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Identical with IEC 60966-3: 2023
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BUREAU OF INDIAN STANDARDS
DRAFT FOR COMMENTS ONLY

मसौदा भारतीय मानक

रेडियो बारम्बारता और समाक्ष केबल समुच्चय

भाग 3 अर्ध-नम्य समाक्ष केबल समुच्चय के लिए अनुभागीय विशिष्टि

(पहला पुनरीक्षण)

Draft Indian Standard
Radio Frequency and Coaxial Cable Assemblies Part 3 Sectional Specification for Semi-Flexible Coaxial Cable Assemblies

(First Revision)

ICS 33.120.10

LITD 06-Wires, Cables, Waveguides and Accessories Sectional Committee	**Last Date for Comments:** 10 January 2025.

NATIONAL FOREWORD

(Formal clauses will be added later)

This Draft Indian Standard (Part 3) (First Revision) which is identical with IEC 60966-3:2023 'Radio frequency and coaxial cable assemblies – Part 3: Sectional specification for semi-flexible coaxial cable assemblies' issued by the International Electrotechnical Commission (IEC) *will be* adopted by the Bureau of Indian Standards on the recommendation of Wires, Cables, Waveguides and Accessories Sectional Committee and approval of the Electronics and Information Technology Division Council.

This standard was originally published in 2018 and was identical with IEC 60699-3: 2008. The first revision of this Indian Standard has been under taken up to align it with the latest version of IEC 60966-3: 2023.

Other parts in this series are:

Part 1: Generic specification General requirements and test methods (Second Revision)
Part 2: Flexible Coaxial Cable Assemblies
Part 4: Sectional specification for semi - Rigid coaxial cable assemblies

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

a) Added "4.3 The relative position dimensions of the interface";
b) Added "Figure 2";
c) Added "6 IEC type designation";
d) Modified "Figure 3";
e) Added "7 Rating and characteristics";
f) Added "Requirements/Remarks" to all the tests in Clause 8;
g) Added some characteristics, such as insertion loss stability, intermodulation level measurement, corona extinction voltage, single bending, abrasion test of cable assembly, mechanical endurance, etc.;
h) Rewrote test schedules;
i) Added Annex A and Annex B.

The text of IEC Standard *may be* approved as suitable for publication as an Indian Standard without deviations. Certain conventions are however not identical to those used in Indian Standards. Attention is particularly drawn to the following:

a) Wherever the words 'International Standard' appears referring to this standard, they should be read as 'Indian Standard'.

b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

International Standards	Corresponding Indian Standards	Degree of Equivalence
IEC 60068-1:2013, Environmental testing − Part 1: General and guidance	IS/IEC 60068-1: 2013, Environmental Testing Part 1 General and Guidance	Identical
IEC 60966-1:2019, Radio frequency and coaxial cable assemblies – Part 1: Generic specification – General requirements and test methods	IS 14686 (Part 1): 2021, Radio frequency and coaxial cable assemblies Part 1 Generic specification General requirements and test methods Second Revision	Identical with IEC 60966-1:2019
IEC 61196-1-314:2015, Coaxial communication cables – Part 1-314: Mechanical test methods – Test for bending	IS/IEC 61196-1-314: 2015, Coaxial communication cables Part 1-314 Mechanical Test Methods — Test for Bending	Identical
IEC 61196-8, Coaxial communication cables – Part 8: Sectional specification for semi-flexible cables with fluoropolymer dielectric	IS/IEC 61196-8: 2012, Coaxial communication cables Part 8 Sectional specification for semi-flexible cables with polytetrafluoroethylene PTFE dielectric	Identical with IEC 61196-8: 2012

The technical committee has reviewed the provisions of the following International Standards referred in this adopted standard and has decided that they are acceptable for use in conjunction with this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

International Standard	***Title***
IEC 61169 (All Parts)	Radio frequency connectors
IEC 61196-1-126	Coaxial communication cables – Part 1-126: Electrical test methods – Corona extinction voltage

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2:2022 ‘Rules for rounding off numerical values *(Second Revision)*’. The number

of significant places retained in the rounded off value should be same as that of the specified value in this standard.

SCOPE OF IEC 60966-3: 2023

"This part of IEC 60966 is a sectional specification that relates to semi-flexible coaxial cable assemblies operating in the transverse electromagnetic mode (TEM). It specifies the design and construction, IEC type designation, workmanship, marking and packaging, standard rating and characteristics, electrical, mechanical and environmental requirements of finished semi flexible cable assemblies, quality assessment, delivery and storage, etc.

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

NOTE 1 For the purpose 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."

Note: - The Technical content of this document has not been enclosed as these are identical with the corresponding IEC Standard. For details, please refer to IEC 60966-3: 2023 or kindly contact.

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