IEC 60512-15-2

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Connectors for electronic equipment – Tests and measurements – Part 15-2: Connector tests (mechanical) – Test 15b: Insert retention in housing (axial)

Connecteurs pour équipements électroniques – Essais et mesures – Partie 15-2: Essais (mécaniques) des connecteurs – Essai 15b: Rétention de l'isolant dans le boîtier (axial)

IEC 60512-15-2:2008

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CONNECTORS FOR ELECTRONIC EQUIPMENT – TESTS AND MEASUREMENTS –

Part 15-2: Connector tests (mechanical) – Test 15b: Insert retention in housing (axial)

FOREWORD

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International Standard IEC 60512-15-2 has been prepared by subcommittee 48B: Connectors, of IEC technical committee 48: Electromechanical components and mechanical structures for electronic equipment.

This standard cancels and replaces test 15b of IEC 60512-8, issued in 1993. This standard is to be read in conjunction with IEC 60512-1 and IEC 60512-1-100 which explains the structure of the IEC 60512 series.

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

FDIS	Report on voting
48B/1844/FDIS	48B/1896/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 the IEC 60512 series, under the general title *Connectors for electronic equipment – Tests and measurements*, 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- withdrawn;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.

CONNECTORS FOR ELECTRONIC EQUIPMENT – TESTS AND MEASUREMENTS –

Part 15-2: Connector tests (mechanical) – Test 15b: Insert retention in housing (axial)

1 Scope and object

This part of IEC 60512, when required by the detail specification, is used for testing connectors within the scope of technical committee 48. It may also be used for similar devices when specified in a detail specification.

The object of this document is to detail a standard test method to assess the effectiveness of the insert retaining system to withstand axial loads likely to be encountered during normal use.

NOTE The test method detailed in this document is a companion to the one detailed in IEC 60512-15-3 (see bibliographic reference).

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 60512-1-1*, Connectors for electronic equipment – Tests and measurements – Part 1-1: General examination – Test 1a: Visual examination*

3 Preparations

3.1 Preparation of specimen

The specimen shall consist of a connector with its terminations, and may be wired if so specified in the detail specification. Cable fittings and accessories shall not be fitted. Any preconditioning given in the detail specification shall be applied.

3.2 Equipment

For the application of the axial loads, a suitable device able to provide the controls on the loads (intensity, rate of increase, time of constant load application) shall be required (e.g.: a universal materials testing machine).

In the case of the axial loads being applied by air or gas pressure, a chamber to contain connectors that may be ejected in case of retention failure shall be provided. If hydraulic pressure is used, such a chamber may not be necessary. However compatibility between materials contained within the specimen and such fluids must be ensured.

NOTE 1 Where air pressure is used, there is a possibility that contacts, inserts or other objects being ejected at high velocity.

NOTE 2 If the detail specification requires special preconditioning of the specimen, all the necessary equipment detailed in the relevant documents describing such conditioning would also be required.