



Edition 2.0 2023-10

# INTERNATIONAL STANDARD

Coaxial communication cables -

Part 9-1: Blank detail specification for flexible RF coaxial cables





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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

#### **COAXIAL COMMUNICATION CABLES -**

#### Part 9-1: Blank detail specification for flexible RF coaxial cables

#### **FOREWORD**

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IEC 61196-9-1 has been prepared by subcommittee 46A: Coaxial cables, of IEC technical committee 46: Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories. It is an International Standard.

This second edition cancels and replaces the first edition published in 2015. This edition constitutes a technical revision.

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

a) [8] Engineering information: "Nominal characteristic impedance", "Relative propagation velocity (velocity ratio)", "Capacitance", "Maximum tensile force (when required)", "Average power (when required)" are added.

- b) [9] to [12]: Tables revised, 7.2.17 "Phase difference", 7.2.20 "Corona extinction voltage", 7.3.5 Stress-crack resistance (for FEP sheath)", "7.4.14 Vibration" are added,
- c) [9] to [12]: Different requirements revised or added.

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

Draft	Report on voting
46A/1641/FDIS	46A/1647/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 <a href="https://www.iec.ch/members\_experts/refdocs">www.iec.ch/members\_experts/refdocs</a>. The main document types developed by IEC are described in greater detail at <a href="https://www.iec.ch/publications">www.iec.ch/publications</a>.

This document is to be read in conjunction with IEC 61196-1:2005 and IEC 61196-9:2023.

A list of all parts in the IEC 61196 series, published under the general title *Coaxial communication cables*, 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,
- · replaced by a revised edition, or
- amended.

#### **COAXIAL COMMUNICATION CABLES -**

#### Part 9-1: Blank detail specification for flexible RF coaxial cables

#### 1 Scope

This part of IEC 61196 applies to coaxial communication cables described in IEC 61196-9. It specifies the requirements of flexible coaxial communication cables with solid or semi-air-spaced dielectric and wrap or/and braid outer conductor. These cables are widely used in mobile communication systems, microwave test equipment, consumer electronics and other fields.

This document determines the layout and style for detail specifications. Detail specifications (DS) can be prepared by a national organization, a manufacturer or a user by entering the details in the blank detail specification.

#### 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 61196-1:2005, Coaxial communication cables – Part 1: Generic specification – General, definitions and requirements

IEC 61196-1-314:2015, Coaxial communication cables – Part 1-314: Mechanical test methods – Test for bending

IEC 61196-9:2023, Coaxial communication cables – Part 9: Sectional specification for flexible RF coaxial cables

#### 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at https://www.electropedia.org/
- ISO Online browsing platform: available at https://www.iso.org/obp