
Radiofrekvenčni konektorji – 32. del: Radiofrekvenčni (RF) koaksialni konektorji z notranjim premerom zunanjega vodnika 1,85 mm (0,072 in) z navojnim spojem – Karakteristična impedanca 50 ohmov (tip 1,85) (IEC 61169-32:1999)

Radio-frequency connectors - Part 32: RF coaxial connectors with inner diameter of outer conductor 1,85 mm (0,072 in) with screw coupling - Characteristic impedance 50 ohms (type 1,85) (IEC 61169-32:1999)

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English version

Radio-frequency connectors
Part 32: RF coaxial connectors with inner diameter of outer
conductor 1,85 mm (0,072 in) with screw coupling
Characteristic impedance 50 ohms (type 1,85)
(IEC 61169-32:1999)

Connecteurs pour fréquences
radioélectriques

Partie 32: Connecteurs coaxiaux pour
fréquences radioélectriques avec
diamètre intérieur du conducteur
extérieur de 1,85 mm (0,072 in) à
verrouillage à vis - Impédance
caractéristique 50 ohms (type 1,85)
(CEI 61169-32:1999)

Hochfrequenz-Steckverbinder

Teil 32: HF-Steckverbinder mit

1,85 mm (0,072 in) Innendurchmesser
des Außenleiters mit Schraubverbindung
Wellenwiderstand 50 Ohm (Typ 1,85)
(IEC 61169-32:1999)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 46D/322/FDIS, future edition 1 of IEC 61169-32, prepared by SC 46D, RF connectors, of IEC TC 46, Cables, wires, waveguides, R.F. connectors, and accessories for communication and signalling, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61169-32 on 1999-10-01.

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) 2000-07-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2002-10-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61169-32:1999 was approved by CENELEC as a European Standard without any modification.

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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 Part 1: Generic specification - General requirements and measuring methods	EN 61169-1	1994

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STANDARD

CEI
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61169-32

Première édition
First edition
1999-07

Connecteurs pour fréquences radioélectriques –

Partie 32:

**Connecteurs coaxiaux pour fréquences
radioélectriques avec diamètre intérieur
du conducteur extérieur de 1,85 mm (0,072 in)
à verrouillage à vis –**

Impédance caractéristique 50 ohms (type 1,85)

[SIST EN 61169-32:2005](https://standards.iteh.ai/catalog/standards/sist/b2a4f6f6-8e89-46b0-9d24-2ce802f27db9/sist-en-61169-32-2005)

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Radio-frequency connectors –

Part 32:

**RF coaxial connectors with inner diameter
of outer conductor 1,85 mm (0,072 in)
with screw coupling –**

Characteristic impedance 50 ohms (type 1,85)

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Commission Electrotechnique Internationale
International Electrotechnical Commission
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

RADIO-FREQUENCY CONNECTORS –

**Part 32: RF coaxial connectors with inner diameter
of outer conductor 1,85 mm (0,072 in)
with screw coupling – Characteristic impedance 50 ohms (type 1,85)**

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
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- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61169-32 has been prepared by subcommittee 46D: RF connectors, of IEC technical committee 46: Cables, wires, waveguides, r.f. connectors and accessories for communication and signalling.

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

FDIS	Report on voting
46D/322/FDIS	46D/326/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 3.

RADIO-FREQUENCY CONNECTORS –

Part 32: RF coaxial connectors with inner diameter of outer conductor 1,85 mm (0,072 in) with screw coupling – Characteristic impedance 50 ohms (type 1,85)

1 General

1.1 Scope

This part of IEC 61169 standardizes the interface and ratings of the type 1,85 r.f. connectors of 50 Ω impedance and having a screw coupling mechanism. These connectors can be intermated with other 1,85 mm and 2,4 mm connectors.

These connectors are recommended for use with semi-rigid and flexible cable and in microwave applications requiring high performance.

These connectors have an operating frequency range of up to 65 GHz.

1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61169. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 61169 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 61169-1:1992, *Radio-frequency connectors – Part 1: Generic specification – General requirements and measuring methods*

2 Interface dimensions

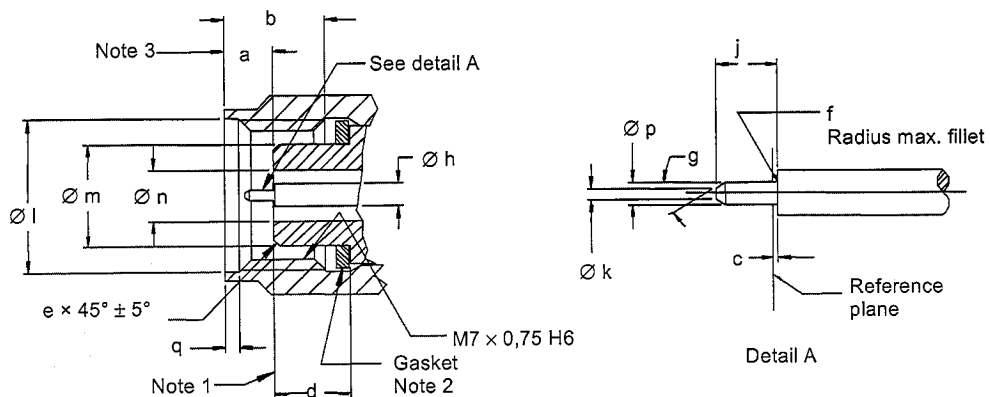
2.1 Mating face and gauge information

2.1.1 Dimensions – Grade 1 connectors

Millimetres are original dimensions.

All undimensioned pictorial configurations are for reference purposes only.

2.1.1.1 Connector with pin centre contact



IEC 922/99

Reference	mm		in	
	Min.	Max.	Min.	Max.
a	1,850	2,450	0,073	0,096
b	4,370	4,630	0,172	0,182
c	0,000	0,0762	0,000	0,003
d	3,380	3,480	0,133	0,137
e	0,250	0,360	0,010	0,014
f	- SIST EN 61169-32-2005 -			0,002
g	28,28	32,28	28,28	32,28
h	0,7909	0,8163	0,0311	0,0321
j	1,335	1,445	0,053	0,057
k	0,000	0,250	0,000	0,010
l	7,010	7,110	0,276	0,280
m	4,725	4,750	0,186	0,187
n	1,8373	1,8627	0,07233	0,0733
p	0,498	0,523	0,0196	0,0206
q	0,508	0,762	0,020	0,030

- NOTE 1 – Mechanical and electrical reference plane.
- NOTE 2 – Gasket required on grade 1 connectors.
- NOTE 3 – With coupling nut biased in the forward direction.

Figure 1 – Connector with pin centre contact