

01-april-2016**Nadomešča:**
SIST EN 122340:2005

Radiofrekvenčni konektorji - 52. del: Področna specifikacija za koaksialne konektorje serije MMCX R.F. (IEC 61169-52:2015)

Radio-frequency connectors -- Part 52: Sectional specification for series MMCX RF coaxial connectors (IEC 61169-52:2015)

Hochfrequenz-Steckverbinder - Teil 52: Rahmenspezifikation für koaxiale HF-Steckverbinder der Serie MMCX (IEC 61169-52:2015)

Connecteurs pour fréquences radioélectriques - Partie 52: Spécification intermédiaire relative aux connecteurs coaxiaux pour fréquences radioélectriques série MMCX (IEC 61169-52:2015)

Ta slovenski standard je istoveten z: EN 61169-52:2015**ICS:**33.120.30 Radiofrekvenčni konektorji RF connectors
(RF)**SIST EN 61169-52:2016****en**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 61169-52:2016](#)

<https://standards.iteh.ai/catalog/standards/sist/36e2c51c-ca61-4a12-bb13-da9fd76d17a8/sist-en-61169-52-2016>

EUROPEAN STANDARD

EN 61169-52

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2015

ICS 33.120.30

Supersedes EN 122340:2002

English Version

Radio-frequency connectors - Part 52: Sectional specification for
series MMCX RF coaxial connectors
(IEC 61169-52:2015)

Connecteurs pour fréquences radioélectriques -
Partie 52: Spécification intermédiaire relative aux
connecteurs coaxiaux pour fréquences radioélectriques
série MMCX
(IEC 61169-52:2015)

Hochfrequenz-Steckverbinder -
Teil 52: Rahmenspezifikation für koaxiale HF-
Steckverbinder der Serie MMCX
(IEC 61169-52:2015)

This European Standard was approved by CENELEC on 2015-07-10. 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.

[SIST EN 61169-52:2016](https://standards.iteh.ai/catalog/standards/sist/36e2c51c-ca61-4a12-bb13-36e2c51c-ca61-4a12-bb13)

[https://standards.iteh.ai/catalog/standards/sist/36e2c51c-ca61-4a12-bb13-](https://standards.iteh.ai/catalog/standards/sist/36e2c51c-ca61-4a12-bb13-36e2c51c-ca61-4a12-bb13)

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

EN 61169-52:2015**European foreword**

The text of document 46F/314/FDIS, future edition 1 of IEC 61169-52, prepared by SC 46F "R.F. and microwave passive components" of IEC/TC 46 "Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61169-52:2015.

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) 2016-04-10
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-07-10

This document supersedes EN 122340:2002.

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

Endorsement notice

The text of the International Standard IEC 61169-52:2015 was approved by CENELEC as a European Standard without any modification.

ITeH STANDARD PREVIEW
(standards.iteh.ai)
<https://standards.iteh.ai/catalog/standards/sist/36e2c51c-ca61-4a12-bb13-da9fd76d17a8/sist-en-61169-52-2016>

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 60068-1	-	Environmental testing - Part 1: General and guidance	EN 60068-1	-
IEC 61169-1	2013	Radio-frequency connectors - Part 1: Generic specification - General requirements and measuring methods	EN 61169-1	2013
IEC 62037	Series	Passive RF and microwave devices, intermodulation level measurement	EN 62037	Series

iTech STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 61169-52:2016](https://standards.iteh.ai/catalog/standards/sist/36e2c51c-ca61-4a12-bb13-da9fd76d17a8/sist-en-61169-52-2016)

<https://standards.iteh.ai/catalog/standards/sist/36e2c51c-ca61-4a12-bb13-da9fd76d17a8/sist-en-61169-52-2016>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 61169-52:2016

<https://standards.iteh.ai/catalog/standards/sist/36e2c51c-ca61-4a12-bb13-da9fd76d17a8/sist-en-61169-52-2016>



INTERNATIONAL STANDARD



Radio-frequency connectors –
Part 52: Sectional specification for series MMCX RF coaxial connectors

STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 61169-52:2016
<https://standards.iteh.ai/catalog/standards/sist/36e2c51c-ca61-4a12-bb13-da9fd76d17a8/sist-en-61169-52-2016>

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 33.120.30

ISBN 978-2-8322-2735-0

Warning! Make sure that you obtained this publication from an authorized distributor.

CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references.....	6
3 Mating face and gauge information.....	6
3.1 Dimensions – General connectors – Grade 2	6
3.1.1 Connector with pin centre contact.....	6
3.1.2 Connector with socket centre contact	7
3.2 Gauges.....	8
3.2.1 Gauge pin for socket centre contact	8
3.2.2 Gauge for outer contact.....	9
3.3 Dimensions – Standard test connectors – Grade 0	11
3.3.1 Connector with pin centre contact.....	11
3.3.2 Connector with socket centre contact	12
4 Quality assessment procedure	13
4.1 General.....	13
4.2 Rating and characteristics (see Clause 5 of IEC 61169-1:2013).....	13
4.3 Test schedule and inspection requirements.....	15
4.3.1 Acceptance tests.....	15
4.3.2 Periodic tests.....	16
4.4 Procedures for the qualification approval.....	18
4.4.1 Quality conformance inspection.....	18
4.4.2 Qualification approval and its maintenance	18
5 Instructions for preparation of detail specifications (DS).....	18
5.1 General.....	18
5.2 Identification of the component.....	18
5.3 Performances.....	19
5.4 Marking, ordering information and related matters.....	19
5.5 Selection of tests, test conditions and severities	19
5.6 Blank detail specification pro-forma for type MMCX connector.....	20
6 Marking	24
6.1 Marking of component.....	24
6.2 Marking and contents of package	24
Figure 1 – Connector with pin centre contact.....	7
Figure 2 – Connector with socket centre contact.....	8
Figure 3 – Gauge pin for socket centre contact.....	9
Figure 4 – Gauge for outer contact.....	10
Figure 5 – Connector with pin centre contact.....	11
Figure 6 – Connector with socket centre contact.....	12
Table 1 – Dimensions of connector with pin centre contact	7
Table 2 – Dimensions of connector with socket centre contact	8
Table 3 – Dimensions of gauge pin for socket centre contact	9
Table 4 – Dimensions of gauge for outer contact	10
Table 5 – Dimensions of connector with pin centre contact	11

Table 6 – Dimensions of connector with socket centre contact	12
Table 7 – Preferred climatic categories (see IEC 60068-1).....	13
Table 8 – Rating and characteristics.....	13
Table 9 – Acceptance tests	16
Table 10 – Periodic tests	16

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 61169-52:2016](https://standards.iteh.ai/catalog/standards/sist/36e2c51c-ca61-4a12-bb13-da9fd76d17a8/sist-en-61169-52-2016)

<https://standards.iteh.ai/catalog/standards/sist/36e2c51c-ca61-4a12-bb13-da9fd76d17a8/sist-en-61169-52-2016>

INTERNATIONAL ELECTROTECHNICAL COMMISSION

RADIO-FREQUENCY CONNECTORS –

Part 52: Sectional specification for series MMCX RF coaxial connectors

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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61169-52 has been prepared by subcommittee 46F: R.F. and microwave passive components, of IEC technical committee 46: Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories

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

FDIS	Report on voting
46F/314/FDIS	46F/320/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.

A list of all parts of the IEC 61169 series, under the general title: *Radio-frequency connectors*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website 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.

A bilingual version of this publication may be issued at a later date.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 61169-52:2016](https://standards.iteh.ai/catalog/standards/sist/36e2c51c-ca61-4a12-bb13-da9fd76d17a8/sist-en-61169-52-2016)

<https://standards.iteh.ai/catalog/standards/sist/36e2c51c-ca61-4a12-bb13-da9fd76d17a8/sist-en-61169-52-2016>

RADIO-FREQUENCY CONNECTORS –

Part 52: Sectional specification for series MMCX RF coaxial connectors

1 Scope

This part of IEC 61169, which is a sectional specification (SS), provides information and rules for the preparation of detail specifications (DS) for RF coaxial connectors with snap-on coupling, typically for use in 50 Ω cable networks (MMCX).

It prescribes mating face dimensions for general purpose connectors – grade 2, dimensional details of standard test connectors-grade 0, gauging information and tests selected from IEC 61169-1, applicable to all detail specifications relating to series MMCX RF connectors.

This specification indicates recommended performance characteristics to be considered when writing a detail specification and it covers test schedules and inspection requirements for assessment levels M and H.

The MMCX miniature snap-on coupling structure series R.F. coaxial connector with the characteristic of normative impedance 50 Ω are used with various kinds of R.F cables and strips. The operating frequency limit is up to 6 GHz.

NOTE Metric dimension are original dimensions. All undimensioned pictorial configurations are for reference purpose only.

[SIST EN 61169-52:2016](http://standards.iteh.ai/catalog/standards/sist/36e2c51c-ca61-4a12-bb13-da9fd76d17a8/sist-en-61169-52-2016)

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 61169-1:2013, *Radio frequency connectors – Part 1: Generic specification – General requirements and measuring methods*

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

IEC 62037 (all parts), *Passive RF and microwave devices, intermodulation level measurement*

3 Mating face and gauge information

3.1 Dimensions – General connectors – Grade 2

3.1.1 Connector with pin centre contact

The mating face of connector with pin centre contact is shown in Figure 1 and its dimensions are shown in Table 1.