

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 © 2012 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
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
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.

Useful links:

IEC publications search - www.iec.ch/searchpub

The advanced search enables you 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It also gives information on projects, replaced and withdrawn publications.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 on-line 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 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) on-line.

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.



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

PRICE CODE

R

ICS 33.120.30

ISBN 978-2-83220-289-0

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

CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references	5
3 Interface dimensions	5
3.1 Dimensions	5
3.1.1 Common dimensions	5
3.1.2 Example of connector “F-Quick” type male plug with resilient outer conductor sleeve (indoor) physical dimensions	6
3.1.3 Example of connector “F-Quick” type male plug with slotted outer conductor (indoor) physical dimensions	7
3.1.4 Example of connector “F-Quick” type male plug with slotted outer conductor and snap ring (indoor) physical dimensions	7
3.2 Mechanical gauges.....	8
4 Quality assessment procedures	9
4.1 General	9
4.2 Ratings and characteristics	9
4.3 Environmental characteristics for outdoor sockets	11
4.4 Test schedule and inspection requirements	11
4.4.1 Acceptance tests	11
4.4.2 Periodic tests.....	11
4.5 Procedures.....	13
4.5.1 Quality conformance inspection	13
4.5.2 Qualification approval and its maintenance	13
5 Instructions for preparation of detail specifications	13
5.1 General.....	13
5.2 Identification of the detail specification	14
5.3 Identification of the component.....	14
5.4 Performance.....	14
5.5 Marking, ordering information and related matters	14
5.6 Selection of tests, test conditions and severities.....	14
5.7 Blank detail specification pro-forma for type F connector	15
Figure 1 – Connector “F-Quick” type male plug: General dimensions	6
Figure 2 – Example of connector “F-Quick” type male plug with resilient outer conductor sleeve (indoor)	7
Figure 3 – Example of connector “F-Quick” type male plug with slotted outer conductor (indoor).....	7
Figure 4 – Example of connector “F-Quick” type male plug with slotted outer conductor and snap ring (indoor).....	8
Figure 5 – Mechanical gauge	8
Table 1 – Connector “F” type male plug (indoor)	6
Table 2 – Ratings and characteristics (1 of 2)	9
Table 3 – Acceptance tests	11
Table 4 – Periodic tests (1 of 2)	12

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.

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

CDV	Report on voting
46F/204/CDV	46F/213/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 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.

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.

Withdrawn