

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)**

## EESTI STANDARDI EESSÕNA

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See Eesti standard EVS-EN IEC 61169-4:2022 sisaldab Euroopa standardi EN IEC 61169-4:2022 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 61169-4:2022 consists of the English text of the European standard EN IEC 61169-4:2022.
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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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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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2025-10-11

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# INTERNATIONAL STANDARD

**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)**



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# INTERNATIONAL STANDARD

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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)**

INTERNATIONAL  
ELECTROTECHNICAL  
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PRICE CODE

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## 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)**

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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.

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.

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

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A bilingual version of this publication may be issued at a later date.

## **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.