

Connectors for electronic equipment - Tests and measurements - Part 9-4: Endurance tests - Test 9d: Durability of contact retention system and seals (maintenance, ageing)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60512-9-4:2011 sisaldab Euroopa standardi EN 60512-9-4:2011 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 30.06.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 10.06.2011.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 60512-9-4:2011 consists of the English text of the European standard EN 60512-9-4:2011.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.06.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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**Connectors for electronic equipment -
Tests and measurements -
Part 9-4: Endurance tests -
Test 9d: Durability of contact retention system and seals (maintenance,
ageing)
(IEC 60512-9-4:2011)**

Connecteurs pour équipements
électroniques – Essais et mesures –
Partie 9-4: Essais d'endurance – Essai 9d:
Durabilité du système de rétention des
contacts et des joints d'étanchéité
(entretien, vieillissement)
(CEI 60512-9-4:2011)

Steckverbinder für elektronische
Einrichtungen -
Mess- und Prüfverfahren -
Teil 9-4: Dauerprüfungen -
Prüfung 9d: Dauerhaftigkeit von
Kontakthalterung und Dichtungen
(Alterung infolge Wartung)
(IEC 60512-9-4:2011)

This European Standard was approved by CENELEC on 2011-05-12. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

The text of document 48B/2123/CDV, future edition 1 of IEC 60512-9-4, 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 60512-9-4 on 2011-05-12.

This standard is to be read in conjunction with EN 60512-1 and EN 60512-1-100, which explains the structure of the EN 60512 series.

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) 2012-02-12
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2014-05-12

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60512-9-4:2011 was approved by CENELEC as a European Standard without any modification.

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	-	Connectors for electronic equipment - Tests and measurements - Part 1: General	EN 60512-1	-
IEC 60512-1-1	-	Connectors for electronic equipment - Tests and measurements - Part 1-1: General examination - Test 1a: Visual examination	EN 60512-1-1	-
IEC 60512-1-100	-	Connectors for electronic equipment - Tests and measurements - Part 1-100: General - Applicable publications	EN 60512-1-100	-
IEC 60512-15-1	-	Connectors for electronic equipment - Tests and measurements - Part 15-1: Connector tests (mechanical) - Test 15a: Contact retention in insert	EN 60512-15-1	-
IEC 60512-15-4	-	Connectors for electronic equipment - Tests and measurements - Part 15-4: Connector tests (mechanical) - Test 15d: Contact insertion, release and extraction force	EN 60512-15-4	-

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CONNECTORS FOR ELECTRONIC EQUIPMENT – TESTS AND MEASUREMENTS –

Part 9-4: Endurance tests – Test 9d: Durability of contact retention system and seals (maintenance, ageing)

1 Scope and object

This part of IEC 60512, when required by the detail specification, is used for testing connectors within the scope of IEC 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 connector to withstand stresses caused by repeated extraction and insertion of contacts during maintenance.

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, *Connectors for electronic equipment – Tests and measurements – Part 1: General*

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

IEC 60512-1-100, *Connectors for electronic equipment – Tests and measurements – Part 1-100: General – Applicable publications*

IEC 60512-15-1, *Connectors for electronic equipment – Tests and measurements – Part 15-1: Connector tests (mechanical) – Test 15a: Contact retention in insert*

IEC 60512-15-4, *Connectors for electronic equipment – Tests and measurements – Part 15-4: Connector tests (mechanical) – Test 15d: Contact insertion, release and extraction force*

3 Details of test equipment

The test equipment shall consist of insertion and extraction tools as specified in the detail specification.

4 Preparation of the specimen

The specimen shall consist of a component with all contacts installed and wired according to the detail specification.

Loosen or remove any accessories to permit extraction and insertion of contacts. The accessories shall remain loose or be removed during the test.