



SLOVENSKI STANDARD SIST EN IEC 60966-4:2024

01-junij-2024

Sestavi radiofrekvenčnih in koaksialnih kablov - 4. del: Področna specifikacija za sestave poltogh koaksialnih kablov (IEC 60966-4:2024)

Radio frequency and coaxial cable assemblies - Part 4: Sectional specification for semi-rigid coaxial cable assemblies (IEC 60966-4:2024)

Konfektionierte Koaxial- und Hochfrequenzkabel - Teil 4: Rahmenspezifikation für halbstarre konfektionierte Koaxialkabel (IEC 60966-4:2024)

Cordons coaxiaux et cordons pour fréquences radioélectriques - Partie 4: Spécification intermédiaire pour cordons coaxiaux semi-rigides (IEC 60966-4:2024)

Ta slovenski standard je istoveten z: EN IEC 60966-4:2024

[SIST EN IEC 60966-4:2024](https://standards.sist.si/catalog/standards/sist/iec/60966-4/iec-60966-4:2024)

<https://standards.sist.si/catalog/standards/sist/iec/60966-4/iec-60966-4:2024>

ICS:

33.120.10 Koaksialni kabli. Valovodi Coaxial cables. Waveguides

SIST EN IEC 60966-4:2024

en

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN IEC 60966-4

April 2024

ICS 33.120.10

Supersedes EN 60966-4:2003

English Version

**Radio frequency and coaxial cable assemblies - Part 4:
Sectional specification for semi-rigid coaxial cable assemblies
(IEC 60966-4:2024)**

Cordons coaxiaux et cordons pour fréquences
radioélectriques - Partie 4 : Spécification intermédiaire pour
cordons coaxiaux semi-rigides
(IEC 60966-4:2024)

Konfektionierte Koaxial- und Hochfrequenzkabel - Teil 4:
Rahmenspezifikation für halbstarre konfektionierte
Koaxialkabel
(IEC 60966-4:2024)

This European Standard was approved by CENELEC on 2024-04-16. 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.

<https://standards.iteh.ai>

<https://standards.iteh.ai/catalog/standards/sist/4dee4391-e4e1-4e32-a81f-68e1fae243a6/sist-en-iec-60966-4-2024>



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

EN IEC 60966-4:2024 (E)

European foreword

The text of document 46/964/FDIS, future edition 3 of IEC 60966-4, 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 60966-4:2024.

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) 2025-01-16
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2027-04-16

This document supersedes EN 60966-4:2003 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 60966-4:2024 was approved by CENELEC as a European Standard without any modification.

[SIST EN IEC 60966-4:2024](https://standards.iteh.ai/catalog/standards/sist/4dee4391-e4e1-4e32-a81f-68e1fae243a6/sist-en-iec-60966-4-2024)

<https://standards.iteh.ai/catalog/standards/sist/4dee4391-e4e1-4e32-a81f-68e1fae243a6/sist-en-iec-60966-4-2024>

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-1	2013	Environmental testing - Part 1: General and guidance	EN 60068-1	2014
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 IEC 61169	series
IEC 61196-1-126	-	Coaxial communication cables - Part 1-126: Electrical test methods - Corona extinction voltage	-	-
IEC 61196-10	-	Coaxial communication cables - Part 10: Sectional specification for semi-rigid cables with fluoropolymer dielectric	EN 61196-10	-
IEC 61196-11	-	Coaxial communication cables - Part 11: Sectional specification for semi-rigid cables with polyethylene (PE) dielectric	-	-



IEC 60966-4

Edition 3.0 2024-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Radio frequency and coaxial cable assemblies –
Part 4: Sectional specification for semi-rigid coaxial cable assemblies**

**Cordons coaxiaux et cordons pour fréquences radioélectriques –
Partie 4 : Spécification intermédiaire pour cordons coaxiaux semi-rigides**

[SIST EN IEC 60966-4:2024](https://standards.iteh.ai/catalog/standards/sist/4dee4391-e4e1-4e32-a81f-68e1fae243a6/sist-en-iec-60966-4-2024)

<https://standards.iteh.ai/catalog/standards/sist/4dee4391-e4e1-4e32-a81f-68e1fae243a6/sist-en-iec-60966-4-2024>

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 33.120.10

ISBN 978-2-8322-8408-7

**Warning! Make sure that you obtained this publication from an authorized distributor.
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.**

CONTENTS

FOREWORD	4
1 Scope	6
2 Normative references	6
3 Terms and definitions	7
4 Design and construction	7
4.1 Cable design and construction	7
4.2 Connector design and construction	7
4.3 The relative position dimensions of the interface	7
4.4 Outline of the cable assembly	7
5 Workmanship, marking and packaging	8
6 IEC type designation	9
7 Rating and characteristics	10
7.1 Nominal characteristic impedance	10
7.2 Temperature range	10
8 Requirements of finished cable assemblies	10
8.1 General	10
8.2 Electrical requirements	10
8.3 Mechanical requirements	12
8.4 Environmental requirements	14
9 Quality management	16
10 Test schedules	16
10.1 Qualification test	16
10.2 Acceptance tests	17
10.3 Periodic tests	18
Annex A (normative) The relative position dimensions of the interface of some typical connectors	20
Annex B (normative) Preferred arrangement for vibrations, shocks test	23
Figure 1 – Length definition of cable assemblies with two connectors	8
Figure 2 – Length definition of cable assemblies with one connector	8
Figure 3 – The marking example of a cable assembly	9
Figure A.1 – The relative position dimensions of the interface of some typical connectors	21
Figure B.1 – Preferred arrangement for vibrations, shocks test	23
Table 1 – Rated temperature of cable assemblies with semi-rigid cables with polyethylene dielectric (IEC 61196-11)	10
Table 2 – Rated temperature of cable assemblies with semi-rigid cables with fluoropolymer dielectric (IEC 61196-10)	10
Table 3 – Electrical requirements	11
Table 4 – Mechanical requirements	12
Table 5 – Environmental requirements	14
Table 6 – Qualification test	16
Table 7 – Acceptance test	18

Table 8 – Sampling plan of group B	18
Table 9 – Periodic test	19
Table A.1 – The dimensions of A and B in Figure A.1	22

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[SIST EN IEC 60966-4:2024](https://standards.iteh.ai/catalog/standards/sist/4dee4391-e4e1-4e32-a81f-68e1fae243a6/sist-en-iec-60966-4-2024)

<https://standards.iteh.ai/catalog/standards/sist/4dee4391-e4e1-4e32-a81f-68e1fae243a6/sist-en-iec-60966-4-2024>

INTERNATIONAL ELECTROTECHNICAL COMMISSION

RADIO FREQUENCY AND COAXIAL CABLE ASSEMBLIES –**Part 4: Sectional specification for semi-rigid coaxial cable assemblies**

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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 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 60966-4 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 third edition cancels and replaces the second edition published in 2003. This edition constitutes a technical revision.

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

- a) added Subclause 4.3 "The relative position dimensions of the interface";
- b) added Figure 2;
- c) added Clause 6 "IEC type designation";
- d) modified Figure 3;