



SLOVENSKI STANDARD
SIST EN 60512-1-100:2002
01-september-2002

**Connectors for electronic equipment - Tests and measurement - Part 1-100:
General - Applicable publications (IEC 60512-1-100:2001)**

Connectors for electronic equipment - Tests and measurements -- Part 1-100: General - Applicable publications

Steckverbinder für elektronische Einrichtungen - Mess- und Prüfverfahren -- Teil 1-100: Allgemeines - Zutreffende Publikationen

Connecteurs pour équipements électroniques - Essais et mesures -- Partie 1-100: Généralités - Publications applicables

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Ta slovenski standard je istoveten z: EN 60512-1-100:2001

ICS:

31.220.10 Xcã ã Ácã } ãVÁ [] ^ d !ã Plug-and-socket devices.
Connectors

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EUROPEAN STANDARD

EN 60512-1-100

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2001

ICS 31.220

Partly supersedes EN 60512-1:1994

English version

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Tests and measurements
Part 1-100: General - Applicable publications
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Connecteurs pour équipements
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This European Standard was approved by CENELEC on 2001-03-01. 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, Czech Republic, 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/974/FDIS, future edition 1 of IEC 60512-1-100, 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 60512-1-100 on 2001-03-01.

This European Standard supersedes annex A of EN 60512-1:1994.

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) 2001-12-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2004-03-01

Endorsement notice

The text of the International Standard IEC 60512-1-100:2001 was approved by CENELEC as a European Standard without any modification.

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Test No.	Test name	Applicable part of IEC 60512	Former test of IEC 60512 to be deleted
–	General	-1	Part 1
	Applicable publications	-1-100	
	<i>Part 1: General examination</i>		
1a	Visual examination	-1-1*	-2 test 1a
1b	Examination of dimension and mass	-1-2*	-2 test 1b
1c	Functional operation (switches)	To be withdrawn	Amendment 1
1c	Electrical engagement length	-1-3	-2 test 1c
1d	Contact protection effectiveness (scoop-proof)	-1-4	-2 test 1d
	<i>Part 2: Electrical continuity and contact resistance tests</i>		
2a	Contact resistance – Millivolt level method	-2-1*	-2 test 2a
2b	Contact resistance – Specified test current method	-2-2*	-2 test 2b
2c	Contact resistance variation	-2-3*	-2 test 2c
2d	(Vacant)		
2e	Contact disturbance	-2-5*	-2 test 2e
2f	Housing (shell) electrical continuity	-2-6*	-2 test 2f
2g	(Vacant)		
2h	Resistance (earthing) from actuator to mounting bush	To be withdrawn	-2 test 2h
	<i>Part 3: Insulation tests</i>		
3a	Insulation resistance	-3-1*	-2 test 3a
	<i>Part 4: Voltage stress tests</i>		
4a	Voltage proof	-4-1*	-2 test 4a
4b	Partial discharge	-4-2*	-2 test 4b
4c	Voltage proof of pre-insulated crimp barrels	-4-3*	-2 test 4c

* In preparation.

Test No.	Test name	Applicable part of IEC 60512	Former test of IEC 60512 to be deleted
<i>Part 5: Current-carrying capacity tests</i>			
5a	Temperature rise	-5-1*	-3 test 5a
5b	Current-temperature derating	-5-2*	-3 test 5b
<i>Part 6: Dynamic stress tests</i>			
6a	Acceleration, steady-state	-6-1*	-4 test 6a
6b	Bump	-6-2*	-4 test 6b
6c	Shock	-6-3*	-4 test 6c
6d	Vibration (sinusoidal)	-6-4*	-4 test 6d
6e	Random vibration	-6-5	
<i>Part 7: Impact tests (free components)</i>			
7a	Free fall (repeated)	-5	
7b	Mechanical strength impact	-5	
<i>Part 8: Static load tests (fixed components)</i>			
8a	Static load, transverse	-5	
8b	Static load, axial	-5	
8c	Robustness of actuating lever	-5	
<i>Part 9: Endurance tests</i>			
9a	Mechanical operation	-5	
9b	Electrical load and temperature	-5	
9c	Mechanical operation with electrical load	-5	
9d	Durability of contact retention system and seals	-5	
9e	Current loading, cyclic	-5	
<i>Part 10: Overload tests</i>			
10a	Electrical overload (switches)	-5	
10b	Switching capacitive loads	-5	
10c	(Vacant)		
10d	Electrical overload, connectors	-10-4	-5 test 10d

* In preparation.

Test No.	Test name	Applicable part of IEC 60512	Former test of IEC 60512 to be deleted
<i>Part 11: Climatic tests</i>			
11a	Climatic sequence	-11-1	-6 test 11a
11b	Combined/sequential cold, low air pressure and damp heat	-11-2*	-6 test 11b
11c	Damp heat, steady state	-11-3*	-6 test 11c
11d	Rapid change of temperature	-11-4*	-6 test 11d
11e	Mould growth	-11-5*	-6 test 11e
11f	Corrosion, salt mist	-11-6*	-6 test 11f
11g	Flowing mixed gas corrosion test	-11-7	
11h	Sand and dust	-11-8	
11i	Dry heat	-11-9*	-6 test 11i
11j	Cold	-11-10*	-6 test 11j
11k	Low air pressure	-11-11*	-6 test 11k
11l	(Not to be used)		
11m	Damp heat, cyclic	-11-12*	-6 test 11m
11n	Gas tightness, solderless wrapped connections	-11-13*	-6 test 11n
11o	(Not to be used)		
11p	Flowing single gas corrosion test	-11-14	
<p style="text-align: center;"> https://standards.iteh.ai/catalog/standards/sist/7d514f5d-daf9-4c56-bb96-f5831277dbe/sist-en-60512-1-100-2002 The STANDARD PREVIEW (standards.iteh.ai) </p>			
<i>Part 12: Soldering tests</i>			
12a	Solderability, wetting, solder bath method	-6	
12b	Solderability, wetting, iron method	-6	
12c	Solderability, dewetting	-6	
12d	Resistance to soldering heat, solder bath method	-6	
12e	Resistance to soldering heat, iron method	-6	
12f	Sealing against flux and cleaning solvents in machine soldering	-12-6	
12g	Solderability, wetting balance method	-12-7	
<i>Part 13: Mechanical operating tests</i>			
13a	Engaging and separating forces	-13-1	-7 test 13a
13b	Insertion and withdrawal forces	-7	
13c	Operating force (switches)	-7	
13d	Operating torque (switches)	-7	
13e	Polarizing method	-7	
* In preparation			

Test No.	Test name	Applicable part of IEC 60512	Former test of IEC 60512 to be deleted
<i>Part 14: Sealing tests</i>			
14a	(Vacant)		
14b	Sealing (fine air leakage)	-7	
14c	(Vacant)		
14d	Immersion, waterproof	-7	
14e	Immersion at low air pressure	-7	
14f	Interfacial sealing	-7	
14g	Impacting water	-14-7	
<i>Part 15: Connector tests (mechanical)</i>			
15a	Contact retention in insert	-8	
15b	Insert retention in housing (axial)	-8	
15c	Insert retention in housing (torsional)	-8	
15d	Contact insertion, release and extraction force	-8	
15e	Contact retention in insert, cable nutation	-8	
15f	Effectiveness of connector coupling devices	-8	
15g	Robustness of protective cover attachment	-8	
15h	Contact retention system resistance to tool application	-15-8	
<i>Part 16: Mechanical tests on contacts and terminations</i>			
16a	Probe damage	-8	
16b	Restricted entry	-8	
16c	Contact bending strength	-8	
16d	Tensile strength (crimped connections)	-8	
16e	Gauge retention force (resilient contacts)	-8	
16f	Robustness of terminations	-8	
16g	Measurement of contact deformation after crimping	-8	
16h	Insulation grip effectiveness (crimped connections)	-8	
16i	Grounding contact spring holding force	-8	
16j	(Vacant)		
16k	Stripping force, solderless wrapped connections	-8	
16m	Unwrapping, solderless wrapped connections	-8	
16n	Bending strength, fixed male tabs	-8	
16o	(Not to be used)		
16p	Torsional strength, fixed male tabs	-8	

Test No.	Test name	Applicable part of IEC 60512	Former test of IEC 60512 to be deleted
16q	Tensile and compressive strength, fixed male tabs	-8	
16r	Deflection of male contacts in a connector insert by simulation	-8	
16s	(Vacant)		
16t	Mechanical strength (wired terminations of solderless connections)	-16-20	
<i>Part 17: Cable clamping tests</i>			
17a	Cable clamp robustness	-9	
17b	Cable clamp resistance to cable rotation	-9	
17c	Cable clamp resistance to cable pull (tensile)	-9	
17d	Cable clamp resistance to cable torsion	-9	
<i>Part 18: Explosion hazard tests</i>			
<i>Part 19: Chemical resistance tests</i>			
19a	Fluid resistance of pre-insulated crimp barrels	-9	
19b	(Vacant)		
19c	Fluid resistance	-19-3	
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<i>Part 20: Fire hazard tests</i>			
20a	Flammability, needle-flame	-9	
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<i>Part 21: R.F. resistance tests</i>			
21a	R.F. shunt resistance	-9	
<i>Part 22: Capacitance tests</i>			
22a	Capacitance	-9	
<i>Part 23: Shielding and filtering tests</i>			
23a	(Vacant)		
23b	Suppression characteristics of integral filters	-9	
23c	Shielding effectiveness, line injection method	-23-3	
23d	Transmission line reflections in the time domain	-23-4*	
* In preparation			