SIST

SLOVENSKI STANDARD
SIST EN 61076-3-101:2002

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Connectors with assessed quality, for use in d.c., low frequency analogue and digital high-speed data applications - Part 3: Rectangular connectors - Section 101: Detail specification for range of shielded connectors with trapezoidal shaped shells and non-removable rectangular contacts on a 1,27 x 2,54 mm centre-line (IEC 61076-3-101:1997)

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Steckverbinder mit bewerteter Qualität für Gleichspannungs- und Niederfrequenzanwendungen sowie digitale Anwendungen mit hoher Übertragungsrate -- Teil 3: Rechteckige Steckverbinder - Hauptabschnitt 101: Bauartspezifikation für eine Reihe von geschirmten Steckverbindern mit trapezförmigen Kragen und nicht auswechselbaren rechteckigen Kontakten im Raster von 1,27 mm x 2,54 mm

Connecteurs sous assurance de la qualité, pour utilisation dans le cadre d'applications analogiques en courant continu et à basse fréquence et dans le cadre d'applications numériques utilisant des débits élévés pour le transfert des données -- Partie 3: Connecteurs rectangulaires -- Section 101: Spécification particulière pour une famille de connecteurs blindés avec boîtiers trapézoïdaux et contacts non-démontables de section rectangulaire au pas de 1,27 mm x 2,54 mm

Ta slovenski standard je istoveten z: EN 61076-3-101:1997

ICS:

31.220.10	Vtiį i in vtiį nice, konektorji	Plug-and-socket devices. Connectors

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EUROPEAN STANDARD

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EUROPÄISCHE NORM

EN 61076-3-101

October 1997

ICS 31.220.10

English version

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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/531/FDIS, future edition 1 of IEC 61076-3-101, 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 61076-3-101 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.
In this standard, annexes A, B, C and ZA are normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61076-3-101:1997 was approved by CENELEC as a European Standard without any modification.

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.

Publication	Year	Title	EN/HD	Year
IEC 60050(581)	1978	International Electrotechnical Vocabulary (IEV) Chapter 581: Electromechanical components for electronic equipment	-	-
IEC 60326-2	1990	Printed boards Part 2: Test methods	-	-
IEC 60352-4	1994	Solderless connections Part 4: Solderless non-accessible insulation displacement connections - General requirements, test methods and practical guidance	EN 60352-4	1994
IEC 60410	1973	Sampling plans and procedures for inspection by attributes	-	-
IEC 60512-1	1994	Electromechanical components for electronic equipment - Basic testing procedures and measuring methods Part 1: General	EN 60512-1	1994
IEC 60512-2	1985	Part 2: General examination, electrical continuity and contact resistance tests, insulation tests and voltage stress tests	-	-
IEC 60512-3	1976	Part 3: Current-carrying capacity tests	-	-
IEC 60512-4	1976	Part 4: Dynamic stress tests	-	-
IEC 60512-5	1992	Part 5: Impact tests (free components), static load tests (fixed components), endurance tests and overload tests	-	-
IEC 60512-7	1993	Part 7: Mechanical operating tests and sealing tests	-	-

Publication	Year	Title	EN/HD	Year
IEC 61076-1	1995	Connectors with assessed quality, for use in d.c., low frequency analogue and in digital high-speed data applications Part 1: Generic specification - Capability approval	EN 61076-1	1995
ISO 468	1982	Surface roughness - Parameters, their values and general rules for specifying requirements	-	-
IEC QC 001001	1986	Basic rules of the IEC Quality Assessment System for Electronic Components (IECQ)	-	-
IEC QC 001002	1986	Rules of procedure of the IEC Quality Assessment System for Electronic Components (IECQ)	-	-

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INTERNATIONAL STANDARD

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QC 480201XX0002

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Connecteurs sous assurance de la qualité, pour utilisation dans le cadre d'applications analogiques en courant continu et à basse fréquence et dans le cadre d'applications numériques utilisant des débits élevés pour le transfert des données –

Partie 3:
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Part 3:
Rectangular connectors –
Section 101: Detail specification for a range of shielded connectors with trapezoidal shaped shells and non-removable rectangular contacts on a 1,27 mm × 2,54 mm centre-line

International Electrotechnical Commission 3, rue de Varembé Geneva, Switzerland
Telefax: +41 22 919 0300 e-mail: inmail@iec.ch IEC web site http: //www.iec.ch

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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For price, see current catalogue

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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CONNECTORS WITH ASSESSED QUALITY, FOR USE IN DC, LOW-FREQUENCY ANALOGUE AND IN DIGITAL HIGH-SPEED DATA APPLICATIONS –

Part 3: Rectangular connectors – Section 101: Detail specification for a range of shielded connectors with trapezoidal shaped shells and non-removable rectangular contacts on a 1,27 mm × 2,54 mm centre-line

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.

4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.

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 61076-3-101 has been prepared by subcommittee 48B: Connectors, of IEC technical committee 48: Electromechanical components and mechanical structures for electric equipment.

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

FDIS	Report on voting
48B/531/FDIS	48B/633/RVD

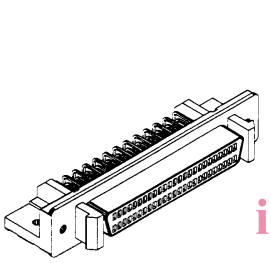
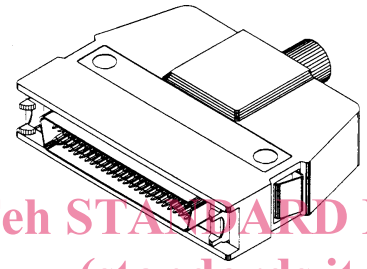
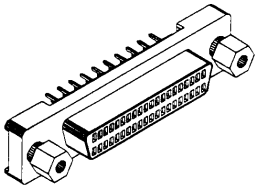
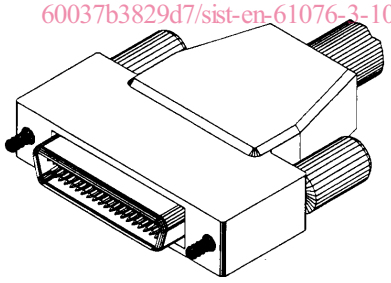
Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

Annexes A, B and C form an integral part of this standard.

The QC number that appears on the front cover of this publication is the specification number in the IEC Quality Assessment System for Electronic Components (IECQ).

CONNECTORS WITH ASSESSED QUALITY, FOR USE IN DC, LOW-FREQUENCY ANALOGUE AND IN DIGITAL HIGH-SPEED DATA APPLICATIONS –

Part 3: Rectangular connectors – Section 101: Detail specification for a range of shielded connectors with trapezoidal shaped shells and non-removable rectangular contacts on a 1,27 mm × 2,54 mm centre-line

IEC SC 48B / TC 48: Connectors/Electromechanical components and mechanical structures to electronic equipment.	QC 480201XX0002
Electronic components of assessed quality Detail specification in accordance with IEC 61076-1	
 Right-angle fixed connector with female contacts and latch blocks  Free connector with male contacts and latches  Straight fixed connector with female contacts and screw locks  Free connector with male contacts and jack-screws	Connectors for printed boards, panel mounting, and cable-to-board applications Trapezoidal shaped 10 to 120 pole shielded connector. Straight and right-angle fixed and free connectors. Fixed is mounted on printed boards. Free connector terminated via insulation displacement. Performance level: 1 Assessment level: G Combination of performance and assessment levels: 1G

1 General data

1.1 *Recommended method of mounting*

A complete connector which can have the fixed connector mounted on a printed board and/or panel-mounted. The fixed connector can have male or female contacts and be soldered or press-in terminated to the printed board.

1.2 *Ratings and characteristics*

Rated voltage:	250 V a.c.
Current rating:	1 A at 30 °C (maximum temperature rise) (50 % energized)
Insulation resistance:	1 GΩ minimum
Climatic category:	55/100/21
Printed board thickness:	1,6 mm (0,062 in) 2,4 mm (0,093 in) 3,2 mm (0,125 in)
Contact spacing:	1,27 mm × 2,54 mm (0,050 in × 0,100 in)
Minimum/maximum number of contacts:	10 min. to 120 max.

Information on the availability of components qualified according to this detail specification is given in the qualified products list (QPL).

1.3 *Reference documents*

IEC 60050(581):1978, *International Electrotechnical Vocabulary (IEV) – Chapter 581: Electromechanical components for electronic equipment*

IEC 60326-2:1990, *Printed boards – Part 2: Test methods*

IEC 60352-4:1994, *Solderless connections – Part 4: Solderless non-accessible insulation displacement connections – General requirements, test methods and practical guidance*

IEC 60410:1973, *Sampling plans and procedures for inspection by attributes*

IEC 60512:*Electromechanical components for electronic equipment; basic testing procedures and measuring methods*

IEC 60512-1:1994, *Electromechanical components for electronic equipment; basic testing procedures and measuring methods – Part 1: General*

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*

IEC 60512-3:1976, *Electromechanical components for electronic equipment; basic testing procedures and measuring methods – Part 3: Current-carrying capacity tests*

IEC 60512-4:1976, *Electromechanical components for electronic equipment; basic testing procedures and measuring methods – Part 4: Dynamic stress tests*

IEC 60512-5:1992, *Electromechanical components for electronic equipment; basic testing procedures and measuring methods – Part 5: Impact tests (free components), static load tests (fixed components), endurance tests and overload tests*

IEC 60512-7:1993, *Electromechanical components for electronic equipment; basic testing procedures and measuring methods – Part 7: Mechanical operating tests and sealing tests*

IEC 61076-1:1995, *Connectors with assessed quality, for use in d.c. and low frequency analogue applications and in digital high speed data applications – Part 1: Generic specification*

ISO 468:1982, *Surface roughness – Parameters, their values and general rules for specifying requirements*

QC 001001:1986, *Basic Rules of the IEC Quality Assessment System for Electronic Components (IECQ)*

QC 001002:1986, *Rules of Procedure of the IEC Quality Assessment System for Electronic Components (IECQ)*

1.4 *Marking*

1.4.1 *On the connector*

Each connector shall have the identification of the contact positions marked upon it as indicated in the detail specification. It shall include the following:

a) mark of origin (manufacturer's name or trade mark);

b) year and month (or week) of manufacture, if explicitly required by the detail specification;

c) IEC type designation, according to 1.5.

However, since the number of characters this requires may exceed the limitations imposed by computer processing systems, the manufacturer may use his own part number, providing that a cross-reference list is made available.

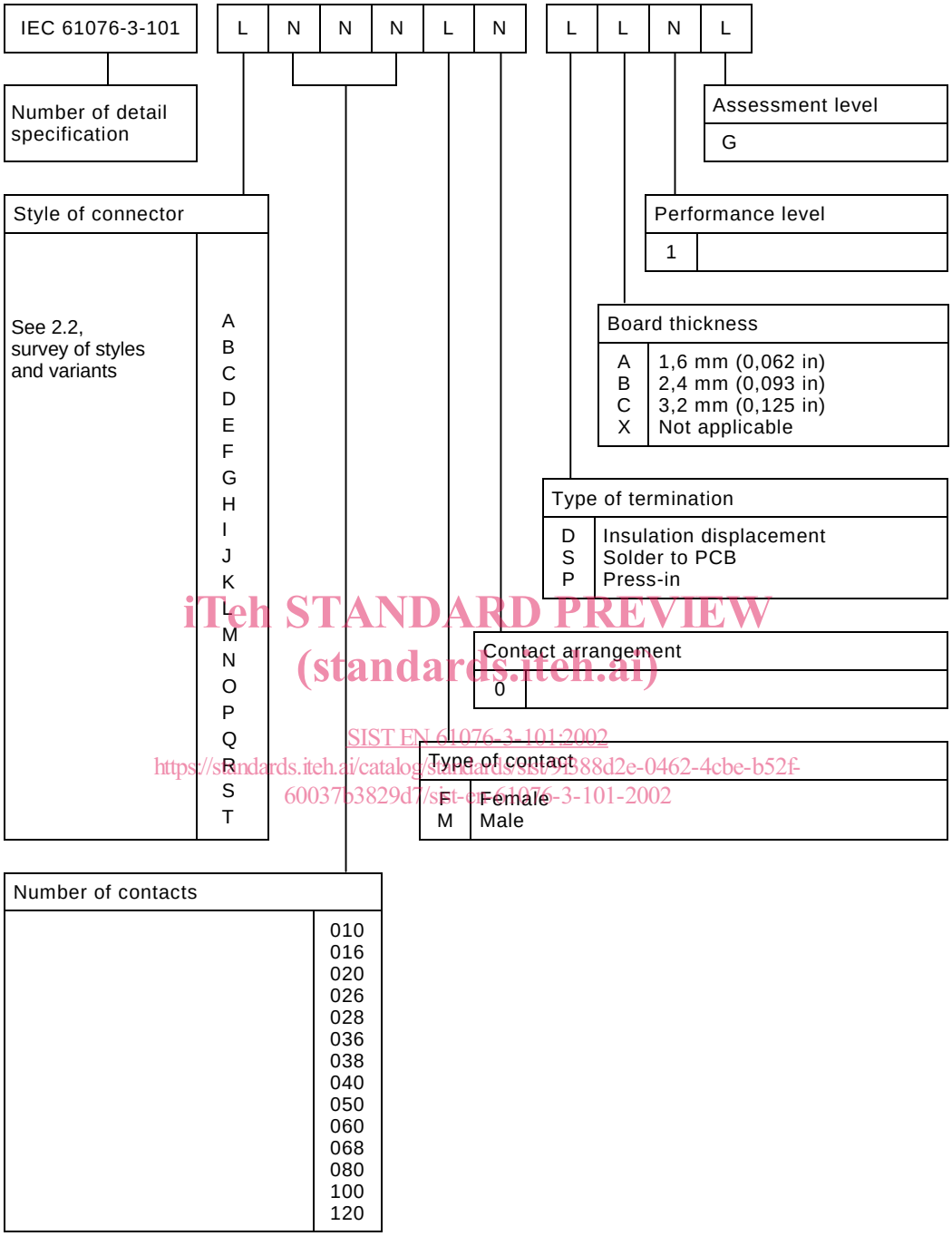
If space does not permit full marking, as much as possible of the information, in the order shown, shall be included.

1.4.2 *On the package*

The information specified in items a), b) and c) shall always be marked on the package.

1.5 *IEC type designation*

Connectors according to this standard shall be designated by the following system:



"L" stands for letter.

"N" stands for number.

Example: IEC 61076-3-101 E026M0 – SA1G

26 pole right-angle fixed connector with male contacts and latch blocks with solder termination for a 1,6 mm board

1.6 *Ordering information*

For ordering connectors according to this detail specification, the type designation described in 1.5 shall be used.

2 Technical data

This standard covers 10 to 120 pole rectangular shielded connectors with rectangular cross-section male contacts on 1,27 mm × 2,54 mm (0,050 in × 0,100 in) contact centre-line spacing. Connector polarization is achieved by the trapezoidal configuration of the shell. The fixed connectors (straight and right-angle) are connected to the printed board (soldered or pressed-in) and the free connector contacts use the insulation displacement type of termination for discrete, round, flat laminated and ribbon cable. The cable shall meet the specifications published by the connector manufacturer.

The application of this range of connectors includes use for signals in telecommunication and information processing equipment and systems, and other electronic devices employing similar techniques.

2.1 *Definitions*

For the purpose of this section of IEC 61076-3, the definitions of IEC 60050(581) apply.

2.2 *Survey of styles and variants*

	STYLE	Mounting (see note)			Contacts		Backshell						Access-ories
		Board		Pannel	Male	Female	Latch blocks	Screw locks		Latching	Jack screws		Board locks
		Straight	Right-angle					Male	Female		Male	Female	
FIXED	A	A			A		A						
	B	B				B	B						
	C	C			C			C					
	D	D				D			D				
	E		E		E		E						
	F		F		F		F						F
	G		G			G	G						
	H		H			H	H						H
	I		I		I			I					
	J		J		J			J					J
	K		K			K			K				
	L		L			L			L				L
FREE	M				M					M			
	N					N				N			
	O				O						O		
	P					P						P	
	Q			Q	Q		Q						
	R			R		R	R						
	S			S	S			S					
	T			T		T			T				

NOTE – All fixed connectors can be used for panel mounting.