BS EN IEC 61169-70:2024

BSI Standards Publication

Radio-frequency connectors

Part 70: Sectional specification for series HD-BNC radio-frequency coaxial connectors — Characteristic Impedance 75 Ω

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National foreword

This British Standard is the UK implementation of EN IEC 61169-70:2024. It is identical to IEC 61169-70:2024.

The UK participation in its preparation was entrusted to Technical Committee EPL/46, Cables, wires and waveguides, radio frequency connectors and accessories for communication and signalling.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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English Version

Radio-frequency connectors - Part 70: Sectional specification for series HD-BNC radio-frequency coaxial connectors - Characteristic Impedance 75 Ω (IEC 61169-70:2024)

Connecteurs pour fréquences radioélectriques - Partie 70 : Spécification intermédiaire pour les connecteurs coaxiaux pour fréquences radioélectriques de la série HD-BNC - Impédance caractéristique de 75 Ω (IEC 61169-70:2024)

Hochfrequenz-Steckverbinder - Teil 70: Rahmenspezifikation für Hochfrequenz-Koaxialsteckverbinder der Serie HD-BNC - Wellenwiderstand 75 Ohm (IEC 61169-70:2024)

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European foreword

The text of document 46F/657/FDIS, future edition 1 of IEC 61169-70, prepared by SC 46F "RF and microwave passive components" of IEC/TC 46 "Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61169-70:2024.

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)	2025-01-02
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2027-04-02

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Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where 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.cencenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 61169-1	2013	Radio frequency connectors - Part 1: Generic specification - General requirements and measuring methods	EN 61169-1	2013

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CONTENTS

FOREWORD 3
1 Scope 5
2 Normative references 5
3 Terms and definitions 5
4 Mating face and gauge information 5
4.1 Dimensions – General connectors – Grade 1 5
4.1.1 Connector with pin-centre contact 5
4.1.2 Connector with socket-centre contact 7
4.1.3 Coupling nut details 9
4.2 Gauges 11
4.2.1 Gauge pin for socket-centre contact 11
4.2.2 Gauge for outer contact of plug 12
5 Quality assessment procedure 13
5.1 General 13
5.2 Rating and characteristics (see IEC 61169-1:2013, Clause 5) 14
5.3 Test schedule and inspection requirements 16
5.3.1 Acceptance tests 16
5.3.2 Periodic tests 16
5.4 Procedures 17
5.4.1 Quality conformance inspection 17
5.4.2 Quality conformance and its maintenance 18
6 Instructions for preparation of detail specifications (DS) 18
6.1 General 18
6.2 Identification of the component 18
6.3 Performance 18
6.4 Marking, ordering information and related matters 18
6.5 Selection of tests, test conditions and severities 19
6.6 Blank detail specification pro forma for series HD-BNC connectors 19

Figure 1 – Connector with pin-centre contact 6
Figure 2 – Pin-centre contact 6
Figure 3 – Connector with socket-centre contact 8
Figure 4 – Socket- centre contact 8
Figure 5 – Coupling nut details 10
Figure 6 – Gauge pin for socket-centre contact 11
Figure 7 – Gauge for outer contact of plug 13

Table 1 – Dimensions of connector with pin-centre contact 7
Table 2 – Dimensions of connector with socket-centre contact 9
Table 3 – Dimensions of coupling nut 11
Table 4 – Dimensions of gauge pin for socket-centre contact 12
Table 5 – Dimensions of outer contact gauge 13
Table 6 – Rating and characteristics 14
Table 7 – Acceptance tests 16
Table 8 – Periodic tests 16

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RADIO-FREQUENCY CONNECTORS –

Part 70: Sectional specification for series HD-BNC radio-frequency coaxial connectors – Characteristic impedance 75 Ω

FOREWORD

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IEC 61169-70 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.

The text of this International Standard is based on the following documents:

Draft	Report on voting
46F/657/FDIS	46F/664/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

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This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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 document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
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RADIO-FREQUENCY CONNECTORS –

Part 70: Sectional specification for series HD-BNC radio-frequency coaxial connectors – Characteristic impedance 75 Ω

1 Scope

This part of IEC 61169, which is a sectional specification (SS), provides information and rules for the preparation of detail specifications (DS) of HD-BNC series RF coaxial connectors together with the pro forma blank detail specification. HD-BNC series connectors with characteristic impedance of 75 Ω are used with RF cables or micro-strips in microwave, telecommunication, wireless and other fields. The operating frequency limit is up to 18 GHz.

It also prescribes mating face dimensions for general purpose connectors, gauging information and tests selected from IEC 61169-1, applicable to all detail specifications relating to series HD-BNC RF connectors.

This specification indicates the 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.

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*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at https://www.electropedia.org/
- ISO Online browsing platform: available at https://www.iso.org/obp

4 Mating face and gauge information

4.1 Dimensions – General connectors – Grade 1

4.1.1 Connector with pin-centre contact

The mating face of connector with pin-centre contact is shown in Figure 1 and Figure 2, and its dimensions are given in Table 1. Metric dimensions are original dimensions. All undimensioned pictorial information is for reference only.

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