



**BSI Standards Publication**

## **Radio-frequency connectors**

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Part 4: RF coaxial connectors with inner diameter of outer conductor 16 mm (0,63 in) with screw lock — Characteristic impedance 50  $\Omega$  (type 7-16)

## National foreword

This British Standard is the UK implementation of EN 61169-4:2022. It is identical to IEC 61169-4:2008. It supersedes DD IEC/PAS 61169-4:2006, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EPL/46, Cables, wires and waveguides, radio frequency connectors and accessories for communication and signalling.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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English Version

**Radio-frequency connectors - Part 4: RF coaxial connectors with  
inner diameter of outer conductor 16 mm (0,63 in) with screw  
lock - Characteristic impedance 50  $\Omega$  (type 7-16)  
(IEC 61169-4:2008)**

Connecteurs pour fréquences radioélectriques - Partie 4:  
Connecteurs coaxiaux pour fréquences radioélectriques de  
diamètre intérieur du conducteur extérieur de 16 mm (0,63  
in) à verrouillage à vis - Impédance caractéristique 50  $\Omega$   
(type 7-16)  
(IEC 61169-4:2008)

Hochfrequenz-Steckverbinder - Teil 4: Koaxiale  
Hochfrequenzsteckverbinder mit 16 mm (0,63 in)  
Innendurchmesser des Außenleiters und  
Schraubverschluss - Wellenwiderstand 50 Ohm (Typ 7-16)  
(IEC 61169-4:2008)

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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

## **European foreword**

The text of document 46F/60/FDIS, future edition 1 of IEC 61169-4, 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 61169-4:2022.

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) 2023-07-11
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2025-10-11

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## **Endorsement notice**

The text of the International Standard IEC 61169-4:2008 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 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.

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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61169-1	-	Radio-frequency connectors - Part 1: Generic specification - General requirements and measuring methods	-	-
IEC 62037	-	RF connectors, connector cable assemblies and cables - Intermodulation level measurement	-	-

## CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references .....	6
3 Mating face and gauge information .....	6
3.1 Dimensions –General connectors – Grade 2.....	7
3.1.1 Connector with pin centre contact.....	7
3.1.2 Connector with socket centre contact .....	8
3.2 Gauges for general purpose connectors - Grade 2 .....	9
3.2.1 Gauges for connector with socket centre contact.....	9
3.3 Dimensions – standard test connectors – Grade 0.....	10
3.3.1 Standard test connector with pin centre contact.....	10
3.3.2 Standard test connector with socket centre contact .....	10
4 Quality assessment procedures .....	11
4.1 General.....	11
4.2 Ratings and characteristics .....	11
4.3 Test Schedule and Inspection requirements .....	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 type 7-16 connector .....	19
Figure 1 – Connector with pin centre contact .....	7
Figure 2 – Connector with socket centre contact.....	8
Figure 3 – Gauge pin for socket centre contact.....	9
Figure 4 – Gauge ring for socket outer contact.....	9
Figure 5 – Slotted centre contact .....	11
Table 1 – Connector with pin centre contact. ....	7
Table 2 – Connector with socket centre contact .....	8
Table 3 – Tolerance for the standard connector with pin centre contact. ....	10
Table 4 – Tolerance for the standard connector with socket centre contact .....	10
Table 5 – Slotted centre contact .....	11
Table 6 – Preferred climatic categories (see IEC 60068-1):.....	12
Table 7 – Ratings and characteristics .....	13

Table 8 – Acceptance tests ..... 14

Table 9 – Periodic tests ..... 15

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**RADIO-FREQUENCY CONNECTORS –****Part 4: RF coaxial connectors with inner diameter  
of outer conductor 16 mm (0,63 in) with screw lock –  
Characteristic impedance 50  $\Omega$  (type 7-16)**

## FOREWORD

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International Standard IEC 61169-4 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 standard cancels and replaces IEC/PAS 61169-4 published in 2006. This first edition constitutes a technical revision.

This bilingual version (2014-01) corresponds to the monolingual English version, published in 2008-04.

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

FDIS	Report on voting
46F/60/FDIS	46F/71/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.

The French version of this standard has not been voted upon.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of IEC 61169 series, published 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 maintenance result 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 4: RF coaxial connectors with inner diameter of outer conductor 16 mm (0,63 in) with screw lock – Characteristic impedance 50 $\Omega$ (type 7-16)**

#### **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 type 7-16 R.F. coaxial connectors with screw lock.

The connectors are normally used with 50  $\Omega$  flexible and semi-rigid r.f. cables for middle power applications in an operating frequency range up to 7,5 GHz.

It describes the interface dimensions for general purpose grade 2 connectors, dimensional details for standard test connectors, grade 0, together with gauging information and the mandatory tests selected from QC 22000 (IEC 61169-1), applicable to all DS relating to type 7-16 connectors.

This specification indicates the recommended performance characteristics to be considered when writing a DS and covers test schedules and inspection requirements.

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

IEC 62037, *RF connectors, connector cable assemblies, and cables - Intermodulation level measurement*

#### **3 Mating face and gauge information**

Metric dimension are original dimensions.

All undimensioned pictorial configurations are for reference purpose only.