SLOVENSKI STANDARD

SIST EN 61300-3-16:2004

september 2004

Povezovalne naprave in pasivne komponente optičnih vlaken – Postopki osnovnega preskušanja in merjenja – 3-16. del: Preiskovanje in meritve; radij končne ploskve sferično poliranega čepa (IEC 61300-3-16:2003)*

Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-16: Examinations and measurements - Endface radius of spherically polished ferrules (IEC 61300-3-16:2003)

ICS 33.180.20

Referenčna številka
SIST EN 61300-3-16:2004(en)

EUROPEAN STANDARD **EN 61300-3-16**

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ICS 33.180.20 Supersedes EN 61300-3-16:1997

English version

Fibre optic interconnecting devices and passive components - Basic test and measurement procedures Part 3-16: Examinations and measurements - Endface radius of spherically polished ferrules

(IEC 61300-3-16:2003)

Dispositifs d'interconnexion et composants passifs à fibres optiques - Méthodes fondamentales d'essais et de mesures Partie 3-16: Examens et mesures - Rayon de la face terminale des embouts polis sphériquement (CEI 61300-3-16:2003)

Lichtwellenleiter-Verbindungselemente und passive Bauteile - Grundlegende Prüf- und Messverfahren Teil 3-16: Untersuchungen und Messungen - Endflächenradius sphärisch polierter Stifte (IEC 61300-3-16:2003)

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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

Ref. No. EN 61300-3-16:2003 E

Foreword

The text of document 86B/1746/FDIS, future edition 2 of IEC 61300-3-16, 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 61300-3-16 on 2002-12-01.

This European Standard supersedes EN 61300-3-16:1997.

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)	2003-10-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2005-12-01

Endorsement notice

The text of the International Standard IEC 61300-3-16:2003 was approved by CENELEC as a European Standard without any modification.

NORME INTERNATIONALE

INTERNATIONAL STANDARD

CEI
IEC
61300-3-16

Deuxième édition
Second edition
2003-01

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

Partie 3-16: Examens et mesures – Rayon de la face terminale des ferrules polies sphériquement

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

Part 3-16: Examinations and measurements – Endface radius of spherically polished ferrules

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CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 3-16: Examinations and measurements – Endface radius of spherically polished ferrules

FOREWORD

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International Standard IEC 61300-3-16 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

This second edition of IEC 61300-3-16 cancels and replaces the first edition published in 1995. It constitutes a technical revision.

This bilingual version (2004-01) replaces the English version.

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

FDIS	Report on voting
86B/1746/FDIS	86B/1772/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.

IEC 61300 consists of the following parts, under the general title *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures:*

– Part 1: General and guidance

– Part 2: Tests

– Part 3: Examinations and measurements

The committee has decided that the contents of this publication will remain unchanged until 2007. At this date, the publication will be

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

The French version of this standard has not been voted upon.

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

Part 3-16: Examinations and measurements – Endface radius of spherically polished ferrules

1 Scope

This part of IEC 61300 describes a procedure to measure the endface radius of a spherically polished ferrule and angled ferrule or an angled spherically polished ferrule.

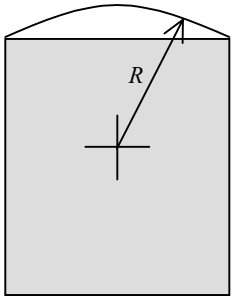
2 Normative references

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.

None.

3 General description

The ferrule endface radius R is defined as the radius of curvature of the portion of the endface which is domed for physical contact. It is assumed that the endface is spherical, although in practice the endface is often aspherical (see Figure 1).



IEC 2657/02

Figure 1 – Radius of curvature of the endface

Three methods are described in this standard for measuring the radius of curvature:

a) method 1: analyzing the endface with a two-dimensional surface analyzer;

b) method 2: analyzing the endface with a two-dimensional interferometry type surface analyzer;

c) method 3: analyzing the endface with a three dimensional interferometry type surface analyzer.

(Method 3 is a reference method.)