

Vysokofrekvenčné konektory. Časť 47: Rámcová špecifikácia na vysokofrekvenčné koaxiálne konektory so svorkovým spojením, prednostne na použitie v káblových sieťach 75 ? (typ F-Quick).

STN EN 61169-47

35 3811

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/15

Obsahuje: EN 61169-47:2015, IEC 61169-47:2015

Oznámením tejto normy sa od 04.05.2018 ruší STN EN 61169-47 (35 3811) z mája 2013

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 61169-47

July 2015

ICS 33.120.30

Supersedes EN 61169-47:2012

English Version

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) (IEC 61169-47:2015)

Connecteurs pour fréquences radioélectriques -Partie 47: Spécification intermédiaire relative aux connecteurs coaxiaux pour fréquences radioélectriques avec accouplement par serrage, spécifiquement utilisés dans les réseaux câblés 75 Ω (type F-Quick) (IEC 61169-47:2015) Hochfrequenzsteckverbinder - Teil 47: Rahmenspezifikation für koaxiale Hochfrequenzsteckverbinder mit Klemmkupplung, vorzugsweise für den Einsatz in 75-Ω-Kabelnetzen (Typ F-Quick) (IEC 61169-47:2015)

This European Standard was approved by CENELEC on 2015-05-04. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

The text of document 46F/272/CDV, future edition 2 of IEC 61169-47, 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 61169-47:2015.

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)	2016-02-04
•	latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2018-05-04

This document supersedes EN 61169-47:2012.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 61169-47:2015 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 1 When 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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 61169-1	2013	Radio-frequency connectors - Part 1: Generic specification - General requirements and measuring methods	EN 61169-1	2013
IEC 61169-24	2009	Radio-frequency connectors - Part 24: Sectional specification - Radio frequency coaxial connectors with screw coupling, typically for use in 75 ohm cable networks (type F)	EN 61169-24	2009
IEC 62037	Series	Passive RF and microwave devices, intermodulation level measurement	EN 62037	Series
IEC 62037-3	-	Passive RF and microwave devices, intermodulation level measurement - Part 3: Measurement of passive intermodulation in coaxial connectors	EN 62037-3	-



IEC 61169-47

Edition 2.0 2015-03

INTERNATIONAL STANDARD



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)





THIS PUBLICATION IS COPYRIGHT PROTECTED Copyright © 2015 IEC, Geneva, Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester. If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

IEC Central Office Tel.: +41 22 919 02 11 3, rue de Varembé Fax: +41 22 919 03 00

CH-1211 Geneva 20 info@iec.ch Switzerland www.iec.ch

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigenda or an amendment might have been published.

IEC Catalogue - webstore.iec.ch/catalogue

The stand-alone application for consulting the entire bibliographical information on IEC International Standards, Technical Specifications, Technical Reports and other documents. Available for PC, Mac OS, Android Tablets and iPad

IEC publications search - www.iec.ch/searchpub

The advanced search enables to find IEC publications by a variety of criteria (reference number, text, technical committee,...). It also gives information on projects, replaced and withdrawn publications.

IEC Just Published - webstore.iec.ch/justpublished

Stay up to date on all new IEC publications. Just Published details all new publications released. Available online and also once a month by email.

Electropedia - www.electropedia.org

The world's leading online dictionary of electronic and electrical terms containing more than 30 000 terms and definitions in English and French, with equivalent terms in 15 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

IEC Glossary - std.iec.ch/glossary

More than 60 000 electrotechnical terminology entries in English and French extracted from the Terms and Definitions clause of IEC publications issued since 2002. Some entries have been collected from earlier publications of IEC TC 37, 77, 86 and CISPR.

IEC Customer Service Centre - webstore.iec.ch/csc

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: csc@iec.ch.



IEC 61169-47

Edition 2.0 2015-03

INTERNATIONAL STANDARD



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)

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 33.120.30 ISBN 978-2-8322-2581-3

Warning! Make sure that you obtained this publication from an authorized distributor.

CONTENTS

F	OREWO	PRD	4
1	Scop	pe	6
2	Norn	native references	6
3	Inter	face 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	Qual	ity 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 conformanceand its maintenance – General procedure	14
5	Instr	uctions 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	Mark	ing	20
	6.1	Marking of component	20
	6.2	Marking and contents of package	20
Fi	gure 1 -	- Connector "F-Quick" type male plug: general dimensions	7
		- Example of connector "F-Quick" type male plug with resilient outer r sleeve (indoor)	8
		- Example of connector "F-Quick" type male plug with slotted outer conductor	8
		- Example of connector "F-Quick" type male plug with slotted outer conductor ring (indoor)	9
Fi	igure 5	- Mechanical gauge for resilient outer conductor	9

STN EN 61169-47: 2016

IEC 61169-47:2015 © IEC 2015 - 3 -

Table 1 – Connector "F" type male plug (indoor)	
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

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

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 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.

IEC 61169-47:2015 © IEC 2015

- 5 -

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.

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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- · amended.

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

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 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, 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 61169-1:2013, 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

koniec náhľadu – text ďalej pokračuje v platenej verzii STN