

**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**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 61076-2-011:2021 sisaldab Euroopa standardi EN IEC 61076-2-011:2021 ingliskeelset teksti.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 13.08.2021.

Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.

This Estonian standard EVS-EN IEC 61076-2-11:2021 consists of the English text of the European standard EN IEC 61076-2-011:2021.

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.

Date of Availability of the European standard is 13.08.2021.

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ICS 29.120.50

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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)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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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 (dop) 2022-04-28 level by publication of an identical national standard or by endorsement
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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	2008	International Electrotechnical Vocabulary- (IEV) - Part 581: Electromechanical components for electronic equipment	-	-
IEC 61076-2	2011	Connectors for electronic equipment -EN 61076-2 Product requirements - Part 2: Sectional specification for circular connectors	-EN 61076-2	2011
IEC 61076-2-101	2012	Connectors for electronic equipment -EN 61076-2-101 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 -EN 61076-2-109 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

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**



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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 –
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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**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**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**

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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.

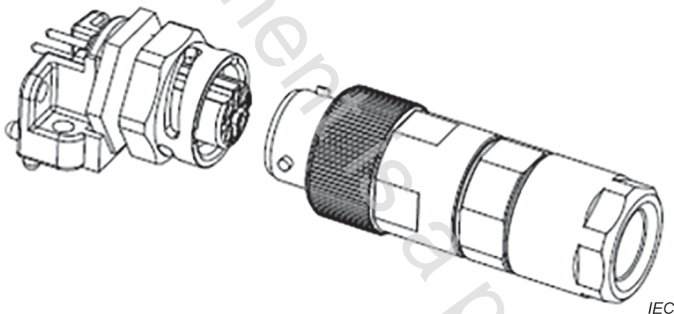
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- reconfirmed,
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INTRODUCTION

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.

<p>IEC SC 48B – Electrical connectors</p> <p>Specification available from: IEC General secretariat or from the addresses shown on the inside cover.</p>	<p>IEC 61076-2-011 Ed. 1.0</p>
<p>DETAIL SPECIFICATION in accordance with IEC 61076-2</p>	
	<p>Circular connectors B12, 2 to 17 ways, for signal and data transmission with frequencies up to 500 MHz</p> <p>Pin and socket connectors with round contact</p> <p>Rewireable – Non-rewirable</p> <p>Free cable connectors Straight and right-angle connectors</p> <p>Fixed connectors</p> <p>Flange mounting Rear mounting Single hole mounting</p>
<p>The ways and coding shown are only given as an example.</p>	

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 rewirable or non-rewirable, 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 \varnothing 0,6 mm, \varnothing 0,76 mm, \varnothing 0,8 mm and \varnothing 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*