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Irish Standard
I.S. EN 61169-26:2013

Radio-frequency connectors -- Part 26:
Sectional specification for TNCA series
RF coaxial connectors (IEC 61169
-26:2013 (EQV))

I.S. EN 61169-26:2013

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**Radio-frequency connectors -
Part 26: Sectional specification for TNCA series RF coaxial connectors
(IEC 61169-26:2013)**

Connecteurs pour fréquences
radioélectriques -
Partie 26: Spécification intermédiaire pour
les connecteurs coaxiaux RF série TNCA
(CEI 61169-26:2013)

Hochfrequenz-Steckverbinder -
Teil 26: Rahmenspezifikation für koaxiale
HF-Steckverbinder der TNCA-Serie
(IEC 61169-26:2013)

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

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Foreword

The text of document 46F/220/FDIS, future edition 1 of IEC 61169-26, 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 61169-26:2013.

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) 2013-12-05
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2016-03-05

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Endorsement notice

The text of the International Standard IEC 61169-26:2013 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 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 60068-1	-	Environmental testing - Part 1: General and guidance	EN 60068-1	-
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 26: Sectional specification for TNCA series
RF coaxial connectors**

FOREWORD

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International Standard IEC 61169-26 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.

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

FDIS	Report on voting
46F/220/FDIS	46F/225/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.

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RADIO-FREQUENCY CONNECTORS –

Part 26: Sectional specification for TNCA series 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 TNCA series RF coaxial connectors, with characteristic impedance of 50 Ω , with threaded coupling and operating frequency limit up to 18 GHz, used in wireless, communication, instrument, antenna, test and measurements, radar, and other fields, connecting with RF cables or micro-strips.

It also prescribes mating face dimensions for general 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 TNCA series connectors.

This specification indicates the 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 (see Tables 8 and 9).

TNCA connectors are recommended for applications above 11 GHz. TNCA connectors are compatible with TNC connectors as described in the IEC 60169-17 and IEC 60169-26 provided that the dielectric of connector with socket-centre contact does not extend beyond reference plane. However when mated with these connectors, the performances are not ensured.

NOTE Attention is drawn to the fact that TNCA interface does not utilize overlapping PTFE dielectric for increased voltage breakdown resistance.

2 Normative reference

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 61169-1:1992, *Radio-frequency connectors – Part 1: Generic specification – General requirements and measuring methods*¹

Amendment 1:1996

Amendment 2:1997

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

3 Mating face and gauge information

3.1 Dimensions – General connectors – Grade 1

3.1.1 Connector with pin-centre contact (see Figure 1)

Metric dimensions are original dimensions.

¹ 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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