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**Electromechanical components for electronic equipment - Basic testing procedure and measuring methods - Part 19: Chemical resistance tests - Section 3: Tests 19c - Fluid resistance (IEC 60512-19-3:1997)**

Electromechanical components for electronic equipment - Basic testing procedures and measuring methods -- Part 19: Chemical resistance tests -- Section 3: Test 19c - Fluid resistance

Elektrisch-mechanische Bauelemente für elektronische Einrichtungen - Meß- und Prüfverfahren -- Teil 19: Prüfungen der Widerstandsfähigkeit gegen Chemikalien -- Hauptaschnitt 3: Prüfung 19c - Beständigkeit gegen Flüssigkeiten

[SIST EN 60512-19-3:2002](https://standards.iteh.ai/catalog/standards/sist/f8416140-11fb-42fe-b084-2002-01-01/sist-en-60512-19-3-2002)

Composants électromécaniques pour équipements électroniques - Procédures d'essai de base et méthodes de mesure -- Partie 19: Essais de résistance chimique -- Section 3: Essai 19c - Résistance aux fluides

**Ta slovenski standard je istoveten z: EN 60512-19-3:1997**

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**ICS:**

31.220.01	Elektromehanske komponente (sestavni deli, gradniki) na splošno	Electromechanical components in general
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**SIST EN 60512-19-3:2002****en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60512-19-3**

October 1997

ICS 31.220.01

English version

**Electromechanical components for electronic equipment**  
**Basic testing procedures and measuring methods**  
**Part 19: Chemical resistance tests**  
**Section 3: Test 19c - Fluid resistance**  
(IEC 60512-19-3:1997)

Composants électromécaniques pour  
équipements électroniques - Procédures  
d'essai de base et méthodes de mesure  
Partie 19: Essais de résistance chimique  
Section 3: Essai 19c - Résistance aux  
fluides  
(CEI 60512-19-3:1997)

Elektrisch-mechanische Bauelemente  
für elektronische Einrichtungen  
Meß- und Prüfverfahren  
Teil 19: Prüfungen der  
Widerstandsfähigkeit gegen Chemikalien  
Hauptschnitt 3: Prüfung 19c -  
Beständigkeit gegen Flüssigkeiten  
(IEC 60512-19-3:1997)

SIST EN 60512-19-3:2002

<https://standards.iteh.ai/catalog/standards/sist/f8416140-11fb-42fe-b084-62b64c84df6d/sist-en-60512-19-3-2002>

This European Standard was approved by CENELEC on 1997-10-01. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

**CENELEC**

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

### Foreword

The text of document 48B/592/FDIS, future edition 1 of IEC 60512-19-3, 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 60512-19-3 on 1997-10-01.

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) 1998-07-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1998-07-01

Annexes designated "normative" are part of the body of the standard.  
Annexes designated "informative" are given for information only.  
In this standard, annex ZA is normative and annex A is informative.  
Annex ZA has been added by CENELEC.

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### iTeh STANDARD PREVIEW

Endorsement notice

The text of the International Standard IEC 60512-19-3:1997 was approved by CENELEC as a European Standard without any modification.

[SIST EN 60512-19-3:2002](https://standards.iteh.ai/catalog/standards/sist/f8416140-11fb-42fe-b084-62b64c84dfad/sist-en-60512-19-3-2002)

<https://standards.iteh.ai/catalog/standards/sist/f8416140-11fb-42fe-b084-62b64c84dfad/sist-en-60512-19-3-2002>

**Annex ZA (normative)****Normative references to international publications  
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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 60512-2	1985	Electromechanical components for electronic equipment - Basic testing procedures and measuring methods Part 2: General examination, electrical continuity and contact resistance tests, insulation tests and voltage stress tests	-	-
A1	1994		-	-

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**60512-19-3**

Première édition  
First edition  
1997-07

**Composants électromécaniques pour  
équipements électroniques –  
Procédures d'essai de base et  
méthodes de mesure –**

**Partie 19:  
Essais de résistance chimique –  
Section 3: Essai 19c – Résistance aux fluides**

[SIST EN 60512-19-3:2002](https://standards.iteh.ai/catalog/standards/sist/f8416140-11fb-42fe-b084-0207034ca35a/60512-19-3:2002)

[https://standards.iteh.ai/catalog/standards/sist/f8416140-11fb-42fe-b084-](https://standards.iteh.ai/catalog/standards/sist/f8416140-11fb-42fe-b084-0207034ca35a/60512-19-3:2002)

**Electromechanical components for  
electronic equipment –  
Basic testing procedures and  
measuring methods –**

**Part 19:  
Chemical resistance tests –  
Section 3: Test 19c – Fluid resistance**

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International Electrotechnical Commission  
Telefax: +41 22 919 0300

3, rue de Varembe Geneva, Switzerland  
e-mail: [inmail@iec.ch](mailto:inmail@iec.ch) IEC web site <http://www.iec.ch>



Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

CODE PRIX  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTROMECHANICAL COMPONENTS FOR  
 ELECTRONIC EQUIPMENT –  
 BASIC TESTING PROCEDURES AND MEASURING METHODS –**

**Part 19: Chemical resistance tests –  
 Section 3: Test 19c – Fluid resistance**

## FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
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- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60512-19-3 has been prepared by IEC subcommittee 48B: Connectors, of IEC technical committee 48: Electromechanical components and mechanical structures for electronic equipment.

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

FDIS	Report on voting
48B/592/FDIS	48B/637/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.

Annex A is for information only.



# ELECTROMECHANICAL COMPONENTS FOR ELECTRONIC EQUIPMENT – BASIC TESTING PROCEDURES AND MEASURING METHODS –

## Part 19: Chemical resistance tests – Section 3: Test 19c – Fluid resistance

### 1 Scope and object

This section of IEC 60512-19, when required by the detail specification, is used for testing electromechanical components within the scope of IEC technical committee 48. This test may also be used for similar components when specified in a detail specification.

The object of this test is to define a standard test method to assess the effects of accidental exposure to fluids and lubricants on electrical connecting devices.

### 2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this section of IEC 60512-19. At the time of publication, the edition indicated was valid. All normative documents are subject to revision, and parties to agreements based on this section of IEC 60512-19 are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60512-2:1985, *Electromechanical components for electronic equipment; basic testing procedures and measuring methods – Part 2: General examination, electrical continuity and contact resistance tests, insulation tests and voltage stress tests*  
Amendment 1 (1994)

### 3 Preparation of the specimen

The specimen shall be fitted with the normal accessories and wired in accordance with the detail specification. The cavities behind unwired contacts shall be fitted with filler plugs.

### 4 Test method

#### 4.1 Initial measurements (if applicable)

The initial measurements shall be carried out in accordance with the detail specification.

#### 4.2 Conditioning

Each specimen shall be subjected to only one of the fluids indicated in the detail specification.

If the test is carried out at a temperature exceeding the fluid's flash-point, appropriate safety measures shall be taken.