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IEC 61169-1

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INTERNATIONAL STANDARD



**Radio frequency connectors –
Part 1: Generic specification – General requirements and measuring methods**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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CONTENTS

FOREWORD.....	5
1 Scope.....	7
2 Normative references	7
3 Terms and definitions	8
3.1 General, parts of connectors	8
3.2 Basic connector terms	9
3.3 Constructional terms	10
3.4 Sealing.....	11
3.5 Miscellaneous terms.....	11
3.6 General electrotechnical terms	12
4 Units, symbols and dimensions.....	12
4.1 Units and symbols	12
4.2 Dimensions	13
4.2.1 Details to be provided in relevant specifications	13
4.2.2 Dimensional units to be used in specifications	13
5 Standards ratings and characteristics	13
6 Classifications into climatic categories.....	13
7 IEC type designation	14
8 Testing	14
9 Test methods.....	14
9.1 Mechanical inspection	14
9.1.1 Visual inspection	14
9.1.2 Dimensions.....	15
9.2 Electrical tests and measuring procedures	15
9.2.1 Return loss.....	15
9.2.2 Power rating	19
9.2.3 Contact resistance, outer conductor and centre conductor continuity (mated cabled connectors)	20
9.2.4 Centre and outer conductor contact continuity under severe mechanical conditioning	22
9.2.5 Insulation resistance.....	22
9.2.6 Voltage proof.....	23
9.2.7 Screening effectiveness.....	24
9.2.8 Discharge test (corona test).....	24
9.2.9 Intermodulation level (PIM).....	25
9.2.10 Surge withstand.....	26
9.3 Mechanical tests and measuring procedures	26
9.3.1 General	26
9.3.2 Soldering.....	26
9.3.3 Vibration.....	26
9.3.4 Insertion force (resilient contacts).....	27
9.3.5 Centre contact captivation	28
9.3.6 Engagement and separation forces and torques	28
9.3.7 Effectiveness of clamping device against cable rotation (nutating of cable end)	29
9.3.8 Effectiveness of clamping device against cable pulling	29

9.3.9	Effectiveness of clamping device against cable bending	30
9.3.10	Effectiveness of clamping device against cable torsion	31
9.3.11	Strength of coupling mechanism	32
9.3.12	Safety wire hole pull-out bending moment (and shearing force)	32
9.3.13	Bump	33
9.3.14	Shock	34
9.3.15	Mechanical endurance	35
9.4	Climatic conditionings and tests	35
9.4.1	Conditionings	35
9.4.2	Climatic sequence	36
9.4.3	Damp heat, steady state	37
9.4.4	Change of temperature	37
9.4.5	High temperature endurance	38
9.4.6	Low temperature endurance	39
9.4.7	Sealing non-hermetic sealed connectors	40
9.4.8	Hermetically sealed connectors	40
9.4.9	Water immersion test	41
9.4.10	Salt mist	43
9.4.11	Resistance to solvents and contaminating fluids	43
9.4.12	Sulphur dioxide test	45
10	Quality assessment	46
10.1	General	46
10.2	Quality assessment steps	46
10.2.1	Primary stage of manufacture	46
10.2.2	Structurally similar components	46
10.2.3	General principle for obtaining quality conformance	46
10.3	Test schedule and inspection requirements	46
10.3.1	Acceptance tests	46
10.3.2	Periodic tests	48
10.4	Procedures for quality conformance	49
10.4.1	Quality conformance inspection	49
10.4.2	Quality conformance and its maintenance	49
10.5	Test and measurement procedures	49
10.5.1	General	49
10.5.2	Schedule of basic test groupings for acceptance and periodic tests	50
10.6	Specifications	50
10.6.1	Specification structures	50
10.6.2	Sectional specification (SS)	50
10.6.3	Detail specification (DS)	50
10.6.4	Blank detail specification	51
10.6.5	Blank detail specification pro-forma for XXXX connectors	52
11	Marking	57
11.1	Marking of component	57
11.2	Marking and contents of package	57
Annex A (informative)	Simulated sea-water solution for use with salt mist test (marine environment, see 9.4.10.3)	58
Bibliography	59

Figure 1 – graphical symbols	16
Figure 2 – General principle.....	16
Figure 3 – Measuring set-up for two-connector procedure.....	17
Figure 4 – Example of a time domain reflectometer measurement recording	18
Figure 5 – Equipment set-up for the measurement of reflection in time domain	19
Figure 6 – Possible test arrangements	23
Figure 7 – Measuring circuit for the discharge test.....	25
Figure 8 – Test arrangement for nutation	29
Figure 9 – Test arrangement for pulling	30
Figure 10 – Bending.....	31
Figure 11 – Cable torsion.....	31
Figure 12 – Temperature curve profile	41
Figure 13 – Container/jumper arrangement.....	42
Table 1 – Preferred climatic categories (see IEC 60068-1).....	13
Table 2 – Dielectric materials ratings	20
Table 3 – Severities for vibration.....	27
Table 4 – Recommended severities for bump.....	33
Table 5 – Recommended severities for shocks	34
Table 6 – Recommended severities for low temperature tests	39
Table 7 – Fuels, lubricants, hydraulic fluids and anti-freeze agents.....	44
Table 8 – Cleaning agents and moisture repellents	44
Table 9 – Acceptance tests.....	47
Table 10 – Periodic tests	48

INTERNATIONAL ELECTROTECHNICAL COMMISSION

RADIO FREQUENCY CONNECTORS –

Part 1: Generic specification – General requirements and measuring methods

FOREWORD

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International Standard IEC 61169-1 has been prepared by subcommittee 46F: R.F. and microwave passive components, of IEC technical committee 46: Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories.

This second edition cancels and replaces the first edition, published in 1992, its Amendments 1 (1996) and 2 (1997). This edition constitutes a technical revision.

With respect to the previous edition, tests methods have been updated as well as terminology.

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

CDV	Report on voting
46F/216/CDV	46F/226/RVC

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 the parts in the IEC 61169 series, published under the general title *Radio frequency connectors*, can be found on the IEC website.

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

A bilingual version of this publication may be issued at a later date.

The contents of the corrigendum of February 2016 have been included in this copy.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

RADIO FREQUENCY CONNECTORS –

Part 1: Generic specification – General requirements and measuring methods

1 Scope

This part of IEC 61169, which is a generic specification, relates to radio frequency connectors for r.f. transmission lines for use in telecommunications, electronics and similar equipment.

It provides the basis for the sectional standards, which apply to individual connector types. It is intended to establish uniform concepts and procedures concerning:

- terminology;
- standard ratings and characteristics;
- testing and measuring procedures concerning electrical, mechanical and climatic properties;
- classification of connectors with regard to climatic testing procedures involving temperature and humidity.

The test methods and procedures of this standard are intended for acceptance and type approval testing.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60027 (all parts), *Letter symbols to be used in electrical technology*

IEC 60050 (all parts), *International Electrotechnical Vocabulary* (available from: <http://www.electropedia.org>)

IEC 60068-1, *Environmental testing – Part 1: General and guidance*

IEC 60068-2-1:1990, *Environmental testing – Part 2-1: Tests – Test A: Cold*¹

IEC 60068-2-2:1974, *Environmental testing – Part 2-2: Tests – Test B: Dry heat*²

IEC 60068-2-6, *Environmental testing – Part 2-6: Tests – Test Fc: Vibration (sinusoidal)*

IEC 60068-2-11, *Environmental testing – Part 2-11: Tests – Test Ka: Salt mist*

IEC 60068-2-13, *Environmental testing – Part 2-13: Tests – Test M: Low air pressure*

IEC 60068-2-14:2009, *Environmental testing – Part 2-14: Tests – Test N: Change of temperature*

IEC 60068-2-17, *Environmental testing – Part 2-17: Tests – Test Q: Sealing*

¹ This publication has been withdrawn.

² This publication has been withdrawn.

IEC 60068-2-20, *Environmental testing – Part 2-20: Tests – Test T: Test methods for solderability and resistance to soldering heat of devices with leads*

IEC 60068-2-27, *Environmental testing – Part 2-27: Tests – Test Ea and guidance: Shock*

IEC 60068-2-29, *Environmental testing – Part 2: Tests – Test Eb and guidance: Bump*

IEC 60068-2-30, *Environmental testing – Part 2-30: Tests – Test Db: Damp heat, cyclic (12 h + 12 h cycle)*

IEC 60068-2-42, *Environmental testing – Part 2-42: Tests – Test Kc: Sulphur dioxide test for contacts and connections*

IEC 60068-2-52:1996, *Environmental testing – Test Kb: Salt mist, cyclic (sodium, chloride solution)*

IEC 60068-2-54, *Environmental testing – Part 2-54: Tests – Test Ta: Solderability testing of electronic components by the wetting balance method*

IEC 60068-2-61:1991, *Environmental testing – Part 2-61: Test methods – Test Z/ABDM: Climatic sequence*

IEC 60068-2-78, *Environmental testing – Part 2-78: Tests – Test Cab: Damp heat, steady state*

IEC 60457-1, *Rigid precision coaxial lines and their associated precision connectors – Part 1: General requirements and measuring methods*

IEC 60617, *Graphical symbols for diagrams* (available from: <http://std.iec.ch/iec60617>)

IEC 62153 (all parts), *Metallic communication cables test methods*

IEC 61726, *Cable assemblies, cables, connectors and passive microwave components – Screening attenuation measurement by the reverberation chamber method*

IEC 62037 (all parts), *Passive RF and microwave devices, intermodulation level measurement*

ISO 1000, *SI units and recommendations for the use of their multiples and of certain other units*³

³ This publication has been withdrawn.