



BSI Standards Publication

# Connectors for electronic equipment — Tests and measurements

Part 17-3: Cable clamping tests — Test 17c:  
Cable clamp resistance to cable pull (tensile)

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### National foreword

This British Standard is the UK implementation of EN 60512-17-3:2010. It is identical to IEC 60512-17-3:2010. This standard supersedes Test 17c from BS 5772-9:1993, IEC 60512-9:1992, which will remain current until all the tests it contains have been revised.

The UK participation in its preparation was entrusted to Technical Committee EPL/48, Electromechanical components and mechanical structures for electronic equipment.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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### Amendments issued since publication

Date	Text affected
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EUROPEAN STANDARD  
 NORME EUROPÉENNE  
 EUROPÄISCHE NORM

**EN 60512-17-3**

September 2010

ICS 31.220.01

English version

**Connectors for electronic equipment -  
 Tests and measurements -  
 Part 17-3: Cable clamping tests -  
 Test 17c: Cable clamp resistance to cable pull (tensile)  
 (IEC 60512-17-3:2010)**

Connecteurs pour équipements  
 électroniques - Essais et mesures -  
 Partie 17-3: Essais de maintien  
 des câbles -  
 Essai 17c: Résistance de la pince  
 de maintien des câbles au tirage  
 (CEI 60512-17-3:2010)

Steckverbinder für elektronische  
 Einrichtungen - Mess- und Prüfverfahren -  
 Teil 17-3: Prüfungen der Kabelabfangung -  
 Prüfung 17c: Widerstandsfähigkeit  
 der Kabelabfangung gegen axialen Zug  
 (IEC 60512-17-3:2010)

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 Comité Européen de Normalisation Electrotechnique  
 Europäisches Komitee für Elektrotechnische Normung

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## Foreword

The text of document 48B/2156/FDIS, future edition 1 of IEC 60512-17-3, prepared by SC 48B, Connectors, of IEC TC 48, Electromechanical components and mechanical structures for electronic equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60512-17-3 on 2010-09-01

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

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) 2011-06-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2013-09-01

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 60512-17-3:2010 was approved by CENELEC as a European Standard without any modification.

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## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60512-1-1	-	Connectors for electronic equipment - Tests and measurements - Part 1-1: General examination - Test 1a: Visual examination	EN 60512-1-1	-

## CONNECTORS FOR ELECTRONIC EQUIPMENT – TESTS AND MEASUREMENTS –

### Part 17-3: Cable clamping tests – Test 17c: Cable clamp resistance to cable pull (tensile)

#### 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 cable-clamping device to prevent longitudinal movement of the cable/wire bundle.

#### 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 of the specimen

The specimen shall consist of the specified cable/wire bundle fitted in the normal manner to its associated component or sub-assembly by means of the cable-clamping device.

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

#### 4 Test method

This test shall be done by means of a suitable device to measure and control the forces, e.g. a universal materials testing machine.

With the specimen rigidly mounted in such an attitude that the cable/wire bundle is in a vertical position, a specified tensile force shall be applied axially to the free end of the cable/wire bundle. This force shall be increased gradually at a rate not exceeding 20 N/s until the specified value is reached. The maximum value shall be maintained for 1 min, unless otherwise specified in the detail specification.

#### 5 Final measurements

The specimen shall be examined visually in accordance with IEC 60512-1-1, test 1a at the junction of the cable/wire bundle and the clamping device and at the junction of the clamping device and the component or sub-assembly.

## 6 Requirements

There shall be no damage such as would impair operation and the cable/wire bundle shall be displaced by not more than the amount specified in the detail specification.

## 7 Details to be specified

When this test is required by the detail specification, the following details shall be specified:

- a) preparation of the specimen and type of cable/wire bundle to be used;
  - b) mounting of the specimen;
  - c) force to be applied;
  - d) requirements for final measurements, e.g. maximum displacement of the cable/wire bundle;
  - e) any deviation from the standard test method.
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