
Radiofrekvenčni konektorji - 14. del: Radiofrekvenčni (RF) koaksialni konektorji z notranjim premerom zunanjega vodnika 12 mm in navojnim spajanjem - Karakteristična impedanca 75 ohmov (tip 3.5/12) (IEC 61169-14:2010)

Radio-frequency connectors - Part 14: R.F. coaxial connectors with inner diameter of outer conductor 12 mm with screw coupling - Characteristic impedance 75 ohms (Type 3.5/12) (IEC 61169-14:2010)

Hochfrequenz-Steckverbinder - Teil 14: Koaxiale HF-Steckverbinder mit 12 mm Innendurchmesser des Außenleiters mit Schraubverbindung - Wellenwiderstand 75 Ohm (Typ 3,5/12) (IEC 61169-14:2010)

Connecteurs pour fréquences radioélectriques - Partie 14: Connecteurs coaxiaux pour fréquences de diamètre intérieur du conducteur extérieur de 12 mm à verrouillage à vis - Impédance caractéristique 75 ohms (Type 3,5/12) (CEI 61169-14:2010)

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33.120.30 Radiofrekvenčni konektorji R.F. connectors
(RF)

SIST EN 61169-14:2011

en

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EUROPEAN STANDARD
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English version

**Radio-frequency connectors -
Part 14: R.F. coaxial connectors with inner diameter of outer conductor 12
mm with screw coupling -
Characteristic impedance 75 ohms (Type 3,5/12)
(IEC 61169-14:2010)**

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Partie 14: Connecteurs coaxiaux pour
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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

The text of document 46F/148/CDV, future edition 1 of IEC 61169-14, prepared by IEC/SC 46F, R.F. and microwave passive components, of IEC TC 46, Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61169-14 on 2010-12-01.

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The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2011-09-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2013-12-01

Annex ZA has been added by CENELEC.

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61169-1	1992	Radio-frequency connectors -	EN 61169-1	1994
+ A1	1996	Part 1: Generic specification - General	+ A1	1996
+ A2	1997	requirements and measuring methods	+ A2	1997

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INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Radio-frequency connectors –
Part 14: R.F. coaxial connectors with inner diameter of outer conductor 12 mm
with screw coupling – Characteristic impedance 75 ohms (Type 3,5/12)**

**Connecteurs pour fréquences radioélectriques –
Partie 14: Connecteurs coaxiaux pour fréquences de diamètre intérieur du
conducteur extérieur de 12 mm à verrouillage à vis – Impédance caractéristique
75 ohms (Type 3,5/12)**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

RADIO-FREQUENCY CONNECTORS –**Part 14: R.F. coaxial connectors with inner diameter
of outer conductor 12 mm with screw coupling –
Characteristic impedance 75 ohms (Type 3,5/12)**

FOREWORD

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International Standard IEC 61169-14 has been prepared by subcommittee 46F: RF and microwave passive components, of IEC technical committee 46: Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories.

This first edition cancels and replaces IEC 60169-14 published in 1977. This edition constitutes a technical revision.

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

FDIS	Report on voting
46F/148/CDV	46F/169/RVD

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.

A bilingual version may be issued at a later date.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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.

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RADIO-FREQUENCY CONNECTORS –

Part 14: R.F. coaxial connectors with inner diameter of outer conductor 12 mm with screw coupling – Characteristic impedance 75 ohms (Type 3,5/12)

1 Scope

This standard concerns RF coaxial connectors for use with RF cables both flexible and semi-rigid, where air dielectric interface and high mechanical stability is required for severe environmental exposure. The connectors provide low reflection in the microwave region up to 12 GHz and all patterns may provide sealing up to a pressure differential of 3 bar.

For this type of connector, cables IEC 75-7 and 75-8 of IEC 61196-6: *Coaxial communication cables – Part 6: Sectional specification for CATV drop cables*, are recommended.

This type is known commercially as the 3,5/12 connector.

2 Normative references

The following referenced documents are indispensable for the application 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 61169-1:1992, *Radio-frequency connectors – Part 1: Generic specification – General requirements and measuring methods*¹
 Amendment 1 (1996)
 Amendment 2 (1997)

3 IEC type designation

Connectors conforming to this standard shall be designated by:

- a) the reference to this standard: 61169-14 IEC;
- b) number of the grade:
 - Grade 0 = standard test connector = G0
 - Grade 1 = high performance connector = G1
 - Grade 2 = general purpose connector
 - if Grade 2 is required, no grade designation is necessary;
- c) a serial number (see Clause 7);
- d) a group of figures specifying the climatic category (see Clause 4).

Example

61169-14 IEC-GI-1 (40/85/21) denotes a free pin Grade 1 high performance connector (straight) for cable 96-2 IEC 75-7-1/2/8 with mating face as indicated in Clause 5 of this standard with a reflection coefficient not greater than 0,06 at frequencies up to 6 GHz belonging to climatic category 40/85/21.

¹ There exists a consolidated edition 1.2 (1998) that comprises IEC 61169-1:1992, its Amendment 1:1996 and its Amendment 2:1997.