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Edition 4.0 2024-03

INTERNATIONAL STANDARD

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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



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RADIO FREQUENCY AND COAXIAL CABLE ASSEMBLIES –

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

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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

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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*

3 Terms and definitions

For the purposes of this document, the definitions given in IEC 60966-1:2019 apply.

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