

<b>STN</b>	<b>Vysokofrekvenčné konektory. Časť 53: Rámcová špecifikácia pre VF koaxiálne konektory s vnútorným priemerom vonkajšieho vodiča 16 mm so závitovým uzáverom. Charakteristická impedancia 50 ohmov (Typ S7-16).</b>	<b>STN EN 61169-53</b>  35 3811
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Radio-frequency connectors - Part 53: Sectional specification for RF coaxial connectors with inner diameter of outer conductor 16 mm with screw lock - Characteristic impedance 50 Ohm (Type S7-16)

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/16

Obsahuje: EN 61169-53:2016, IEC 61169-53:2015

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EUROPEAN STANDARD

**EN 61169-53**

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2016

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English Version

**Radio-frequency connectors - Part 53: Sectional specification for  
RF coaxial connectors with inner diameter of outer conductor 16  
mm with screw lock - Characteristic impedance 50 Ohm  
(Type S7-16)  
(IEC 61169-53:2015)**

Connecteurs pour fréquences radioélectriques - Partie 53:  
Spécification intermédiaire relative aux connecteurs  
coaxiaux pour fréquences radioélectriques avec diamètre  
intérieur des conducteurs extérieurs de 16 mm à  
verrouillage à vis - Impédance caractéristique 50 Ohm  
(Type S7-16)  
(IEC 61169-53:2015)

Hochfrequenz-Steckverbinder - Teil 53:  
Rahmenspezifikation für koaxiale HF-Steckverbinder mit 16  
mm Innendurchmesser des Außenleiters und  
Schraubverriegelung - Wellenwiderstand 50 Ohm (Typ S7-  
16)  
(IEC 61169-53:2015)

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Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

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## European foreword

The text of document 46F/309/CDV, future edition 1 of IEC 61169-53, prepared by SC 46F "R.F. and microwave passive components" of IEC/TC 46 "Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61169-53:2016.

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) 2016-07-29
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## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

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.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61169-1	2013	Radio-frequency connectors -- Part 1: Generic specification - General requirements and measuring methods	EN 61169-1	2013
IEC 62037	series	Passive RF and microwave devices, intermodulation level measurement	EN 62037	series



# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



**Radio-frequency connectors –  
Part 53: Sectional specification for RF coaxial connectors with inner diameter of  
outer conductor 16 mm with screw lock – Characteristic impedance 50  $\Omega$  (Type  
S7-16)**

**Connecteurs pour fréquences radioélectriques –  
Partie 53: Spécification intermédiaire relative aux connecteurs coaxiaux pour  
fréquences radioélectriques avec diamètre intérieur des conducteurs extérieurs  
de 16 mm à verrouillage à vis – Impédance caractéristique 50  $\Omega$  (Type S7-16)**



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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



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## Radio-frequency connectors –

**Part 53: Sectional specification for RF coaxial connectors with inner diameter of outer conductor 16 mm with screw lock – Characteristic impedance 50  $\Omega$  (Type S7-16)**

## Connecteurs pour fréquences radioélectriques –

**Partie 53: Spécification intermédiaire relative aux connecteurs coaxiaux pour fréquences radioélectriques avec diamètre intérieur des conducteurs extérieurs de 16 mm à verrouillage à vis – Impédance caractéristique 50  $\Omega$  (Type S7-16)**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**RADIO-FREQUENCY CONNECTORS –****Part 53: Sectional specification for RF coaxial connectors  
with inner diameter of outer conductor 16 mm with screw lock –  
Characteristic impedance 50 Ω (Type S7-16)**

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The text of this standard is based on the following documents:

FDIS	Report on voting
46F/309/CDV	46F/321/RVC

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 61169 series, under the general title: *Radio-frequency connectors*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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## RADIO-FREQUENCY CONNECTORS –

### **Part 53: Sectional specification for RF coaxial connectors with inner diameter of outer conductor 16 mm with screw lock – Characteristic impedance 50 $\Omega$ (Type S7-16)**

#### **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 RF coaxial connectors with threaded coupling, typically for use in 50  $\Omega$  cable networks (Type S7-16).

It prescribes mating face dimensions for general purpose 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 4.1-9.5 RF connectors.

This specification indicates 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.

The S7-16 series RF coaxial connectors with nominal impedance 50  $\Omega$  are threaded coupling units which are used with all kinds of RF cables and microstrips in microwave transmission system. And the working frequency is up to 7,5 GHz.

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

#### **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 62037-3 (all parts), *Passive RF and microwave devices, intermodulation level measurement*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**