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Standards

Irish Standard  
I.S. EN 61169-35:2011

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

## I.S. EN 61169-35:2011

*Incorporating amendments/corrigenda issued since publication:*

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EUROPEAN STANDARD

**EN 61169-35**

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2011

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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)

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.

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

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**I.S. EN 61169-35:2011**

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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2014-08-15

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**Endorsement notice**

The text of the International Standard IEC 61169-35:2011 was approved by CENELEC as a European Standard without any modification.

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.

## 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

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**RADIO-FREQUENCY CONNECTORS –****Part 35: Sectional specification for 2,92 series RF connectors**

## FOREWORD

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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.**

## 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  $\Omega$  , 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*<sup>1</sup>

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.

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

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