



Edition 1.0 2025-08

INTERNATIONAL STANDARD

Radio-frequency connectors - Standards
Part 23: Pin and socket connector for use with 3,5 mm rigid precision coaxial lines with inner diameter of outer conductor of 3,5 mm (0,1378 in)

Document Preview

IEC 61169-23:2025

https://standards.iteh.ai/catalog/standards/iec/0edc6ff3-fa2a-409a-9995-44be7d018615/iec-61169-23-2025

1169-23:20

ICS 33.120.30 ISBN 978-2-8327-0665-7



THIS PUBLICATION IS COPYRIGHT PROTECTED Copyright © 2025 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 Secretariat Tel.: +41 22 919 02 11

3, rue de Varembé info@iec.ch CH-1211 Geneva 20 www.iec.ch

Switzerland

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 corrigendum or an amendment might have been published.

IEC publications search -

webstore.iec.ch/advsearchform

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 It also gives information on projects, replaced and withdrawn publications.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/justpublishedStay up to date on all new IEC publications. Just Published

details all new publications released. Available online and once a month by email.

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: sales@jec.ch.

IEC Products & Services Portal - products.iec.ch

Discover our powerful search engine and read freely all the publications previews, graphical symbols and the glossary. With a subscription you will always have access to up to date content tailored to your needs.

Electropedia - www.electropedia.org

The world's leading online dictionary on electrotechnology, containing more than 22 500 terminological entries in English and French, with equivalent terms in 25 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

Preview

<u> 1EC 61169-23:2025</u>

https://standards.iteh.ai/catalog/standards/iec/0edc6ff3-fa2a-409a-9995-44he7d018615/iec-61169-23-2024

IEC 61169-23:2025 © IEC 2025

CONTENTS

	FC	REWO	PRD	2		
	1	Scop	4			
	2					
	3	Term	ns and definitions	ions		
	4 Mating face and gauge information			5		
		4.1	Dimensions – High performance connectors – Grade1			
		4.1.1	Connector with pin-centre contact	5		
		4.1.2	Connector with socket-centre contact	6		
		4.2	Gauge pins for socket-centre contact	8		
		4.3	Dimensions – Standard test connectors – Grade 0	8		
		4.3.1	-			
		4.3.2				
	5		ity assessment procedures			
		5.1	General			
		5.2	Ratings and characteristics (see IEC 61169-1:2013, Clause 5)			
		5.3	Test schedule and inspection requirements			
		5.3.1	'			
		5.3.2				
	6	5.3.3				
	O		uctions for preparation of detail specifications	10		
		6.1 6.2	General	16		
		6.3	Performances	17		
		6.4	Marking, ordering information and related matters			
		6.5	Selection of tests, test conditions and severities			
		6.6	Blank detail specification pro-forms for type 3.5 series connector	18		
	Bik	oliograp	s iteh.ai/catalog/standards/iec/0edc6ff3-fa2a-409a-9995-44be7d018615/iec-611 phy	69-23- 22		
		5 1	•			
	Fig	gure 1 -	- Connector with pin-centre contact	5		
	Fig	gure 2 -	- Connector with socket-centre contact	7		
			- Gauge pin for socket-centre contact			
	•		- Connector with pin-centre contact			
Figure 5 – Connector with socket-centre contact						
rigure o Commedia with Socker-contre contact				10		
	Та	ble 1 –	Dimensions of connector with pin-centre contact	6		
			Dimensions of connector with socket-centre contact			
			Dimensions of gauge pin for socket-centre contact			
			Dimensions of connector with pin-centre contact			
			·			
			Dimensions of connector with socket-centre contact			
			Preferred climatic categories			
			Rating and characteristics			
			Acceptance tests			
	Ta	ble 9 -	Periodic tests	15		

IEC 61169-23:2025 © IEC 2025

INTERNATIONAL ELECTROTECHNICAL COMMISSION

Radio-frequency connectors -

Part 23: Pin and socket connector for use with 3,5 mm rigid precision coaxial lines with inner diameter of outer conductor 3,5 mm (0,1378 in)

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) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at https://patents.iec.ch. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 61169-23 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. It is an International Standard.

This first edition cancels and replaces IEC 60169-23:1991. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC 60169-23:1991:

- a) use of IEC 61169-1:2013 as its generic specification instead of using IEC 60169-1:1987;
- b) all the subclauses and test methods are in line with IEC 61169-1:2013;
- c) mating faces and dimensions have been revised;