SVENSK STANDARD SS-EN IEC 61076-2-011

Fastställd	Utgåva	Sida	Ansvarig kommitté
2021-12-15	1	1 (1+14)	SEK TK 48B

Anslutningsdon för el- och elektronikutrustning – Fordringar – Del 2-011: Runda anslutningsdon – Detaljspecifikation för anslutningsdon med B12 bajonettfattning och gränssnitt enligt IEC 61076-2-101 och IEC 61076-2-109

Connectors for electrical and electronic equipment – Product requirements – Part 2-011: Circular connectors – Detail specification for B12 bayonet coupling connectors based on mating interfaces according to IEC 61076-2-101 and IEC 61076-2-109

Som svensk standard gäller europastandarden EN IEC 61076-2-011:2021. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 61076-2-011:2021.

Nationellt förord

Europastandarden EN IEC 61076-2-011:2021

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC

– **IEC 61076-2-011, First edition, 2021 - Connectors for electrical and electronic equipment - Product requirements - Part 2-011: Circular connectors - Detail specification for B12 bayonet coupling connectors based on mating interfaces according to IEC 61076-2-101 and IEC 61076-2-109**

utarbetad inom International Electrotechnical Commission, IEC.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61076-2-011

August 2021

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English Version

Connectors for electrical and electronic equipment - Product requirements - Part 2-011: Circular connectors - Detail specification for B12 bayonet coupling connectors based on mating interfaces according to IEC 61076-2-101 and IEC 61076-2-109
(IEC 61076-2-011:2021)

Connecteurs pour équipements électriques et électroniques - Exigences de produit - Partie 2-011: Connecteurs circulaires - Spécification particulière pour les connecteurs à accouplement à baïonnette B12 basés sur des interfaces d'accouplement conformes à l'IEC 61076-2-101 et l'IEC 61076-2-109
(IEC 61076-2-011:2021)

Steckverbinder für elektronische Einrichtungen - Produktanforderungen - Teil 2-011: Rundsteckverbinder - Bauartspezifikation für Steckverbinder mit B12 Bajonettausführung auf Basis von Steckgesichtern nach IEC 61076-2-101 und IEC 61076-2-109
(IEC 61076-2-011:2021)

This European Standard was approved by CENELEC on 2021-07-28. 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: Rue de la Science 23, B-1040 Brussels

Ref. No. EN IEC 61076-2-011:2021 E

European foreword

The text of document 48B/2883/FDIS, future edition 1 of IEC 61076-2-011, 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 61076-2-011:2021.

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) 2022–04–28
•	latest date by which the national standards conflicting with the document have to be withdrawn	(dow) 2024–07–28

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 61076-2-011:2021 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 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.

Publication	Year	Title	EN/HD	Year
IEC 60050-581	2008	International Electrotechnical Vocabulary-(IEV) - Part 581: Electromechanical components for electronic equipment		-
IEC 61076-2	2011	Connectors for electronic equipment -Product requirements - Part 2: Sectional specification for circular connectors	EN 61076-2	2011
IEC 61076-2-101	2012	Connectors for electronic equipment -Product requirements - Part 2–101: Circular connectors - Detail specification for M12 connectors with screw-locking	EN 61076-2-101	2012
IEC 61076-2-109	2014	Connectors for electronic equipment -Product requirements - Part 2–109: Circular connectors - Detail specification for connectors with M 12 × 1 screw-locking, for data transmission frequencies up to 500 MHz	EN 61076-2-109	2014
IEC 61984	2008	Connectors - Safety requirements and tests	EN 61984	2009

IEC 61076-2-011

Edition 1.0 2021-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Connectors for electrical and electronic equipment – Product requirements – Part 2-011: Circular connectors – Detail specification for B12 bayonet coupling connectors based on mating interfaces according to IEC 61076-2-101 and IEC 61076-2-109

Connecteurs pour équipements électriques et électroniques – Exigences de produit – Partie 2-011: Connecteurs circulaires – Spécification particulière pour les connecteurs à accouplement à baïonnette B12 basés sur des interfaces d'accouplement conformes à l'IEC 61076-2-101 et l'IEC 61076-2-109

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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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 61076-2-011 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 standard is based on the following documents:

FDIS	Report on voting
48B/2883/FDIS	48B/2892/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

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

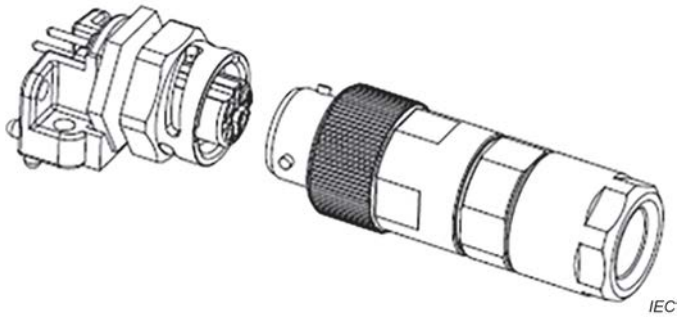
The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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

INTRODUCTION

This document describes the fixed and free cable connector coupling interface for circular connectors. In addition to dimensional definitions, reference planes for existing connector mating faces have been defined. Mechanical and electrical characteristics and the corresponding test procedures are part of this generic standard. It specifies the additional dimensions for the bayonet coupling interfaces. The mating faces are not part of this document, but explicitly defined in IEC 61076-2-101 and IEC 61076-2-109.

<table>
<tr><td>IEC SC 48B – Electrical connectors

Specification available from:
IEC General secretariat
or from the addresses shown on the inside cover.</td><td>IEC 61076-2-011 Ed. 1.0</td></tr>
<tr><td>DETAIL SPECIFICATION in accordance with IEC 61076-2</td><td></td></tr>
<tr><td rowspan="2"> 
</td><td>Circular connectors
B12, 2 to 17 ways, for signal and data transmission with frequencies up to 500 MHz

Pin and socket connectors with round contact

Rewireable – Non-rewirable</td></tr>
<tr><td>Free cable connectors
Straight and right-angle connectors

Fixed connectors

Flange mounting
Rear mounting

Single hole mounting</td></tr>
<tr><td colspan="2">The ways and coding shown are only given as an example.</td></tr>
</table>

CONNECTORS FOR ELECTRICAL AND ELECTRONIC EQUIPMENT – PRODUCT REQUIREMENTS –

Part 2-011: Circular connectors – Detail specification for B12 bayonet coupling connectors based on mating interfaces according to IEC 61076-2-101 and IEC 61076-2-109

1 Scope

This part of IEC 61076-2 describes the bayonet coupling interface of circular connectors that are typically used for industrial process measurement and control. These connectors consist of fixed and free connectors either rewireable or non-rewireable, with bayonet-coupling. These connectors may have glass to metal seal inserts. They have male or female contacts and are deemed to be intermateable with corresponding free connectors produced according to this document. Male connectors have round contacts Ø 0,6 mm, Ø 0,76 mm, Ø 0,8 mm and Ø 1,0 mm.

Different codings prevent the mating of these individually coded fixed connectors (and consequently of individually coded free connectors deemed to couple with them) to other interfaces and cross-mating between the different codings. However, the styles and interface dimensions, except for the coupling mechanism, are as given in 4.3 of IEC 61076-2- 101:2012 and 4.3.1 of IEC 61076-2-109:2014.

The male type B12 circular connectors are interoperable with the female type B12 connector of the same coding and ways. The female type B12 connectors are interoperable with the male type B12 and M12 (threaded screw coupling) connector of the same coding and ways.

NOTE B12 relates to a bayonet coupling with tube dimensions compatible with a M12 thread. M12 is the dimension of the thread of the screw-coupling mechanism of circular connectors covered by IEC 61076-2-101 and IEC 61076-2-109, which provide the mating interface (connector insert level) to these connectors with bayonet coupling.

2 Normative references

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.

IEC 60050-581:2008, *International Electrotechnical Vocabulary (IEV) – Part 581: Electromechanical components for electronic equipment*

IEC 61076-2:2011, *Connectors for electronic equipment – Product requirements – Part 2: Sectional specification for circular connectors*

IEC 61076-2-101:2012, *Connectors for electronic equipment – Product requirements – Part 2-101: Circular connectors – Detail specification for M12 connectors with screw-locking*

IEC 61076-2-109:2014, *Connectors for electronic equipment – Product requirements – Part 2-109: Circular connectors – Detail specification for connectors with M 12 x 1 screw-locking, for data transmission frequencies up to 500 MHz*

IEC 61984:2008, *Connectors – Safety requirements and tests*