

SLOVENSKI STANDARD

SIST EN 61076-4-105:2002

01-september-2002

Connectors with assessed quality, for use in d.c., low frequency analogue and digital high-speed data applications - Part 4: Printed board connectors - Section 105: Detail specification for 9 mm circular connector with 3 to 8 contacts for use in a wide range of applications including telecommunication and audio industry (IEC 61076-4-105:1995)

Connectors with assessed quality, for use in d.c., low frequency analogue and in digital high-speed data applications -- Part 4: Printed board connectors -- Section 105 : Detail specification for 9 mm circular connector with 3 to 8 contacts for use in a wide range of applications including the telecommunication and audio industry

Steckverbinder mit bewerteter Qualität für Gleichspannungs- und Niederfrequenzanwendungen sowie digitale Anwendungen mit hoher Übertragungsrate -- Teil 4: Steckverbinder für gedruckte Schaltungen -- Hauptabschnitt 105: Bauartspezifikation für 9 mm Rund-Steckverbinder mit 3 bis 8 Kontakten für unterschiedlichsten Gebrauch inklusive Telekommunikations- und Audioanwendungen

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 4: Connecteurs pour cartes imprimées -- Section 105: Spécification particulière d'un connecteur circulaire de 9 mm, de 3 à 8 contacts, à utiliser dans une large gamme d'applications incluant les télécommunications et le grand public

Ta slovenski standard je istoveten z: EN 61076-4-105:1998

ICS:

31.220.10	Vtiļ i in vtiļ nice, konektorji	Plug-and-socket devices. Connectors
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SIST EN 61076-4-105:2002

en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61076-4-105

August 1998

ICS 31.220.10

English version

**Connectors with assessed quality, for use in d.c., low frequency
analogue and in digital high-speed data applications
Part 4: Printed board connectors
Section 105 : Detail specification for 9 mm circular connector
with 3 to 8 contacts for use in a wide range of applications
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(IEC 61076-4-105:1995)

This European Standard was approved by CENELEC on 1998-08-01. 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 the International Standard IEC 61076-4-105:1995, prepared by SC 48B, Connectors, of IEC TC 48, Electromechanical components and mechanical structures for electronic equipment, was submitted to the formal vote and was approved by CENELEC as EN 61076-4-105 on 1998-08-01 without any modification.

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) 1999-08-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 1999-08-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annexes A, B, C, D and ZA are normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61076-4-105:1995 was approved by CENELEC as a European Standard without any modification.

SIST EN 61076-4-105:2002

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1) EN 60068-1 includes corrigendum October 1988 and A1:1992 to IEC 60068-1.

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EN 61076-4-105:1998

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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
IEC 61076-4	1995	Part 4: Sectional specification - Printed board connectors	EN 61076-4	1996
ISO 468	1982	Surface roughness - Parameters, their values and general rules for specifying requirements	-	-

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NORME INTERNATIONALE INTERNATIONAL STANDARD

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1076-4-105

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1995-06

**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 4: Connecteurs pour cartes imprimées –
Section 105: Spécification particulière d'un connecteur
circulaire de 9 mm, de 3 à 8 contacts, à utiliser dans
une large gamme d'applications incluant les
télécommunications et le grand public**

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**Connectors with assessed quality, for use
in d.c., low-frequency analogue and in digital
high-speed data applications –**

**Part 4: Printed board connectors –
Section 105: Detail specification for 9 mm circular
connector with 3 to 8 contacts for use in a wide range
of applications including the telecommunication
and audio industry**

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
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Pour prix, voir catalogue en vigueur
For price, see current catalogue

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[f5ab88e51179/sist-en-61076-4-105-2002](https://standards.iteh.ai/catalog/standards/sist/7b79a2f1-0063-425f-b861-f5ab88e51179/sist-en-61076-4-105-2002)

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 4: Printed board connectors - Section 105: Detail specification for 9 mm circular connector with 3 to 8 contacts for use in a wide range of applications including the telecommunication and audio industry

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 cooperation 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, prepared by technical committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 3) They have the form of recommendations for international use 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.

International Standard IEC 1076-4-105 has been prepared by sub-committee 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:

DIS	Report on voting
48B/362/DIS	48B/416/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, C and D 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 4: Printed board connectors – Section 105: Detail specification for 9 mm circular connector with 3 to 8 contacts for use in a wide range of applications including the telecommunication and audio industry

1 General data

1.1 Recommended method of mounting

A complete connector consists of a fixed connector and a free connector. The fixed connector is mounted vertically or at a right angle to the printed circuit board. The free connector is terminated to a cable consisting of three to eight conductors (shielded or unshielded).

1.2 Minimum and maximum number of contacts

The fixed and the free connector have a range of three to eight contacts. Each connector is keyed to prevent mismatching. Examples of contact arrangements are shown in figure 2.

1.3 Rating and characteristics

Working voltage:	30 V a.c. r.m.s. or d.c.
Current rating:	1 A max.
Insulation resistance:	1 000 M Ω min.
Climatic category:	PL1: 55/100/56 PL2: 55/100/21 PL3: Not applicable
Printed board thickness:	1,58 mm (0,062 in)
Contact spacing:	Varies with number of contacts.

1.4 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this section of IEC 1076-4. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this section of IEC 1076-4 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 68-1: 1988, *Environmental testing – Part 1: General and guidance*

IEC 326-2: 1990, *Printed boards – Part 2: Test methods*
Amendment 1 (1992)

IEC 352-4: 1994, *Solderless connections – Part 4: Solderless non-accessible insulation displacement connections – General requirements, test methods and practical guidance*

IEC 410: 1973, *Sampling plans and procedures for inspection by attributes*

IEC 512-2: 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)

IEC 512-4: 1976, *Electromechanical components for electronic equipment; basic testing procedures and measuring methods – Part 4: Dynamic stress tests*

IEC 512-5: 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 512-6: 1984, *Electromechanical components for electronic equipment; basic testing procedures and measuring methods – Part 6: Climatic tests and soldering tests*

IEC 512-7: 1993, *Electromechanical components for electronic equipment; basic testing procedures and measuring methods – Part 7: Mechanical operating tests and sealing tests*

IEC/DIS 1076-1: 1995, *Connectors with assessed quality, for use in d.c., low-frequency analogue and in digital high-speed data applications – Part 1: Generic specification*¹⁾

IEC/DIS 1076-4: 1995, *Connectors with assessed quality, for use in d.c., low-frequency analogue and in digital high-speed data applications – Part 4: Sectional specification – Printed board connectors*²⁾

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

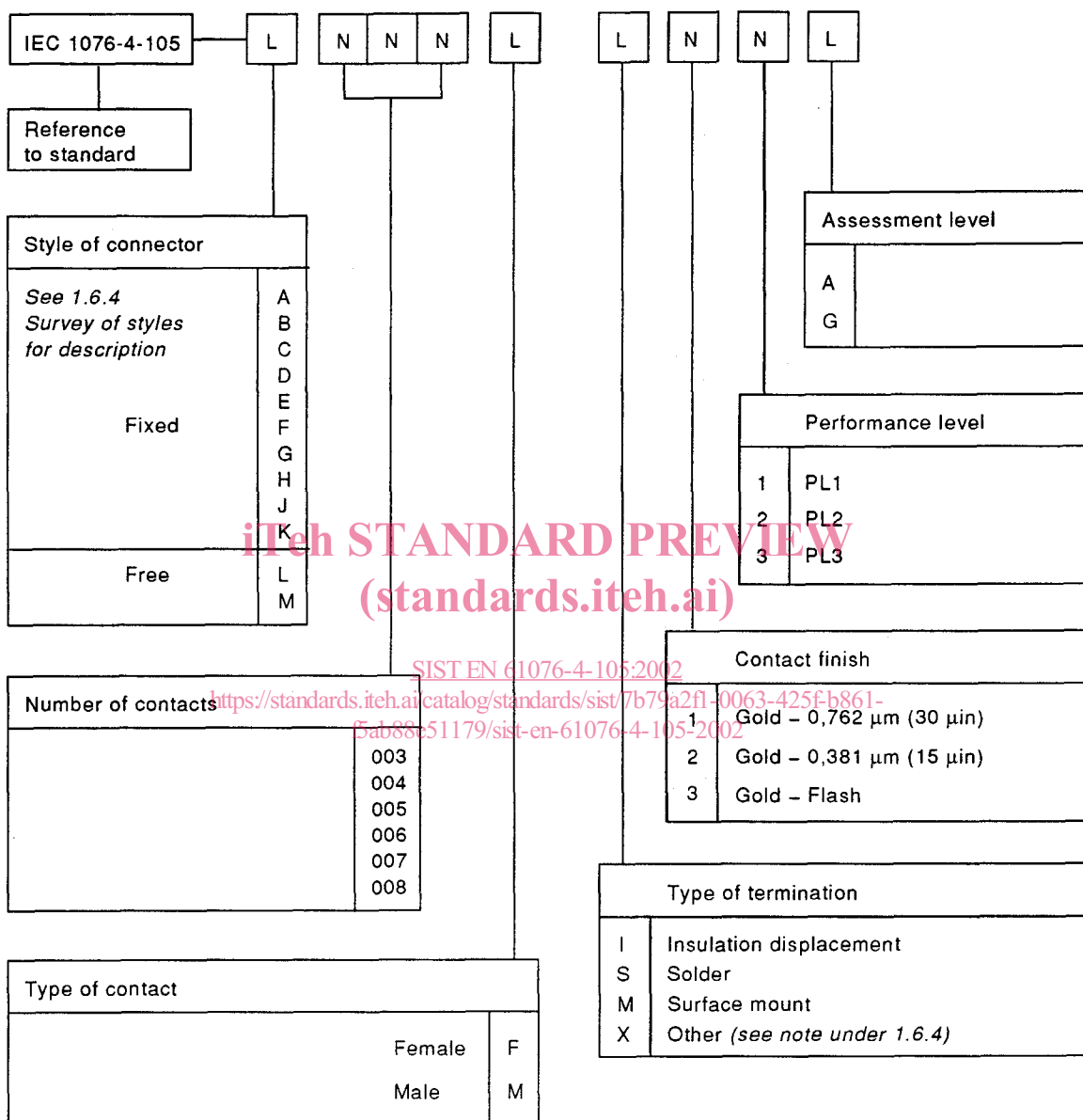
¹⁾ At present, at the stage of draft international standard: 48B/363/DIS.

²⁾ At present, at the stage of draft international standard: 48B/364/DIS.

1.5 Marking

Each connector and its associated package shall be marked in accordance with the requirements specified in 2.5 of the future IEC 1076-1.

1.5.1 IEC type designation



"L" stands for letter

"N" stands for number

Example:

IEC 1076-4-105 - A008FS11G

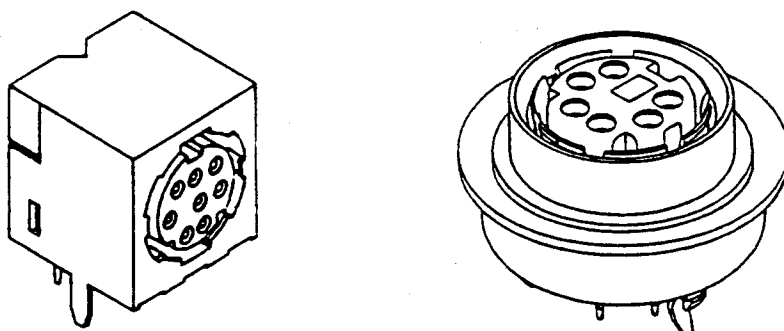
Eight-position shielded right-angle fixed soldered connector with female contacts with 0,76 µm gold finish for performance level 1 and assessment level G.

1.6 Drawings and dimensions

1.6.1 General

Dimensions in inches are original. Dimensions are shown in millimetres with inch dimensions in brackets. Drawings are shown in third-angle projection. The shape of the connectors may deviate from those given in the following figures as long as the specified dimensions are not influenced.

1.6.2 Isometric view and common features



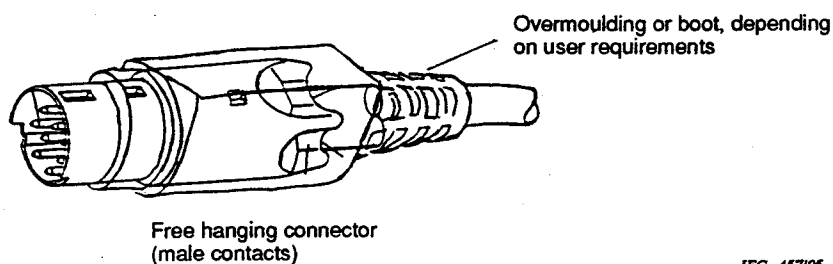
Right-angle connector
(female contacts)

Vertical connector
(female contacts)

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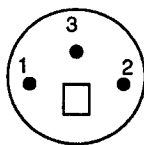
Free hanging connector
(male contacts)

IEC 457195

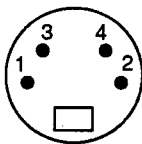
Figure 1 – Isometric views

1.6.3 Mating information

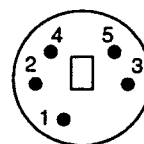
Contact arrangements, mating face view of connector with male contacts. Mating face view of connector with female contacts is mirror image.



IEC 458/95



IEC 459/95

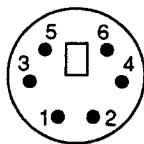


IEC 460/95

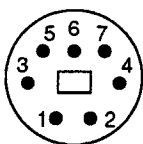
Figure 2a – Three-position mating face

Figure 2b – Four-position mating face

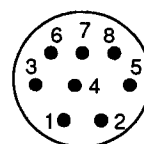
Figure 2c – Five-position mating face



IEC 461/95



IEC 462/95



IEC 463/95

Figure 2d – Six-position mating face

Figure 2e – Seven-position mating face

Figure 2f – Eight-position mating face

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Figure 2 – Contact arrangements