BS EN IEC 61169-71:2022

BSI Standards Publication

Radio-frequency connectors

Part 71: Sectional specification for RF coaxial connectors with inner diameter of outer conductor 5 mm — Characteristic impedance 50 Ohms — type NEX10®

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National foreword

This British Standard is the UK implementation of EN IEC 61169-71:2022. It is identical to IEC 61169-71:2022.

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.

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NORME EUROPÉENNE

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English Version

Radio-frequency connectors - Part 71: Sectional specification for RF coaxial connectors with inner diameter of outer conductor 5 mm - Characteristic impedance 50 Ohms - type NEX10® (IEC 61169-71:2022)

Connecteurs pour fréquences radioélectriques - Partie 71: Spécification intermédiaire pour connecteurs RF coaxiaux avec conducteur extérieur présentant un diamètre intérieur de 5 mm - Impédance caractéristique de 50 ohms (type NEX10®)
(IEC 61169-71:2022)

Hochfrequenz-Steckverbinder - Teil 71: Rahmenspezifikation für koaxiale HF-Steckverbinder mit 5,0 mm Innendurchmesser des Außenleiters - Wellenwiderstand 50 Ω (Typ NEX10®)
(IEC 61169-71:2022)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
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European foreword

The text of document 46F/618/FDIS, future edition 1 of IEC 61169-71, 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 61169-71:2022.

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)	2023-04-04
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2025-07-04

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 62305-1 NOTE Harmonized as EN 62305-1

IEC 62037-1:2012 NOTE Harmonized as EN 62037-1:2012 (not modified)

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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.cenelec.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
IEC 62153-4-7	-	Metallic cables and other passive components test methods - Part 4-7: 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 - Triaxial tube in tube method	EN IEC 62153-4-7	-
ISO 3290-1	-	Rolling bearings - Balls - Part 1: Steel balls	-	-

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RADIO-FREQUENCY CONNECTORS –

Part 71: Sectional specification for RF coaxial connectors with inner diameter of outer conductor 5 mm – Characteristic impedance 50 Ohms – type NEX10®

FOREWORD

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IEC 61169-71 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/618/FDIS	46F/622/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/standardsdev/publications.

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,
- withdrawn,
- replaced by a revised edition, or
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INTRODUCTION

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RADIO-FREQUENCY CONNECTORS –

Part 71: Sectional specification for RF coaxial connectors with inner diameter of outer conductor 5 mm – Characteristic impedance 50 Ohms – type NEX10®

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 connector, typically for use in 50 Ω radio communication systems, type NEX10®[1].

This document describes mating face dimensions for general purpose connectors (grade 2), dimensional details of standard test connectors (grade 1), gauging information and tests selected from IEC 61169-1, applicable to all detail specifications relating to type NEX10® RF coaxial 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.

The type NEX10® RF coaxial connectors are used with all kinds of RF cables and microstrip circuits in radio frequency transmission systems with operating frequencies up to 20 GHz.

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, *Metallic cables and other passive components test methods – Part 4-7: 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 – Triaxial tube in tube method*

ISO 3290-1, *Rolling bearings-balls – Part 1: steel balls*

3 Terms and definitions

No terms and definitions are listed in this document.

[1] NEX10® is an example of a suitable product available commercially. This information is given for the convenience of users of this document and does not constitute an endorsement by IEC of this product.

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