

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Radio-frequency connectors –
Part 47: Sectional specification for radio-frequency coaxial connectors with
clamp coupling, typically for use in 75 Ω cable networks (type F-Quick)**

**Connecteurs pour fréquences radioélectriques –
Partie 47: Spécification intermédiaire relative aux connecteurs coaxiaux pour
fréquences radioélectriques avec couplage par bride, spécifiquement utilisés
dans les réseaux câblés 75 Ω (type F-Quick)**



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CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references	6
3 Interface dimensions	6
3.1 Dimensions	6
3.1.1 Common dimensions	6
3.1.2 Example of connector “F-Quick” type male plug with resilient outer conductor sleeve (indoor) physical dimensions	7
3.1.3 Example of connector “F-Quick” type male plug with slotted outer conductor (indoor) physical dimensions	8
3.1.4 Example of connector “F-Quick” type male plug with slotted outer conductor and snap ring (indoor) physical dimensions	8
3.2 Mechanical gauges	9
4 Quality assessment procedures	10
4.1 General.....	10
4.2 Ratings and characteristics	10
4.3 Environmental characteristics for outdoor sockets.....	12
4.4 Test schedule and inspection requirements.....	12
4.4.1 Acceptance tests	12
4.4.2 Periodic tests.....	12
4.5 Procedures for the quality conformance	14
4.5.1 Quality conformance inspection	14
4.5.2 Quality conformance and its maintenance – General procedure	14
5 Instructions for preparation of detail specifications	14
5.1 General.....	14
5.2 Identification of the component	14
5.3 Performance	15
5.4 Marking, ordering information and related matters	15
5.5 Selection of tests, test conditions and severities	15
5.6 Blank detail specification pro-forma for type F-QUICK connector	16
6 Marking	21
6.1 Marking of component.....	21
6.2 Marking and contents of package.....	21
 Figure 1 – Connector “F-Quick” type male plug: general dimensions	7
Figure 2 – Example of connector “F-Quick” type male plug with resilient outer conductor sleeve (indoor)	8
Figure 3 – Example of connector “F-Quick” type male plug with slotted outer conductor (indoor).....	8
Figure 4 – Example of connector “F-Quick” type male plug with slotted outer conductor and snap ring (indoor).....	9
Figure 5 – Mechanical gauge for resilient outer conductor	9
 Table 1 – Connector “F” type male plug (indoor)	7

Table 2 – Ratings and characteristics 10
Table 3 – Acceptance tests 12
Table 4 – Periodic tests 13

INTERNATIONAL ELECTROTECHNICAL COMMISSION

RADIO-FREQUENCY CONNECTORS –

Part 47: Sectional specification for radio-frequency coaxial connectors with clamp coupling, typically for use in 75 Ω cable networks (type F-Quick)

FOREWORD

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International Standard IEC 61169-47 has been prepared by subcommittee 46F: R.F. and microwave passive components, of IEC technical committee 46: Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories.

This bilingual version (2017-11) corresponds to the monolingual English version, published in 2015-03.

This second edition cancels and replaces the first edition published in 2012. It constitutes a technical revision.

The main changes are listed below:

- Subclause 3.2 has been updated to better define gauging.
- Table 2 has been updated for insertion and removal forces.
- Clause 4 has been updated to refer to the new edition of IEC 61169-1.

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

CDV	Report on voting
46F/272/CDV	46F/306/RVC

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 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 website under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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RADIO-FREQUENCY CONNECTORS –

Part 47: Sectional specification for radio-frequency coaxial connectors with clamp coupling, typically for use in 75 Ω cable networks (type F-Quick)

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 clamp coupling, typically for use in 75 Ω cable networks (type F-Quick).

It describes the interface dimensions with gauging information, electrical and mechanical performance including the mandatory tests selected from IEC 61169-1:2013, applicable to all DS relating to type F-Quick connectors.

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

NOTE This interface is typically used for indoor connections, which are easily disconnected and reconnected. The typical application is for F-type coaxial receiver leads or F-type coaxial patch cables. The interface may also be known as a Push-on connector. It is preferred to use the fixed (screwed) connectors type F according to IEC 61169-24:2009.

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 61169-24:2009, *Radio-frequency connectors – Part 24: Sectional specification – Radio frequency coaxial connectors with screw coupling, typically for use in 75 Ω cable networks (type F)*

IEC 62037 (all parts), *Passive RF and microwave devices, intermodulation level measurement*

IEC 62037-3, *Passive RF and microwave devices, intermodulation level measurement – Part 3: Measurement of passive intermodulation in coaxial connectors*

3 Interface dimensions

3.1 Dimensions

3.1.1 Common dimensions

Millimetres are original dimensions.

All un-dimensioned pictorial configurations are for reference purposes only.

Figure 1 and Table 1 depict the dimensions that are common to any F connector and thus indispensable for compatibility. Examples of specific design with their dimensions are given in 3.1.2 to 3.1.4.