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INTERNATIONAL STANDARD

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Connectors for electronic equipment – Tests and measurements – Part 7-2: Impact tests (free connectors) – Test 7b: Mechanical strength impact

Connecteurs pour équipements électroniques – Essais et mesures – Partie 7-2: Essais d'impact (fiches) – Essai 7b: Résistance mécanique aux chocs



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IEC Central Office
3, rue de Varembé
CH-1211 Geneva 20
Switzerland
Email: inmail@iec.ch
Web: www.iec.ch

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CONNECTORS FOR ELECTRONIC EQUIPMENT – TESTS AND MEASUREMENTS –

Part 7-2: Impact tests (free connectors) – Test 7b: Mechanical strength impact

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International Standard IEC 60512-7-2 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 7b of IEC 60512-5, issued in 1992. The structure of the test documents in the IEC 60512 series is explained in IEC 60512-1-100.

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

FDIS	Report on voting
48B/2258/FDIS	48B/2269/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 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 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

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CONNECTORS FOR ELECTRONIC EQUIPMENT – TESTS AND MEASUREMENTS –

Part 7-2: Impact tests (free connectors) – Test 7b: Mechanical strength impact

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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 standard is to detail a standard test method to assess the ability of a free connector on the end of a cable or wire bundle to withstand impacts it could receive when dropped onto a hard surface.

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 Preparation

3.1 Preparation of the specimen

The specimen shall consist of a free connector or a similar component with its accessories fitted in the normal manner and wired as used in the normal application.

The specimen shall be prepared in accordance with the detail specification.

Unless otherwise specified, the specimen shall be pre-conditioned at a temperature between 15 °C and 35 °C and a RH between 25 % and 75 % RH during 48 h.

If the component is normally provided for use with different types of cables, the thinnest and/or most flexible type shall be used. The length of the cable or wire bundle shall allow the rear of the specimen to be (2 250 ± 10) mm from the point of attachment.

3.2 Equipment

A steel plate 300 mm × 500 mm of 25 mm thickness shall be positioned so that the component under test will fall onto it.

3.3 Mounting

The specimen shall be attached in an appropriate manner at a distance of (2 250 ± 10) mm from the rear of the component so that the specimen may swing freely from a horizontal to a vertical position as shown in Figure 1.