

STN	Vysokofrekvenčné konektory Časť 15: VF koaxiálne konektory s vnútorným priemerom vonkajšieho vodiča 4,13 mm (0,163 in) so závitovým spojením Charakteristická impedancia 50 Ohm (Typ SMA)	STN EN IEC 61169-15 35 3811
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Radio-frequency connectors - Part 15: Sectional specification - RF coaxial connectors with inner diameter of outer conductor 4,13 mm (0,163 in) with threaded coupling - Characteristic impedance 50 (type SMA)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 07/21

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EUROPEAN STANDARD

EN IEC 61169-15

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2021

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English Version

**Radio-frequency connectors - Part 15: Sectional specification -
RF coaxial connectors with inner diameter of outer conductor
4,13 mm (0,163 in) with threaded coupling - Characteristic
impedance 50 Ω (type SMA)
(IEC 61169-15:2021)**

Connecteurs pour fréquences radioélectriques - Partie 15:
Spécification intermédiaire - Connecteurs coaxiaux pour
fréquences radioélectriques avec diamètre intérieur du
conducteur extérieur de 4,13 mm (0,163 in) à couplage
fileté - Impédance caractéristique 50 Ω (type SMA)
(IEC 61169-15:2021)

Hochfrequenz-Steckverbinder - Teil 15: Koaxiale HF-
Steckverbinder mit 4,13 mm (0,163 in) Innendurchmesser
des Außenleiters und Schraubverriegelung -
Wellenwiderstand 50 Ohm (Typ SMA)
(IEC 61169-15:2021)

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EN IEC 61169-15:2021 (E)**European foreword**

The text of document 46F/528(F)/FDIS, future edition 1 of IEC 61169-15, 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 IEC 61169-15:2021.

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- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2021–11–23
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IEC 61169-35 NOTE Harmonized as EN 61169-35

Annex ZA (normative)

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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 61169-1	2013	Radio frequency connectors - Part 1: Generic specification - General requirements and measuring methods	EN 61169-1	2013
IEC 62153-4-7	2015	Metallic communication cable test methods - Part 4-7: Electromagnetic compatibility (EMC) - Test method for measuring of transfer impedance Z_T and screening attenuation a_s or coupling attenuation a_c of connectors and assemblies up to and above 3 GHz - Triaxial tube in tube method	EN 62153-4-7	2016



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Edition 1.0 2021-01

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Radio-frequency connectors –
Part 15: Sectional specification – RF coaxial connectors with inner diameter of
outer conductor 4,13 mm (0,163 in) with threaded coupling – Characteristic
impedance 50 Ω (type SMA)**

**Connecteurs pour fréquences radioélectriques –
Partie 15: Spécification intermédiaire – Connecteurs coaxiaux pour fréquences
radioélectriques avec diamètre intérieur du conducteur extérieur de 4,13 mm
(0,163 in) à couplage fileté – Impédance caractéristique 50 Ω (type SMA)**



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Edition 1.0 2021-01

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Radio-frequency connectors –

Part 15: Sectional specification – RF coaxial connectors with inner diameter of outer conductor 4,13 mm (0,163 in) with threaded coupling – Characteristic impedance 50 Ω (type SMA)

Connecteurs pour fréquences radioélectriques –

Partie 15: Spécification intermédiaire – Connecteurs coaxiaux pour fréquences radioélectriques avec diamètre intérieur du conducteur extérieur de 4,13 mm (0,163 in) à couplage fileté – Impédance caractéristique 50 Ω (type SMA)

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CONTENTS

FOREWORD	3
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Mating face and gauge information	6
4.1 Dimensions – High performance connectors – Grade 1	6
4.1.1 Connector with pin centre contact	6
4.1.2 Connector with socket centre contact	7
4.2 Gauge pin for socket centre contact	9
4.3 Dimensions – Standard test connectors – Grade 0	9
4.3.1 Connectors with pin centre contact	9
4.3.2 Connector with socket centre contact	11
5 Quality assessment procedures	12
5.1 General	12
5.2 Ratings and characteristics	12
5.3 Test schedule and inspection requirements	16
5.3.1 Acceptance tests	16
5.3.2 Periodic tests	16
5.3.3 Procedures for the quality conformance	18
6 Instructions for preparation of detail specifications	18
6.1 General	18
6.2 Identification of the component	18
6.3 Performance	18
6.4 Marking, ordering information and related matters	19
6.5 Selection of tests, test conditions and severities	19
6.6 Blank detail specification pro-forma for SMA connectors	19
Bibliography	24
Figure 1 – Connector with pin centre contact (for dimensions, see Table 1)	6
Figure 2 – Connector with socket centre contact (for dimensions, see Table 2)	8
Figure 3 – Gauge pin for socket centre contact (for dimensions, see Table 3)	9
Figure 4 – Connector with pin centre contact (for dimensions, see Table 4)	10
Figure 5 – Connector with socket in centre contact (for dimensions, 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 pin 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 – Preferred climatic categories	12
Table 7 – Ratings and characteristics	12
Table 8 – Acceptance tests	16
Table 9 – Periodic tests	17

INTERNATIONAL ELECTROTECHNICAL COMMISSION

RADIO-FREQUENCY CONNECTORS –**Part 15: Sectional specification – RF coaxial connectors with inner diameter of outer conductor 4,13 mm (0,163 in) with threaded coupling – Characteristic impedance 50 Ω (type SMA)**

FOREWORD

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International Standard IEC 61169-15 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.

This first edition cancels and replaces IEC 60169-15 published in 1979 and the amendment 1 published in 1996. This edition constitutes a technical revision.

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

FDIS	Report on voting
46F/528/FDIS	46F/541/RVD

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

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

Part 15: Sectional specification – RF coaxial connectors with inner diameter of outer conductor 4,13 mm (0,163 in) with threaded coupling – Characteristic impedance 50 Ω (type SMA)

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 inner diameter of outer conductor 4,13 mm (0,163 in) with threaded coupling with a characteristic impedance of 50 Ω (type SMA).

This document specifies mating face dimensions for high performance connectors – grade 1, 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 SMA RF connectors.

This document 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 SMA types RF coaxial connectors are used with all kinds of RF cables and microstrips in microwave transmission systems. The operating frequency is up to 18 GHz. These connectors can be intermated with 3,5 mm (IEEE 287-2007) and 2,92 mm (IEC 61169-35) connectors.

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

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

IEC 62153-4-7:2015, *Metallic communication cable test methods – Part 4-7: Electromagnetic compatibility (EMC) – Test method for measuring of transfer impedance Z_T and screening attenuation a_s or coupling attenuation a_c of connectors and assemblies up to and above 3 GHz – Triaxial tube in tube method*

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