

Radio-frequency connectors - Part 54: Sectional specification for coaxial connectors with 10 mm inner diameter of outer conductor, nominal characteristic **impedance 50  $\Omega$ , series 4,3-10**

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English Version

Radio-frequency connectors -  
Part 54: Sectional specification for coaxial connectors  
with 10 mm inner diameter of outer conductor,  
nominal characteristic impedance 50  $\Omega$ , series 4,3-10  
(IEC 61169-54:2016)

Connecteurs pour fréquences radioélectriques -  
Partie 54: Spécification intermédiaire relative aux  
connecteurs coaxiaux avec diamètre intérieur du  
conducteur extérieur de 10 mm, impédance caractéristique  
nominale de 50  $\Omega$ , série 4,3-10  
(IEC 61169-54:2016)

Hochfrequenz-Steckverbinder -  
Teil 54: Rahmenspezifikation für koaxiale  
Hochfrequenzsteckverbinder mit 10 mm Innendurchmesser  
des Außenleiters, Wellenwiderstand 50  $\Omega$ , Typ 4,3-10  
(IEC 61169-54:2016)

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Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

## European foreword

The text of document 46F/348/FDIS, future edition 1 of IEC 61169-54, prepared by SC 46F "RF and microwave passive components", of 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 61169-54:2016.

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) 2017-07-11
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2019-10-11

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## INTRODUCTION

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## RADIO-FREQUENCY CONNECTORS –

### **Part 54: Sectional specification for coaxial connectors with 10 mm inner diameter of outer conductor, nominal characteristic impedance 50 $\Omega$ , series 4,3-10**

#### **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 coaxial connectors with 10 mm inner diameter of outer conductor, characteristic impedance 50  $\Omega$ , series 4,3-10 with screw type, hand screw type or quick-lock type coupling, for an upper operating frequency limit of 6 GHz, for use in wireless telecommunication and wireless network applications in conjunction with appropriate transmission line types for these applications.

It also describes mating face dimensions for general purpose connectors, gauging information and tests selected from IEC 61169-1, applicable to all detail specifications relating to 4,3-10 series connectors.

This specification indicates the recommended performance characteristics to be considered when writing a detail specification and it covers test schedules and inspection requirements for assessment levels M and H.

#### **2 Normative references**

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 62037-1:2012, *Passive RF and microwave devices, intermodulation level measurement – Part 1: General requirements and measuring methods*

#### **3 Mating face and gauge information**

##### **3.1 Dimensions – General connectors – Grade 2**

##### **3.1.1 Connector with pin-centre contact (see Figure 1)**

Metric dimensions are original dimensions. All un-dimensioned pictorial configurations are for reference purpose only.