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Responsible committee: EPL/46 Cables, wires and waveguides, radio frequency connectors and accessories for communication and signalling

Interested committees:

Title: BS EN IEC 61169-23 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 of 3.5 mm (0.1378 in)

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- iii) requires additional national guidance or information

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

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Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/Figure/ Table/Note	Type of comment	Commend (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



46F/640/CD

COMMITTEE DRAFT (CD)

PROJECT NUMBER:

IEC 61169-23 ED1

DATE OF CIRCULATION:

2023-02-17

CLOSING DATE FOR COMMENTS:

2023-05-12

SUPERSEDES DOCUMENTS:

46F/637/RR

IEC SC 46F : RF AND MICROWAVE PASSIVE COMPONENTS

SECRETARIAT:

United States of America

SECRETARY:

Mr John Morelli

OF INTEREST TO THE FOLLOWING COMMITTEES:

PROPOSED HORIZONTAL STANDARD:



Other TC/SCs are requested to indicate their interest, if any, in this CD to the secretary.

FUNCTIONS CONCERNED:

☐ EMC

☐ ENVIRONMENT

☐ QUALITY ASSURANCE

☐ SAFETY

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- any relevant patent rights of which they are aware and to provide supporting documentation,
- any local regulations or technical reasons that may exist and should be considered should this proposal proceed, recognizing that failure to address such requirements could result in the need for new or existing "in some countries" clauses. See AC/22/2007.

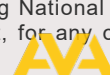
TITLE:

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 of 3.5 mm (0.1378 in)

NOTE FROM TC/SC OFFICERS:

Proposed revision of 3.5 MM connectors by Chine NC

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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

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- International Standard IEC 61169-XX 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.

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

FDIS	Report on voting
46F/XX/FDIS	46F/XX/RVD

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.

97 The committee has decided that the contents of this document will remain unchanged until the
98 stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to
99 the specific document. At this date, the document will be

- 100 • reconfirmed,
- 101 • withdrawn,
- 102 • replaced by a revised edition, or
- 103 • amended.

104

105 The National Committees are requested to note that for this document the stability date
106 is 20XX.

107 THIS TEXT IS INCLUDED FOR THE INFORMATION OF THE NATIONAL COMMITTEES AND WILL BE DELETED
108 AT THE PUBLICATION STAGE.

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

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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)

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 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).

This document prescribes mating face dimensions for high performance connectors – grade 1, dimensional details of standard test connectors-grade 0, gauging information and tests selected from IEC 61169-1, applicable to all detail specifications relating to series 3,5mm RF connectors.

This document indicates recommended performance characteristics to be considered when writing a detail specification and it covers test schedules and inspection requirements for assessment levels M and H.

These connectors are constructed so as to affix on the 50Ω, 3,5 mm rigid precision coaxial line described in IEC 457-5, and to provide low reflection to 34 GHz. These connectors can be intermated with SMA (IEC 61169-15) and 2,92 mm (IEC 61169-35) connectors.

NOTE: Metric dimension are original dimensions. All undimensioned pictorial configurations are for reference purpose 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*

IEC 62153-4-7:2015, *Metallic communication cable test methods-Part4-7 : Electromagnetic compatibility (EMC) -Test method for measuring of transfer impedance Z_T and screening attenuation a_s or coupling attenuation a_c of connectors and assemblies up to and above 3 GHz- Triaxial tube in tube method.*

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 Mating face and gauge information

4.1 Dimensions –High performance connectors –Grade1

4.1.1 Connector with pin- centre contact

The mating face of connector with pin centre contact is shown in Figure 1 and its dimensions are shown in Table 1.