SVENSK STANDARD

SS-EN IEC 60966-2-1, utg 4:2024

Fastställd	Sida	Ansvarig kommitté
2024-12-18	1 (29)	SEK TK 46

Koaxialkablar för radiofrekvens med påmonterade anslutningsdon – Del 2-1: Gruppspecifikation för koaxialkablar med påmonterade anslutningsdon

Radio frequency and coaxial cable assemblies –
Part 2-1: Sectional specification for flexible coaxial cable assemblies

Som svensk standard gäller europastandarden EN IEC 60966-2-1:2024. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 60966-2-1:2024.

Nationellt förord

Europastandarden EN IEC 60966-2-1:2024

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 60966-2-1, Fourth edition, 2024 - Radio frequency and coaxial cable assemblies – Part 2-1: Sectional specification for flexible coaxial cable assemblies**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 60966-2-1, utg 3:2010 med eventuella tillägg, ändringar och rättelser gäller ej fr o m 2027-04-23.

ICS 33.120.10

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Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

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SEK Svensk Elstandard

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60966-2-1

May 2024

ICS 33.120.10

Supersedes EN 60966-2-1:2009

English Version

Radio frequency and coaxial cable assemblies - Part 2-1: Sectional specification for flexible coaxial cable assemblies (IEC 60966-2-1:2024)

Cordons coaxiaux et cordons pour fréquences radioélectriques - Partie 2-1: Spécification intermédiaire pour cordons coaxiaux souples
(IEC 60966-2-1:2024)

Konfektionierte Koaxial- und Hochfrequenzkabel - Teil 2-1: Rahmenspezifikation für flexible konfektionierte Koaxialkabel
(IEC 60966-2-1:2024)

This European Standard was approved by CENELEC on 2024-04-23. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

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 60966-2-1:2024 E

SEK Svensk Elstandard

SS-EN IEC 60966-2-1, utg 4:2024

European foreword

The text of document 46/966/FDIS, future edition 4 of IEC 60966-2-1, prepared by 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 60966-2-1:2024.

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) 2025-01-23
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2027-04-23

This document supersedes EN 60966-2-1:2009 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 60966-2-1:2024 was approved by CENELEC as a European Standard without any modification.

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 60966-1	2019	Radio frequency and coaxial cable assemblies - Part 1: Generic specification - General requirements and test methods	EN IEC 60966-1	2019
IEC 61169	series	Radio frequency connectors	EN 61169	series
IEC 61196-1-126	-	Coaxial communication cables - Part 1-126: Electrical test methods - Corona extinction voltage	-	-
IEC 61196-9	-	Coaxial communication cables - Part 9: Sectional specification for flexible RF coaxial cables	-	-

IEC 60966-2-1

Edition 4.0 2024-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Radio frequency and coaxial cable assemblies – Part 2-1: Sectional specification for flexible coaxial cable assemblies

Cordons coaxiaux et cordons pour fréquences radioélectriques – Partie 2-1: Spécification intermédiaire pour cordons coaxiaux souples

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

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RADIO FREQUENCY AND COAXIAL CABLE ASSEMBLIES –

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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.
9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at https://patents.iec.ch. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 60966-2-1 has been prepared by IEC technical committee 46: Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories. It is an International Standard.

This fourth edition cancels and replaces the third edition published in 2008. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) added Figure 2;
b) added Clause 6 "IEC type designation";
c) modified Figure 3;
d) added Clause 7 "Rating and characteristics";

e) added "Requirements/Remarks" to all the tests in Clause 8;

f) added "Insertion loss difference", "Corona extinction voltage" and "Shaking test" in Table 2;

g) added "Impact test" in Table 3;

h) changed "Vibrations, bumps and shocks test" to "Vibrations, shocks test" in Table 3;

i) added Annex A, Annex B and Annex C.

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

Draft	Report on voting
46/966/FDIS	46/996/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 in the IEC 60966, published under the general title *Radio frequency and coaxial cable assemblies*, 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.

IMPORTANT – The "colour inside" logo on the cover page of this document 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 AND COAXIAL CABLE ASSEMBLIES –

Part 2-1: Sectional specification for flexible coaxial cable assemblies

1 Scope

This part of IEC 60966 is a sectional specification that relates to flexible RF coaxial cable assemblies operating in the transverse electromagnetic mode (TEM). It establishes uniform requirements for testing the electrical, mechanical and climatic properties of flexible cable assemblies composed of flexible RF coaxial cables and RF coaxial connectors.

This part of IEC 60966 applies to flexible cable assemblies composed of flexible RF coaxial cables and coaxial connectors. Flexible RF cable assemblies are widely used in mobile communication systems, microwave test equipment, radar, aerospace and other fields.

NOTE 1 For the purposes of this sectional specification, a cable assembly is always regarded as an integral unit. All specifications apply to the finished assembly and not to individual and non-assembled parts thereof.

NOTE 2 This sectional specification can be supplemented with detail specifications giving additional details as required by the particular application. This application will not necessarily require all tests.

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 60966-1:2019, *Radio frequency and coaxial cable assemblies – Part 1: Generic specification – General requirements and test methods*

IEC 61169 (all parts), *Radio frequency connectors*

IEC 61196-1-126, *Coaxial communication cables – Part 1-126: Electrical test methods – Corona extinction voltage*

IEC 61196-9, *Coaxial communication cables − Part 9: Sectional specification for flexible RF coaxial cables*