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Anslutningsdon för elektronikutrustning – Fordringar – Del 2-104: Runda anslutningsdon – Detaljspecifikation för anslutningsdon M8 med skruvfattning eller snäppfastsättning

Connectors for electronic equipment –

Product requirements –

Part 2-104: Circular connectors –

Detail specification for circular connectors with M8 screw-locking or snap-locking

Som svensk standard gäller europastandarden EN 61076-2-104:2014. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61076-2-104:2014.

Nationellt förord

Europastandarden EN 61076-2-104:2014

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 61076-2-104, Second edition, 2014 - Connectors for electronic equipment - Product requirements - Part 2-104: Circular connectors - Detail specification for circular connectors with M8 screw-locking or snap-locking**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 61076-2-104, utgåva 1, 2009, gäller ej fr o m 2017-10-14.

ICS 31.220.10

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English Version

Connectors for electronic equipment - Product requirements -
Part 2-104: Circular connectors - Detail specification for circular
connectors with M8 screw-locking or snap-locking
(IEC 61076-2-104:2014)

Connecteurs pour équipements électroniques - Exigences
de produit - Partie 2-104: Connecteurs circulaires -
Spécification particulière pour les connecteurs circulaires
M8 à vis ou à encliquetage
(CEI 61076-2-104:2014)

Steckverbinder für elektronische Einrichtungen -
Produktanforderungen - Teil 2-104: Rundsteckverbinder -
Bauartspezifikation für Rundsteckverbinder M8 mit
Schraub- oder Rastverriegelung
(IEC 61076-2-104:2014)

This European Standard was approved by CENELEC on 2014-10-14. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of document 48B/2384/FDIS, future edition 2 of IEC 61076-2-104, 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 approved by CENELEC as EN 61076-2-104:2014.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2015-07-14
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-10-14

This document supersedes EN 61076-2-104:2008.

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Endorsement notice

The text of the International Standard IEC 61076-2-104:2014 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 documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|--|-----------------------|--------------|
| IEC 60050 | Series | International Electrotechnical Vocabulary | - | - |
| IEC 60068-1 | 2013 | Environmental testing - Part 1: General and guidance | EN 60068-1 | 2014 |
| IEC 60068-2-60 | - | Environmental testing - Part 2: Tests - Test Ke: Flowing mixed gas corrosion test | EN 60068-2-60 | - |
| IEC 60352 | Series | Solderless connections | EN 60352 | Series |
| IEC 60512 | Series | Connectors for electronic equipment - Tests and measurements | EN 60512 | Series |
| IEC 60529 | 1989 | Degrees of protection provided by enclosures (IP Code) | EN 60529 corr. May | 1991 1993 |
| + A1 | 1999 | | + A1 | 2000 |
| + A2 | 2013 | | + A2 | 2013 |
| IEC 60664-1 | 2007 | Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests | EN 60664-1 | 2007 |
| IEC 60998-2-1 | - | Connecting devices for low-voltage circuits for household and similar purposes - Part 2-1: Particular requirements for connecting devices as separate entities with screw-type clamping units | EN 60998-2-1 | - |
| IEC 60999 | Series | Connecting devices - Electrical copper conductors - Safety requirements for screw-type and screwless-type clamping units | EN 60999 | Series |
| IEC 61076-1 | 2006 | Connectors for electronic equipment - Product requirements - Part 1: Generic specification | EN 61076-1 | 2006 |

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|---|--------------|-------------|
| IEC 61984 | - | Connectors - Safety requirements and tests | EN 61984 | - |
| ISO 1302 | - | Geometrical Product Specifications (GPS) - Indication of surface texture in technical product documentation | EN ISO 1302 | - |

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CONNECTORS FOR ELECTRONIC EQUIPMENT –
PRODUCT REQUIREMENTS –****Part 2-104: Circular connectors –
Detail specification for circular connectors
with M8 screw-locking or snap-locking**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61076-2-104 has been prepared by subcommittee 48B: Connectors, of IEC technical committee 48: Electromechanical components and mechanical structures for electronic equipment.

This second edition cancels and replaces the first edition published in 2008. This edition constitutes a technical revision.

The main technical changes with regard to the previous edition are as follows:

- three new type ways have been added to the A-coding, including new gauges and contact diameters;
- the type designation has been removed.

A list of all parts of the IEC 61076 series, under the general title *Connectors for electronic equipment – Product requirements*, can be found on the IEC website.

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

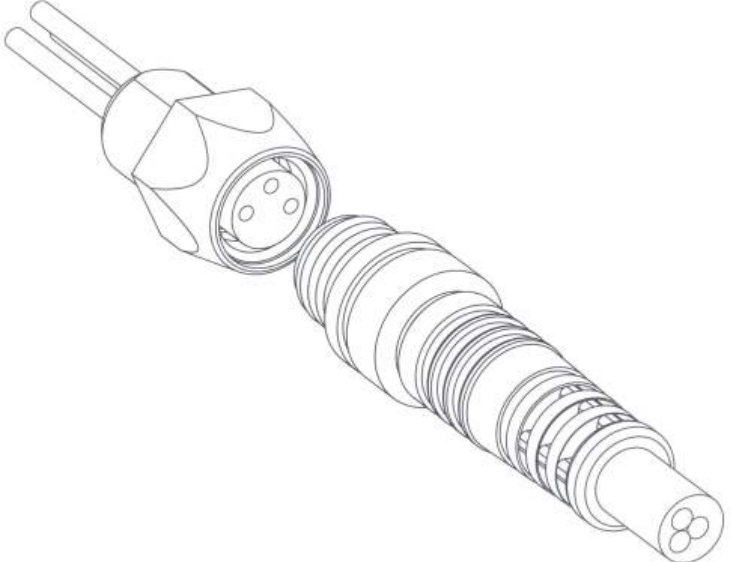
| FDIS | Report on voting |
|---------------|------------------|
| 48B/2384/FDIS | 48B/2399/RVD |

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

| | |
|---|--|
| <p>International Electrotechnical Commission IEC SC 48B – Connectors Specification available from: IEC General secretariat or from the addresses shown on the inside cover.</p> | IEC 61076-2-104 |
| <p>ELECTRONIC COMPONENTS detail specification in accordance with IEC 61076-1</p> | |
|  | <p>Circular connectors M8/ diameter 8 mm 3 to 8 way Male and female contacts Male and female connectors Rewireable – Non-rewireable</p> <p>Free cable connectors Straight and right angle connectors Fixed connectors Flange mounting Single hole mounting</p> |

CONNECTORS FOR ELECTRONIC EQUIPMENT – PRODUCT REQUIREMENTS –

Part 2-104: Circular connectors – Detail specification for circular connectors with M8 screw-locking or snap-locking

1 Scope

This part of IEC 61076 describes circular connectors M8 screw-locking or with nominal diameter 8 mm snap-locking, typically used for industrial process measurement and control. These connectors consist of fixed and free connectors either rewirable or non-rewirable. Male connectors have round contacts of diameter 0,6 mm, diameter 0,7 mm and diameter 1,0 mm.

Throughout this detail specification, dimensions are in mm.

NOTE M8 is the dimension of the thread of the screw-locking mechanism of these circular connectors.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050 (all parts): *International Electrotechnical Vocabulary* (available at <http://www.electropedia.org>)

IEC 60068-1:2013, *Environmental testing - Part 1: General and guidance*

IEC 60068-2-60, *Environmental testing – Part 2: Tests – Test Ke: Flowing mixed gas corrosion test*

IEC 60352 (all parts), *Solderless connections*

IEC 60512 (all parts), *Connectors for electronic equipment – Tests and measurements*

IEC 60529:1989, *Degrees of protection provided by enclosures (IP Code)*

Amendment 2:2013

Amendment 1:1999

IEC 60664-1:2007, *Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests*

IEC 60998-2-1, *Connecting devices for low-voltage circuits for household and similar purposes – Part 2-1: Particular requirements for connecting devices as separate entities with screw-type clamping units*

IEC 60999 (all parts), *Connecting devices – Electrical copper conductors – Safety requirements for screw-type and screwless-type clamping units*

IEC 61076-1:2006, *Connectors for electronic equipment – Product requirements – Part 1: Generic specification*

IEC 61984, *Connectors – Safety requirements and tests*

ISO 1302, *Geometrical Product Specification (GPS) – Indication of surface texture in technical product documentation*