IEC 61300-2-5

Edition 3.0 2009-01

INTERNATIONAL STANDARD

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Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-5: Tests – Torsion

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PRICE CODE J

ICS 33.180.20

ISBN 2-8318-1022-9

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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Part 2-5: Tests – Torsion

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International Standard IEC 61300-2-5 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

This third edition cancels and replaces the second edition, published in 2002 and constitutes a technical revision. Specific technical changes from the previous edition are as follows:

– the title was changed;
– the procedure was reconsidered;
– the figure of closure test set-up was added;
– the severity of the test was reconsidered according to the component.

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

FDIS	Report on voting
86B/2774/FDIS	86B/2806/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 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- withdrawn,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.

A bilingual version of this publication may be issued at a later date.

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

Part 2-5: Tests – Torsion

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1 Scope

The purpose of this part of IEC 61300 is to determine the ability of the cable attachment element of the device under test to withstand torsional loads, while under tension, as might be experienced during installation and normal service. The scope of the test also includes those elements designed for ribbon cables.

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.

IEC 61300-1, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 1: General guidance*

IEC 61300-3-1, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-1: Examinations and measurements – Visual examination*

IEC 61300-3-3, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-3: Examinations and measurements – Active monitoring of changes in attenuation and return loss*

IEC 61300-3-4, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-4: Examinations and measurements – Attenuation*

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 General description

The cable-to-device interface, while under a specified tension, is subjected to a torsional load or twisting action to determine the effects of this action on the physical and optical properties of the device.

4 Apparatus

4.1 General

The test apparatus shall be capable of applying simultaneously both tension and a torsional load or twisting action to the cable-to-device interface. Figures 1 and 2 show the basic parts of a test apparatus for component and closure test set-ups, respectively.