ICS 33.120.30 SLOVENSKÁ TECHNICKÁ NORMA Január 2026

STN	**Vysokofrekvenčné konektory Časť 23: Kolíkový a dutinkový konektor na použitie s presnými pevnými 3,5 mm koaxiálnymi vodičmi s vnútorným priemerom vonkajšieho vodiča 3,5 mm (0,1378 palca)**	**STN EN IEC 61169-23** 35 3811

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)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/25

Obsahuje: EN IEC 61169-23:2025, IEC 61169-23:2025

Oznámením tejto normy sa od 31.10.2028 ruší
STN EN 60169-23 (35 3810) z júla 2001

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61169-23

October 2025

ICS 33.120.30

Supersedes EN 60169-23:1993

English Version

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) (IEC 61169-23:2025)

Connecteurs pour fréquences radioélectriques - Partie 23: Connecteur mâle et connecteur femelle pour lignes coaxiales rigides de précision de 3,5 mm avec diamètre intérieur du conducteur extérieur de 3,5 mm (0,1378 in) (IEC 61169-23:2025)

Hochfrequenz-Steckverbinder - Teil 23: Stift- und Buchsenstecker zur Verwendung mit starren 3,5-mm-Präzisionskoaxialleitungen mit einem Innendurchmesser des Außenleiters von 3,5 mm (0,1378 in) (IEC 61169-23:2025)

This European Standard was approved by CENELEC on 2025-10-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN IEC 61169-23:2025 E

EN IEC 61169-23:2025 (E)

European foreword

The text of document 46F/715/FDIS, future edition 1 of IEC 61169-23, 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 61169-23:2025.

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) 2026-10-31
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2028-10-31

This document supersedes EN 60169-23:1993 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 61169-23:2025 was approved by CENELEC as a European Standard without any modification.

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

IEC 60457-5 NOTE Approved as HD 351.5 S1

IEC 61169-15 NOTE Approved as EN IEC 61169-15

IEC 61169-35 NOTE Approved as EN 61169-35

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
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	-
IEC 62037-3	-	Passive RF and microwave devices, intermodulation level measurement - Part 3: Measurement of passive intermodulation in coaxial connectors	EN IEC 62037-3	-

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INTERNATIONAL STANDARD

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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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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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)

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. 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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8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
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IEC 61169-23 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.

This first edition cancels and replaces IEC 60169-23:1991. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC 60169-23:1991:

a) use of IEC 61169-1:2013 as its generic specification instead of using IEC 60169-1:1987;
b) all the subclauses and test methods are in line with IEC 61169-1:2013;
c) mating faces and dimensions have been revised;

d) necessary contents have been added into the text, including gauge pins for socket-centre contact, quality assessment procedures and instructions for preparation of detail specifications.

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

Draft	Report on voting
46F/715/FDIS	46F/720/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.

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,
– withdrawn, or
– revised.

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 (0,137 8 in).

This document specifies 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 3,5 mm 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 50 Ω, 3,5 mm rigid precision coaxial line described in IEC 60457-5, 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, *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*

IEC 62037-3, *Passive RF and microwave devices, intermodulation level measurement - Part 3: Measurement of passive intermodulation in coaxial connectors*