

Connectors for electrical and electronic equipment -
Product requirements - Part 2-114: Circular connectors
- Detail specification for connectors with M8
screw-locking with power contacts and signal contacts
for data transmission up to 100 MHz

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 61076-2-114:2020 sisaldab Euroopa standardi EN IEC 61076-2-114:2020 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 61076-2-114:2020 consists of the English text of the European standard EN IEC 61076-2-114:2020.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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English Version

Connectors for electrical and electronic equipment - Product requirements - Part 2-114: Circular connectors - Detail specification for connectors with M8 screw-locking with power contacts and signal contacts for data transmission up to 100 MHz
(IEC 61076-2-114:2020)

Connecteurs pour équipements électriques et électroniques
- Exigences de produit - Partie 2-114: Connecteurs
circulaires - Spécification particulière pour les connecteurs
avec verrouillage à vis M8 avec contacts de puissance et
contact de signaux pour transmission de données jusqu'à
100 MHz
(IEC 61076-2-114:2020)

Steckverbinder für elektrische und elektronische
Einrichtungen - Produktanforderungen - Teil 2-114:
Rundsteckverbinder - Bauartspezifikation für
Steckverbinder M8 mit Schraubverriegelung mit Daten- und
Leistungskontakten zur Datenübertragung bis 100 MHz
(IEC 61076-2-114:2020)

This European Standard was approved by CENELEC on 2020-10-29. 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.

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 48B/2814/FDIS, future edition 1 of IEC 61076-2-114, prepared by SC 48B "Electrical connectors" of IEC/TC 48 "Electrical connectors and mechanical structures for electrical and electronic equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61076-2-114:2020.

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) 2021-07-29
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-10-29

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 Where 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 60050-581	-	International Electrotechnical Vocabulary - Part 581: Electromechanical components for electronic equipment	-	-
IEC 60068-1	-	Basic environmental testing procedures - Part 1: General and guidance	-	-
IEC 60068-2-60	-	Environmental testing - Part 2-60: Tests - Test Ke: Flowing mixed gas corrosion test	EN 60068-2-60	-
IEC 60352	series	Solderless connections	EN 60352	series
IEC 60512-2-1	-	Connectors for electronic equipment - Tests and measurements - Part 2-1: Electrical continuity and contact resistance tests - Test 2a: Contact resistance - Millivolt level method	EN 60512-2-1	-
IEC 60512-3-1	-	Connectors for electronic equipment - Tests and measurements - Part 3-1: Insulation tests - Test 3a: Insulation resistance	EN 60512-3-1	-
IEC 60512-4-1	-	Connectors for electronic equipment - Tests and measurements - Part 4-1: Voltage stress tests - Test 4a: Voltage proof	EN 60512-4-1	-
IEC 60512-5-2	-	Connectors for electronic equipment - Tests and measurements - Part 5-2: Current-carrying capacity tests - Test 5b: Current-temperature derating	EN 60512-5-2	-
IEC 60512-6-3	-	Connectors for electronic equipment - Tests and measurements - Part 6-3: Dynamic stress tests - Test 6c: Shock	EN 60512-6-3	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60512-6-4	-	Connectors for electronic equipment - Tests and measurements - Part 6-4: Dynamic stress tests - Test 6d: Vibration (sinusoidal)	EN 60512-6-4	-
IEC 60512-8-1	-	Connectors for electronic equipment - Tests and measurements - Part 8-1: Static load tests (fixed connectors) - Test 8a: Static load, transverse	EN 60512-8-1	-
IEC 60512-9-1	-	Connectors for electronic equipment - Tests and measurements - Part 9-1: Endurance tests - Test 9a: Mechanical operation	EN 60512-9-1	-
IEC 60512-12-2	-	Connectors for electronic equipment - Tests and measurements - Part 12-2: Soldering tests - Test 12b: Solderability, wetting, soldering iron method	EN 60512-12-2	-
IEC 60512-13-2	-	Connectors for electronic equipment - Tests and measurements - Part 13-2: Mechanical operation tests - Test 13b: Insertion and withdrawal forces	EN 60512-13-2	-
IEC 60512-13-5	-	Connectors for electronic equipment - Tests and measurements - Part 13-5: Mechanical operation tests - Test 13e: Polarizing and keying method	EN 60512-13-5	-
IEC 60512-15-6	-	Connectors for electronic equipment - Tests and measurements - Part 15-6: Connector tests (mechanical) - Test 15f: Effectiveness of connector coupling devices	EN 60512-15-6	-
IEC 60512-19-3	-	Electromechanical components for electronic equipment - Basic testing procedures and measuring methods - Part 19: Chemical resistance tests - Section 3: Test 19c - Fluid resistance	EN 60512-19-3	-
IEC 60512-25-7	2004	Connectors for electronic equipment - Tests and measurements - Part 25-7: Test 25g - Impedance, reflection coefficient, and voltage standing wave ratio (VSWR)	EN 60512-25-7	2005
IEC 60512-29-100	-	Connectors for electronic equipment - Tests and measurements - Part 29-100: Signal integrity tests up to 500 MHz on M12 style connectors - Tests 29a to 29g	EN 60512-29-100	-
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529	1991
-	-		+ corrigendum	1993
IEC 60603-7	series	Connectors for electronic equipment - Part 7: Detail specification for 8-way, unshielded, free and fixed connectors	-	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60603-7	2008	Connectors for electronic equipment - Part 7: Detail specification for 8-way, unshielded, free and fixed connectors	EN 60603-7	2009
IEC 60603-7-1	2011	Connectors for electronic equipment - Part 7-1: Detail specification for 8-way, shielded, free and fixed connectors	EN 60603-7-1	2011
IEC 60664-1	-	Insulation coordination for equipment within low-voltage supply systems - Part 1: Principles, requirements and tests	EN IEC 60664-1	-
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
IEC 61131-2	-	Industrial-process measurement and control - Programmable controllers - Part 2: Equipment requirements and tests	-	-
IEC 61784-5	series	Industrial communication networks - Profiles	EN 61784-5	series
IEC 61784-5-12	-	Industrial communication networks - Profiles - Part 5-12: Installation of fieldbuses - Installation profiles for CPF 12	EN IEC 61784-5-12	-
IEC 61918	-	Industrial communication networks - Installation of communication networks in industrial premises	-	-
IEC 61984	-	Connectors - Safety requirements and tests	EN 61984	-
IEC 62197-1	-	Connectors for electronic equipment - Quality assessment requirements - Part 1: Generic specification	EN 62197-1	-
IEC 62430	-	Environmentally conscious design (ECD) - Principles, requirements and guidance	EN IEC 62430	-
IEC Guide 109	-	Environmental aspects - Inclusion in electrotechnical product standards	-	-
ISO/IEC TR 11801	series	Information technology - Generic cabling for customer premises	-	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 1302	-	Geometrical Product Specifications (GPS) - Indication of surface texture in technical product documentation	EN ISO 1302	-
ISO 11469	-	Plastics - Generic identification and marking of plastics products	EN ISO 11469	-
TIA-568 SET	2019	Commercial building telecommunications cabling standard set	-	-

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Connectors for electrical and electronic equipment – Product requirements –
Part 2-114: Circular connectors – Detail specification for connectors with M8
screw-locking with power contacts and signal contacts for data transmission up
to 100 MHz**

**Connecteurs pour équipements électriques et électroniques – Exigences de
produit –**

**Partie 2-114: Connecteurs circulaires – Spécification particulière pour les
connecteurs avec verrouillage à vis M8 avec contacts de puissance et contact
de signaux pour transmission de données jusqu'à 100 MHz**



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INTERNATIONAL STANDARD

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**Connecteurs pour équipements électriques et électroniques – Exigences de
produit –
Partie 2-114: Connecteurs circulaires – Spécification particulière pour les
connecteurs avec verrouillage à vis M8 avec contacts de puissance et contact
de signaux pour transmission de données jusqu'à 100 MHz**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT – PRODUCT REQUIREMENTS –

Part 2-114: Circular connectors – Detail specification for connectors with M8 screw-locking with power contacts and signal contacts for data transmission up to 100 MHz

FOREWORD

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International Standard IEC 61076-2-114 has been prepared by subcommittee 48B: Electrical connectors, of IEC technical committee 48: Electrical connectors and mechanical structures for electrical and electronic equipment

The text of this International Standard is based on the following documents:

FDIS	Report on voting
48B/2814/FDIS	48B/2830/RVD

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

This first edition cancels and replaces IEC PAS 61076-2-114, published in 2016.

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

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

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

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

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