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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

Radio-frequency connectors - h Standards
Part 74: Sectional specification for HN series RF coaxial connectors with screw coupling - Characteristic impedance 50  $\Omega$  COS. I.C. a.1

Connecteurs pour fréquences radioélectriques - V EW Partie 74: Spécification intermédiaire pour connecteurs RF coaxiaux de série HN avec couplage à vis - Impédance caractéristique 50  $\Omega$ 

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# Radio-frequency connectors - Part 74: Sectional specification for HN series RF coaxial connectors with screw coupling - Characteristic impedance 50 $\Omega$

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IEC 61169-74 has been prepared by subcommittee 46F: RF and microwave passive components, of IEC technical committee 46: Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories. It is an International Standard.

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

Draft	Report on voting
46F/703/CDV	46F/719/RVC

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.

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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>.

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## 1 Scope

This part of IEC 61169, which is a Sectional Specification (SS), provides information and rules for the preparation of Detail Specifications (DS) for series HN RF coaxial connectors with screw coupling with a characteristic impedance of 50  $\Omega$ .

This document prescribes mating face dimensions for high performance connectors (grade 2), dimensional details of standard test connectors (grade 0), gauging information and tests selected from IEC 61169-1, applicable to all Detail Specifications relating to series HN RF connectors.

This document indicates recommended performance characteristics which are considered when writing a Detail Specification and it covers test schedules and inspection requirements for assessment levels M and H.

The series HN connectors are intended to be used in microwave transmission systems and can be connected with all kinds of RF cables and microstrips. The operating frequency is up to 6 GHz.

NOTE Metric dimension are original dimensions. All undimensioned pictorial configurations are for reference purpose only.

#### 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 61169-1:2013, Radio frequency connectors - Part 1: Generic specification - General requirements and measuring methods

IEC 62037-3, Passive RF and microwave devices, intermodulation level measurement - Part 3: https://measurement.org/dec-61169-74-2025

IEC 62153-4-7, Metallic cables and other passive components test methods - Part 4-7: Electromagnetic compatibility (EMC) - Test method for measuring of transfer impedance  $Z_{\rm T}$  and screening attenuation  $a_{\rm S}$  or coupling attenuation  $a_{\rm C}$  of connectors and assemblies - Triaxial tube in tube method

#### 3 Terms and definitions

No terms and definitions are listed in this document.

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