



SLOVENSKI STANDARD

SIST EN 61169-35:2011

01-oktober-2011

Radiofrekvenčni konektorji - 35. del: Področna specifikacija za koaksialne RF konektorje serije 2.92 (IEC 61169-35:2011)

Radio-frequency connectors - Part 35: Sectional specification for 2.92 series R.F. coaxial connectors (IEC 61169-35:2011)

Hochfrequenz-Steckverbinder - Teil 35: Rahmenspezifikation für HF-Steckverbinder der Baureihe 2,92 (IEC 61169-35:2011)

Connecteurs pour fréquences radioélectriques - Partie 35 : Spécification intermédiaire pour les connecteurs RF série 2,92 (CEI 61169-35:2011)

<https://standards.iteh.ai/catalog/standards/sist/34b16fce-57d0-4a2f-a4a6-cdd0d6d0f88f/sist-en-61169-35-2011>

Ta slovenski standard je istoveten z: EN 61169-35:2011

ICS:

33.120.30 Radiofrekvenčni konektorji R.F. connectors
(RF)

SIST EN 61169-35:2011

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 61169-35:2011](#)

<https://standards.iteh.ai/catalog/standards/sist/34b16fce-57d0-4a2f-a4a6-cdd0d6d0f88f/sist-en-61169-35-2011>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61169-35

September 2011

ICS 33.120.30

English version

**Radio-frequency connectors -
Part 35: Sectional specification for 2,92 series RF connectors
(IEC 61169-35:2011)**

Connecteurs pour fréquences
radioélectriques -
Partie 35 : Spécification intermédiaire pour
les connecteurs RF série 2,92
(CEI 61169-35:2011)

Hochfrequenz-Steckverbinder -
Teil 35: Rahmenspezifikation für HF-
Steckverbinder der Baureihe 2,92
(IEC 61169-35:2011)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

This European Standard was approved by CENELEC on 2011-08-15. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 46F/191/FDIS, future edition 1 of IEC 61169-35, 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 61169-35:2011.

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) 2012-05-15
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2014-08-15

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 61169-35:2011 was approved by CENELEC as a European Standard without any modification.

(standards.iteh.ai)

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60169-23 NOTE Harmonized as EN 60169-23. SIST EN 61169-35:2011
<https://standards.iteh.ai/catalog/standards/sist/34b16f6e-57d0-4a2f-a4a6-cdd0d6d0f88f/sist-en-61169-35-2011>

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61169-1	1992	Radio-frequency connectors -	EN 61169-1	1994
+ A1	1996	Part 1: Generic specification - General	+ A1	1996
+ A2	1997	requirements and measuring methods	+ A2	1997

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 61169-35:2011](https://standards.iteh.ai/catalog/standards/sist/34b16fce-57d0-4a2f-a4a6-cdd0d6d0f88f/sist-en-61169-35-2011)

<https://standards.iteh.ai/catalog/standards/sist/34b16fce-57d0-4a2f-a4a6-cdd0d6d0f88f/sist-en-61169-35-2011>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 61169-35:2011](#)

<https://standards.iteh.ai/catalog/standards/sist/34b16fce-57d0-4a2f-a4a6-cdd0d6d0f88f/sist-en-61169-35-2011>



IEC 61169-35

Edition 1.0 2011-07

INTERNATIONAL STANDARD



Radio-frequency connectors –
Part 35: Sectional specification for 2,92 series RF connectors

STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 61169-35:2011](https://standards.iteh.ai/catalog/standards/sist/34b16fce-57d0-4a2f-a4a6-cdd0d6d0f88f/sist-en-61169-35-2011)

<https://standards.iteh.ai/catalog/standards/sist/34b16fce-57d0-4a2f-a4a6-cdd0d6d0f88f/sist-en-61169-35-2011>

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

PRICE CODE

T

ICS 33.120.30

ISBN 978-2-88912-559-3

CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references	6
3 Mating face and gauge information	6
3.1 Dimensions – High performance connectors – Grade 1	6
3.1.1 Connector with pin-centre contact.....	6
3.1.2 Connector with socket-centre contact	8
3.2 Gauges	9
3.2.1 Gauge pins for socket-centre contact.....	9
3.2.2 Test procedure	9
3.3 Dimensions – standard test connectors – Grade 0.....	10
3.3.1 Connector with pin-centre contact.....	10
3.3.2 Connector with socket-centre contact	11
4 Quality assessment procedure.....	11
4.1 General.....	11
4.2 Rating and characteristics (see Clause 6 of IEC 61169-1)	12
4.3 Test schedule and inspection requirements – Acceptance tests.....	14
4.3.1 Acceptance tests.....	14
4.3.2 Periodic tests	15
4.4 Procedures.....	16
4.4.1 Quality conformance inspection	16
4.4.2 Qualification approval and its maintenance.....	16
5 Instructions for preparation of detail specifications	17
5.1 General.....	17
5.2 Identification of the detail specification	17
5.3 Identification of the component.....	17
5.4 Performance.....	17
5.5 Marking, ordering information and related matters	18
5.6 Selection of tests, test conditions and severities.....	18
5.7 Blank detail specification pro forma for 2,92 series connectors.....	19
Bibliography.....	24
Figure 1 – Connector with pin-centre contact (for dimensions and notes, see Table 1).....	7
Figure 2 – Connector with socket-centre contact (for dimensions and notes, see Table 2).....	8
Figure 3 – Gauge pins for socket-centre contact (for dimensions and notes, see Table 3).....	9
Figure 4 – Connector with pin-centre contact (for dimensions and notes, see Table 4).....	10
Figure 5 – Connector with socket-centre contact (for dimensions and notes, see Table 5).....	11

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 pins for socket-centre contact	9
Table 4 – Dimensions of connector with pin-centre contact	10
Table 5 – Dimensions of connector with socket-centre contact.....	11
Table 6 – Rating and characteristics	12
Table 7 – Acceptance tests	14
Table 8 – Periodic tests	15

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 61169-35:2011](https://standards.iteh.ai/catalog/standards/sist/34b16fce-57d0-4a2f-a4a6-cdd0d6d0f88f/sist-en-61169-35-2011)

<https://standards.iteh.ai/catalog/standards/sist/34b16fce-57d0-4a2f-a4a6-cdd0d6d0f88f/sist-en-61169-35-2011>

INTERNATIONAL ELECTROTECHNICAL COMMISSION

RADIO-FREQUENCY CONNECTORS –**Part 35: Sectional specification for 2,92 series RF 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 61169-35 has been prepared by subcommittee 46F: RF and microwave passive components, of IEC technical committee 46: Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories.

This first edition cancels and replaces IEC/PAS 61169-35, published in 2009, of which it constitutes a minor revision. The only change is that the PAS has been changed into and International Standard.

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

FDIS	Report on voting
46F/191/FDIS	46F/196/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 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.

A bilingual version of this standard 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 61169-35:2011

<https://standards.iteh.ai/catalog/standards/sist/34b16fce-57d0-4a2f-a4a6-cdd0d6d0f88f/sist-en-61169-35-2011>

RADIO-FREQUENCY CONNECTORS –

Part 35: Sectional specification for 2,92 series RF connectors

1 Scope

This sectional specification provides information and rules for preparation of detail specification of 2,92 series RF coaxial connectors together with the pro-forma blank detail specification.

It also prescribes mating face dimensions for high performance connectors - grade 1, dimensional detail of standard test connectors - Grade 0, gauging information and tests selected from IEC 61169-1 applicable to all detail specifications relating to 2,92 series RF coaxial 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 2,92 series coaxial connectors with characteristic impedance 50 Ω , 2,92 mm inner diameter of outer conductor and screw coupling, are used for millimeter wave applications, connecting with RF cables or microstrips. The operating frequency limit is up to 40 GHz.

Mating interface standards of the 2,92 series connectors are similar to IEEE std 287-2007 (2,92 mm) and MIL-std-348A (SMK). The 2,92 connectors can be inter-mated with SMA, and 3,5 mm connectors as per following standards: SMA IEC 61169-35, MIL-PRF-39012D and MIL-STD-348A. 3,5 mm: IEC 60169-23, IEEE std 287-2007.

2 Normative references

The following referenced documents are indispensable for the application 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 61169-1:1992, *Radio-frequency connectors – Part 1: Generic specification – General requirements and measuring methods*¹
 Amendment 1 (1996)
 Amendment 2 (1997)

3 Mating face and gauge information

3.1 Dimensions – High performance connectors – Grade 1

3.1.1 Connector with pin-centre contact

Inch dimensions are original dimensions.

All undimensioned pictorial configurations are for reference purpose only.

¹ There exists a consolidated edition 1.2 (1998) that comprises IEC 61169-1:1992, its Amendment 1:1996 and its Amendment 2:1997.