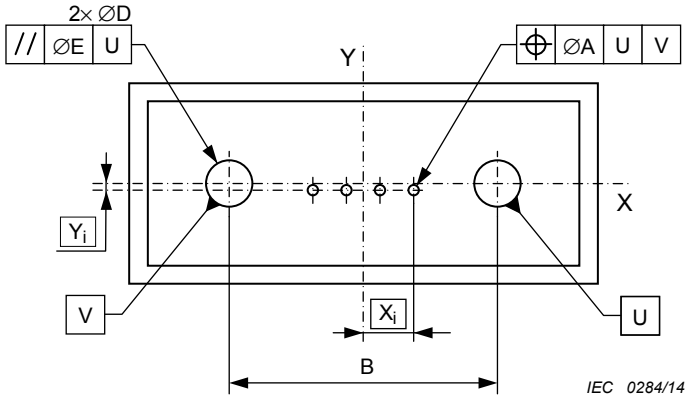

Figure 1 – Y_i and C_D definitions