



SLOVENSKI STANDARD
oSIST prEN IEC 61169-70:2023
01-januar-2023

Radiofrekvenčni konektorji - 70. del: Področna specifikacija za radiofrekvenčne koaksialne konektorje serije HD-BNC - Karakteristična impedanca 75 ohm

Radio-frequency connectors - Part 70: Sectional specification for series HD-BNC radio-frequency coaxial connectors - Characteristic Impedance 75 ohms

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(RF)

oSIST prEN IEC 61169-70:2023 en



46F/631/CDV

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FUNCTIONS CONCERNED: <input type="checkbox"/> EMC <input type="checkbox"/> ENVIRONMENT <input type="checkbox"/> QUALITY ASSURANCE <input type="checkbox"/> SAFETY	
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TITLE:

IEC 61169-70 Ed 1.0: Radio-frequency connectors Part 70: Sectional specification for series HD-BNC radio-frequency coaxial connectors - Characteristic Impedance 75 ohms

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

IEC 61169: RADIO-FREQUENCY CONNECTORS -**Part 70: Sectional specification for series HD-BNC radio-frequency coaxial connectors – Characteristic Impedance 75 Ω**

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- International Standard IEC 61169-44 has been prepared by subcommittee 46F: R.F. and microwave passive components, of IEC technical committee 46: Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories.

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

FDIS	Report on voting
XX/XX/FDIS	XX/XX/RVD

84
85 Full information on the voting for the approval of this standard can be found in the report on
86 voting indicated in the above table.

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

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

- 91 • reconfirmed,
92 • withdrawn,
93 • replaced by a revised edition, or
94 • amended.

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136 **IEC 61169: RADIO-FREQUENCY CONNECTORS -**
137 **Part 70: Sectional specification for series HD-BNC radio-frequency coaxial**
138 **connectors - Characteristic Impedance 75 Ω**

139 **1 Scope**

140 This part of IEC 61169, which is a sectional specification (SS), provides information and rules
141 for preparation of detail specification (DS) of HD-BNC series RF coaxial connectors together
142 with the pro forma blank detail specification. HD-BNC series connectors with characteristic
143 impedance of 75Ω are used with RF cables or micro-strips in microwave, telecommunication,
144 wireless and other fields. The operating frequency limit is up to 18 GHz.

145
146 It also prescribes mating face dimensions for general purpose connectors, gauging
147 information and tests selected from IEC 61169-1, applicable to all detail specifications relating
148 to series HD-BNC RF connectors.

149
150 This specification indicates the recommended performance characteristics to be considered
151 when writing a detail specification and it covers test schedules and inspection requirements
152 for assessment levels M and H.

153

154 **2 Normative references**

155 The following documents are referred to in the text in such a way that some or all of their
156 content constitutes requirements of this document. For dated references, only the edition cited
157 applies. For undated references, the latest edition of the referenced document (including any
158 amendments) applies.

159
160 IEC 61169-1:1998 RF connectors – Part 1: Generic specification – General requirements and
161 measuring methods.

162

163 **3 Terms and definitions**

164 For the purposes of this document, the following terms and definitions apply.

165 ISO and IEC maintain terminological databases for use in standardization at the following
166 addresses:

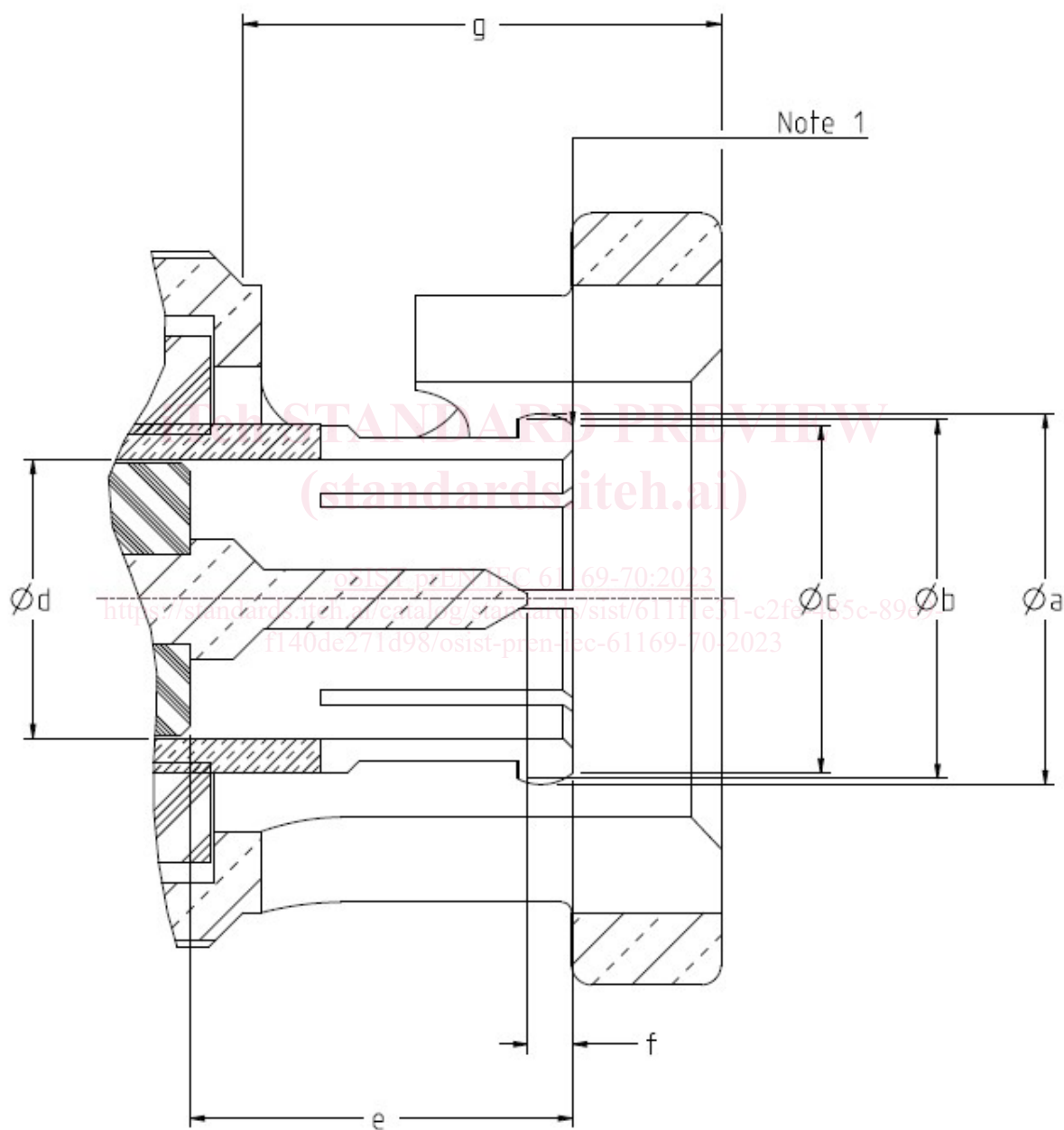
- 167 • IEC Electropedia: available at <http://www.electropedia.org/>
- 168 • ISO Online browsing platform: available at <http://www.iso.org/obp>

169

170 **4 Mating face and gauge information**171 **4.1 Dimensions - General connectors – Grade 1**172 **4.1.1 Connector with pin-centre contact**

173 Metric dimensions are original dimensions. All undimensioned pictorial information is for
 174 reference only.

175



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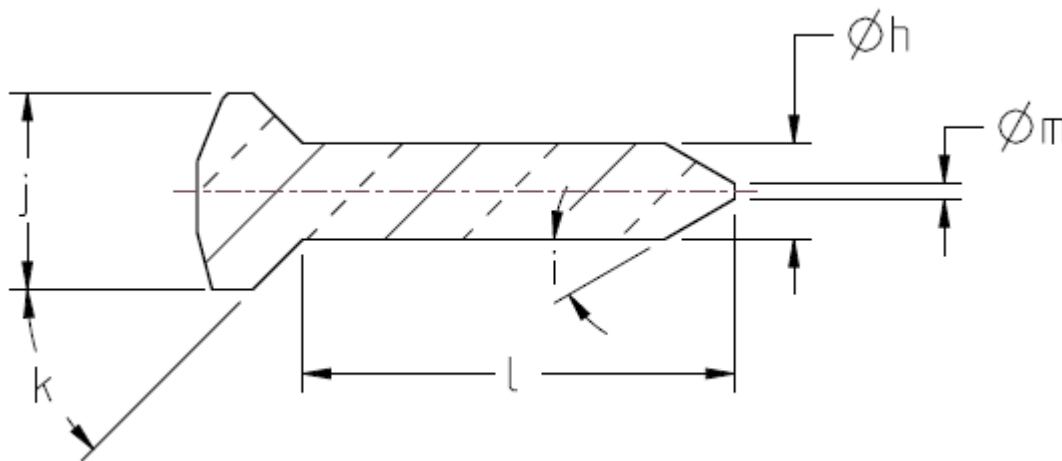
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178 **Figure 1 - Connector with pin- centre contact**

179

(For dimensions, see Table 1)

180



181

182

Figure 2 Pin- centre contact

183

(For dimensions, see Table 1)

184

Note 1: Mechanical and electrical reference plane

185

186

Table 1 — Dimensions of connector with pin-centre contact

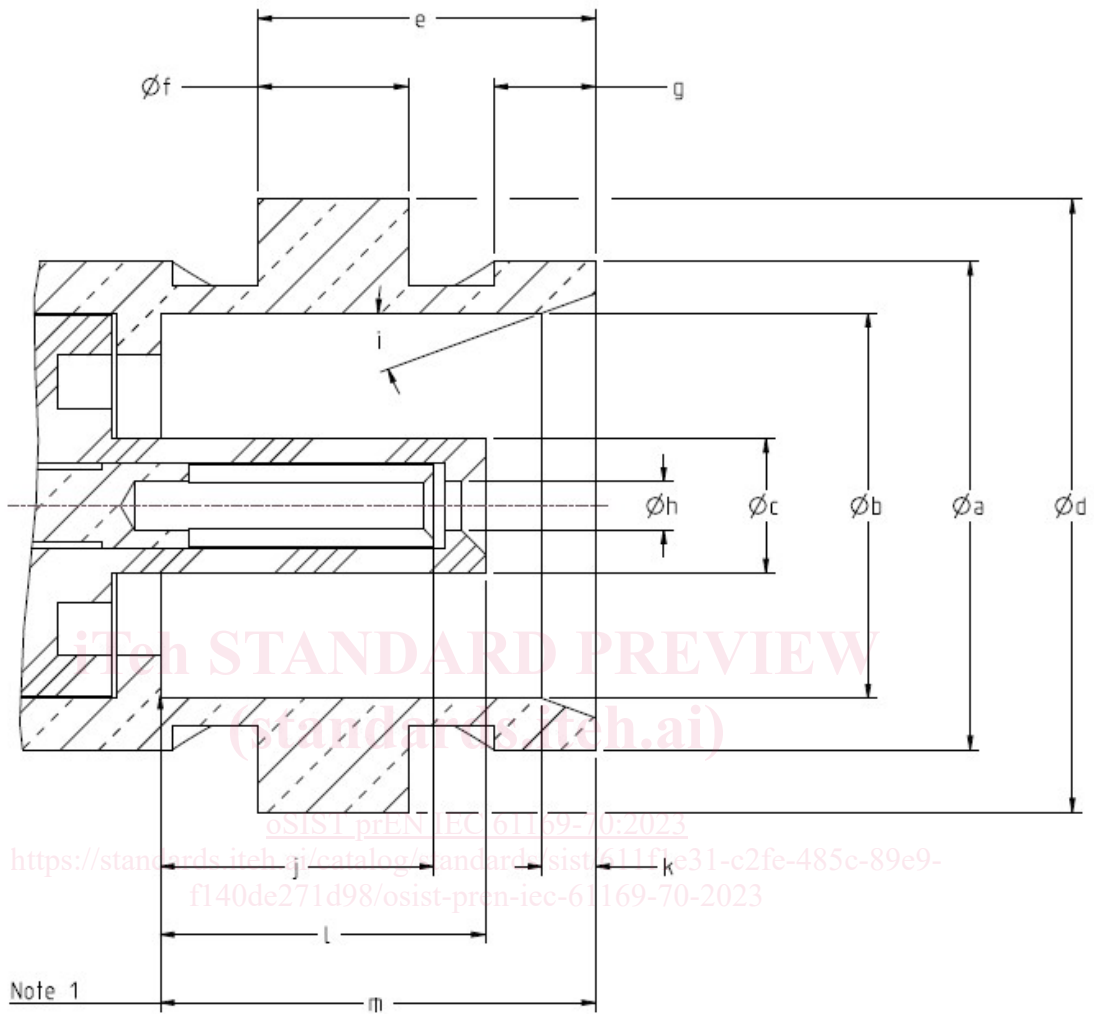
Ref.	mm		Notes
	min	max	
a	3,73		Ref – Dimension to meet gauge test
b	3,61		Ref – Dimension to meet gauge test
c	3,49		Ref – Dimension to meet gauge test
d	2,80	2,85	Inner Diameter of Outer Contact
e	3,71	--	Insulator
f	0,28	0,62	
g	4,80	4,88	
h	0,36	0,39	
i	30°		Angle
j	0,80		Ref
k	45°		Angle
l	2,50	--	
m	--	0,10	Flat

187

188 **4.1.2 Connector with socket-centre contact**

189

190



Note 1

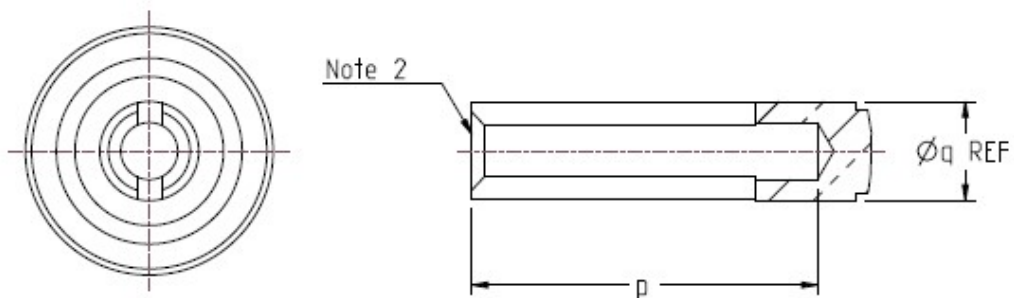
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Figure 3 - Connector with socket-centre contact

192

(For dimensions, see Table 2)



Note 2

193

Figure 4 - Socket- centre contact

194

195

(For dimensions, see Table 2)

196

197 Note 1: Mechanical and electrical reference plane.

198 Note 2: Socket contact configuration to meet electrical and mechanical requirements.

199

200

Table 2 — Dimensions of connector with socket-centre contact

Ref.	mm		Notes
	min	max	
a	4,52	4,58	
b	3,56	3,62	
c	--	1,75	
d	5,66	5,76	
e	3,10	3,20	
f	1,35	1,45	
g	1,25	--	
h	0,42	--	
i	20°		Angle
j	2,45	2,65	Contact
k	0,45	0,55	
l	--	3,48	
m	4,03	4,09	
n	0,42	--	
p	2,86	--	
q	0,80		

201