NSAI
Standards

Irish Standard
I.S. EN 61169-11:2017

Radio-frequency connectors - Part 11: Sectional specification for RF coaxial connectors with inner diameter of outer conductor 9,5 mm with threaded coupling - Characteristic impedance 50 ⊠ (type 4,1-9,5)

I.S. EN 61169-11:2017

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National Foreword

I.S. EN 61169-11:2017 is the adopted Irish version of the European Document EN 61169-11:2017, Radio-frequency connectors - Part 11: Sectional specification for RF coaxial connectors with inner diameter of outer conductor 9,5 mm with threaded coupling - Characteristic impedance 50 ⊠ (type 4,1-9,5)

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61169-11

June 2017

ICS 33.120.30

English Version

Radio-frequency connectors - Part 11: Sectional specification for RF coaxial connectors with inner diameter of outer conductor 9,5 mm with threaded coupling - Characteristic impedance 50 Ω (type 4,1-9,5) (IEC 61169-11:2017)

Connecteurs pour fréquences radioélectriques - Partie 11: Spécification intermédiaire relative aux connecteurs coaxiaux pour fréquences radioélectriques avec diamètre intérieur du conducteur extérieur de 9,5 mm à couplage fileté - Impédance caractéristique 50 Ω (type 4,1-9,5) (IEC 61169-11:2017)

Hochfrequenz-Steckverbinder - Teil 11: Rahmenspezifikation für koaxile HF-Steckverbinder mit 9,5 mm Innendurchmesser des Außenleiters und Schraubverriegelung - Wellenwiderstand 50 Ω (Typ 4.1-9.5) (IEC 61169-11:2017)

This European Standard was approved by CENELEC on 2017-04-26. 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: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 61169-11:2017 E

European foreword

The text of document 46F/322A/CDV, future edition 1 of IEC 61159-11, prepared by SC 46F "RF and microwave passive components", of IEC/TC 46 "Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61159-11:2017.

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) 2018-01-26
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2020-04-26

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.

Endorsement notice

The text of the International Standard IEC 61159-11:2017 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, 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.

Publication	Year	Title	EN/HD	Year
IEC 61169-1	2013	Radio-frequency connectors -- Part 1: Generic specification - General requirements and measuring methods	EN 61169-1	2013
IEC 62037-3	-	Passive RF and microwave devices, intermodulation level measurement -- Part 3: Measurement of passive intermodulation in coaxial connectors	EN 62037-3	-

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IEC 61169-11

Edition 1.0 2017-03

INTERNATIONAL STANDARD

colour inside

Radio-frequency connectors – Part 11: Sectional specification for RF coaxial connectors with inner diameter of outer conductor 9,5 mm with threaded coupling – Characteristic impedance 50 Ω (type 4,1-9,5)

IEC 61169-11:2017-03(en)

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Radio-frequency connectors – Part 11: Sectional specification for RF coaxial connectors with inner diameter of outer conductor 9,5 mm with threaded coupling – Characteristic impedance 50 Ω (type 4,1-9,5)

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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Part 11: Sectional specification for RF coaxial connectors with inner diameter of outer conductor 9,5 mm with threaded coupling – Characteristic impedance 50 Ω (type 4,1-9,5)

FOREWORD

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International Standard IEC 61169-11 has been prepared by subcommittee 46F: RF and microwave passive components, of IEC technical committee 46: Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories.

The text of this International Standard is based on the following documents:

CDV	Report on voting
46F/322A/CDV	46F/336/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document 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 document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

- reconfirmed,
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- replaced by a revised edition, or
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RADIO-FREQUENCY CONNECTORS –

Part 11: Sectional specification for RF coaxial connectors with inner diameter of outer conductor 9,5 mm with threaded coupling – Characteristic impedance 50 Ω (type 4,1-9,5)

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 threaded coupling, typically for use in 50 Ω cable networks (type 4,1-9,5).

This document 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 4,1-9,5 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 4,1-9,5 types RF coaxial connectors with nominal impedance 50 Ω are threaded coupling units which are used with all kinds of RF cables and microstrips in microwave transmission systems. And the working frequency is up to 14 GHz.

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

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 62037-3, *Passive RF and microwave devices, intermodulation level measurement – Part 3: Measurement of passive intermodulation in coaxial connectors*

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.