



BSI Standards Publication

Radio-frequency connectors

Part 24: Sectional specification — Radio frequency coaxial connectors with screw coupling, typically for use in 75 Ω cable networks (type F)

National foreword

This British Standard is the UK implementation of EN IEC 61169-24:2019. It is identical to IEC 61169-24:2019. It supersedes BS EN 61169-24:2009, which is withdrawn.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 secretary.

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English Version

**Radio-frequency connectors - Part 24: Sectional specification -
Radio frequency coaxial connectors with screw coupling,
typically for use in 75 Ohm cable networks (type F)
(IEC 61169-24:2019)**

Connecteurs pour fréquences radioélectriques - Partie 24:
Spécification intermédiaire - Connecteurs coaxiaux pour
fréquences radioélectriques avec couplage vissé,
typiquement utilisés dans des réseaux de distribution par
câbles de 75 Ohms (type F)
(IEC 61169-24:2019)

Hochfrequenz-Steckverbinder - Teil 24:
Rahmenspezifikation - Koaxiale
Hochfrequenzsteckverbinder mit Schraubkupplung,
vorzugsweise für den Einsatz in 75 Ohm Kabelnetzen (Typ
F)
(IEC 61169-24:2019)

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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/417/CDV, future edition 3 of IEC 61169-24, 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 61169-24:2019.

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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) 2020-05-23
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-08-23

This document supersedes EN 61169-24:2009 and all of its amendments and corrigenda (if any).

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

RADIO-FREQUENCY CONNECTORS –**Part 24: Sectional specification – Radio frequency coaxial connectors with screw coupling, typically for use in 75 Ω cable networks (type F)**

FOREWORD

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International Standard IEC 61169-24 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 third edition cancels and replaces the second edition published in 2009. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition: all drawings have been reworked and improved to allow frequency extension up to 3 GHz.

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

CDV	Report on voting
46F/417/CDV	46F/436A/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,
- withdrawn,
- replaced by a revised edition, or
- amended.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

RADIO-FREQUENCY CONNECTORS –

Part 24: Sectional specification – Radio frequency coaxial connectors with screw coupling, typically for use in 75 Ω cable networks (type F)

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 screw coupling, typically for use in 75 Ω cable networks (type F).

It describes the interface dimensions with gauging information and the mandatory tests selected from IEC 61169-1, applicable to all DS relating to type F connectors.

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

NOTE Millimetres are original dimensions. All undimensioned pictorial configurations are for reference purposes 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*

EN 60068-2-52, *Environmental testing – Test methods. Tests. Test Kb. Salt mist, cyclic (sodium chloride solution)*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

4 Interface dimensions

4.1 Dimensions

4.1.1 Connector “F” type female socket (indoor) physical dimensions

Figure 1 shows a connector “F” type female socket (indoor).