

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Connectors for electronic equipment – Tests and measurements –  
Part 16-4: Mechanical tests on contacts and terminations – Test 16d: Tensile  
strength (crimped connections)**

**Connecteurs pour équipements électroniques – Essais et mesures –  
Partie 16-4: Essais mécaniques des contacts et des sorties – Essai 16d:  
Résistance à la traction (connexions serties)**



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CONNECTORS FOR ELECTRONIC EQUIPMENT –  
TESTS AND MEASUREMENTS –****Part 16-4: Mechanical tests on contacts and terminations –  
Test 16d: Tensile strength (crimped connections)**

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International Standard IEC 60512-16-4 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 16d 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/1879/FDIS	48B/1912/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

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## CONNECTORS FOR ELECTRONIC EQUIPMENT – TESTS AND MEASUREMENTS –

### Part 16-4: Mechanical tests on contacts and terminations – Test 16d: Tensile strength (crimped connections)

#### 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 part of IEC 60512 is to detail a standard test method to determine the tensile strength of a crimped connection.

#### 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 contact or terminal crimped to a conductor. This shall be done in accordance with the relevant detail specification and tooling specifications given therein. If the specimen has a cable insulation support or any other clamping device not part of the conductor crimp, this shall be rendered inoperative such that it has no influence on the test.

Any preconditioning required by the detail specification shall be applied.

NOTE It may be convenient to crimp a specimen to each end of a conductor; if this is done such a specimen shall be considered as one specimen.

##### 3.2 Equipment

A tensile testing machine with relevant fixtures able to comply with the test procedure herein detailed shall be required.

##### 3.3 Mounting

If mounting of the specimen is appropriate, it shall be as specified in the detail specification.

The specimen shall be fixed in the jaws of a tensile testing machine such that the crimp barrel of the specimen is not damaged or otherwise affected by the jaws.

The fixing of the specimen shall be such that the tensile load is applied axially to the crimped connection under test.