

**Harmonized system of quality
assessment for electronic components**

Sectional specification: Radio frequency coaxial connectors — Series 7-16

The European Standard EN 122190:1994 has the status of a
British Standard

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by Technical Committee EPL/46, Cables, wires and waveguides, RF connectors and accessories for communication and signalling, to Subcommittee EPL/46/4, RF connectors, upon which the following bodies were represented:

- AEA Technology
- BEAMA Electrical Cable & Conductor Accessory Manufacturers
- British Telecommunications plc
- Federation of the Electronics Industry
- Ministry of Defence
- National Supervisory Inspectorate
- Society of Cable Television Engineers

This British Standard, having been prepared under the direction of the Electrotechnical Sector Board, was published under the authority of the Standards Board and comes into effect on 15 August 1996

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The following BSI references relate to the work on this standard:
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Contents

	Page
Committees responsible	Inside front cover
National foreword	ii
Foreword	2
Text of EN 122190	3
List of references	Inside back cover

National foreword

This British Standard has been prepared by Subcommittee EPL/46/4 and is the English language version of EN 122190:1994 *Sectional specification: Radio frequency coaxial connectors — Series 7-16*, published by the European Committee for Electrotechnical Standardization (CENELEC) Electronic Components Committee (CECC).

Cross-references

Publication referred to	Corresponding British Standard
CECC 22000:1992	BS CECC 22000:1993 <i>Harmonized system of quality assessment for electronic components. Generic specification. Radio frequency coaxial connectors (Parts I, II and III)</i>
	BS EN 60068 <i>Environmental testing</i>
	BS EN 60068-2 <i>Test methods</i>
IEC 68-2-1:1990	BS EN 60068-2-1:1993 <i>Tests A. Cold</i>
	BS 2011 <i>Environmental testing</i>
	Part 2.1 <i>Tests</i>
IEC 68-2-13:1983	Part 2.1M:1984 <i>Test M. Low air pressure</i>
IEC 68-2-30:1980	Part 2.1Db:1981 <i>Test Db and guidance: Damp heat, cyclic (12 + 12 hour cycle)</i>

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 24, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

English version

Sectional Specification:
Radio frequency coaxial connectors
Series 7-16

Spécification intermédiaire:
Connecteurs coaxiaux pour fréquence
radioélectrique
Série 7-16

Rahmenspezifikation:
Hochfrequenz-Koaxial-Steckverbinder
Serie 7-16

This European Standard was approved by the CENELEC Electronic Components Committee (CECC) on 26 December 1993. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the General Secretariat of the CECC or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CECC General Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom. The membership of the CECC is identical, with the exception of the national electrotechnical committees of Greece, Iceland and Luxembourg.

CECC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B-1050 Brussels

Foreword

The CENELEC Electronic Components Committee (CECC) is composed of those member countries of the European Committee for Electrotechnical Standardization (CENELEC) who wish to take part in a harmonized System for electronic components of assessed quality.

The object of the System is to facilitate international trade by the harmonization of the specifications and quality assessment procedures for electronic components, and by the grant of an internationally recognized Mark, or Certificate, of Conformity. The components produced under the System are thereby acceptable in all member countries without further testing.

This European Standard was prepared by CECC WG22, RF Connectors.

The text of the draft based on document CECC 22190 Issue 2:1993 was submitted to the formal vote for conversion to a European Standard; together with the voting report, circulated as document CECC (Secretariat) 3470 it was approved by CECC as EN 122190 on 26 December 1993.

The following dates were fixed:

- latest date of announcement of the EN at national level (doa) 1994-05-02
- latest date of publication of an identical national standard^a (dop) 1994-11-02
- latest date of withdrawal of conflicting national standards^a (dow) 1995-11-02

^a National standard (excluding national implementation of IECQ specifications).

Contents

	Page
Foreword	2
Section 1. Scope	3
Section 2. Mating face and gauge information	
2.1 Dimensions — General purpose connectors	4
2.2 Gauges for general purpose connectors	6
2.3 Dimensions — Standard test connectors (Grade 0)	7
Section 3. Properties	
3.1 Ratings and characteristics	10
Section 4. Test conditions and severities	
4.1 Measurement and recovery conditions	13
4.2 Visual examination	13
4.3 Dimensions	13
4.4 Electrical tests and measurements	13
4.5 Mechanical tests and measurements	15
4.6 Environmental tests and measurements	17
4.7 Endurance tests	21
4.8 Resistance to solvents and contaminating fluids	21
Section 5. Quality Assessment Procedures	
5.1 Test schedules and inspection requirements	22
Figure 1 — Plug with male centre contact	4
Figure 2	5
Figure 3 — Gauge pin for centre contact of socket connector (for dimension “a” see Table 3)	6
Figure 4 — Gauge ring for outer contact of socket connector (for dimension “a” see Table 4)	6
Figure 5 — Plug with male centre contact	7
Figure 6 — Socket with female centre contact	8
Figure 7	8
Table 1	4
Table 2	5
Table 3	6
Table 4	7
Table 5	8
Table 6	9

Section 1. Scope

This sectional specification (SS) provides information and rules for the preparation of detail specifications (DS) for screw coupled coaxial connectors Series 7-16.

It prescribes mating-face dimensions for general purpose connectors, dimensional details for standard test connectors, Grade 0, together with gauging information and the mandatory tests, selected from CECC 22000, applicable to all DSs relating to Series 7-16 connectors.

This specification indicates the recommended performance characteristics to be considered when writing a DS, and covers test schedules and inspection requirements for Assessment Levels H, M and U.

Section 2. Mating face and gauge information

2.1 Dimensions — general purpose connectors

Metric dimensions are original dimensions. All undimensioned pictorial configurations are for reference purposes only.

2.1.1 Plug

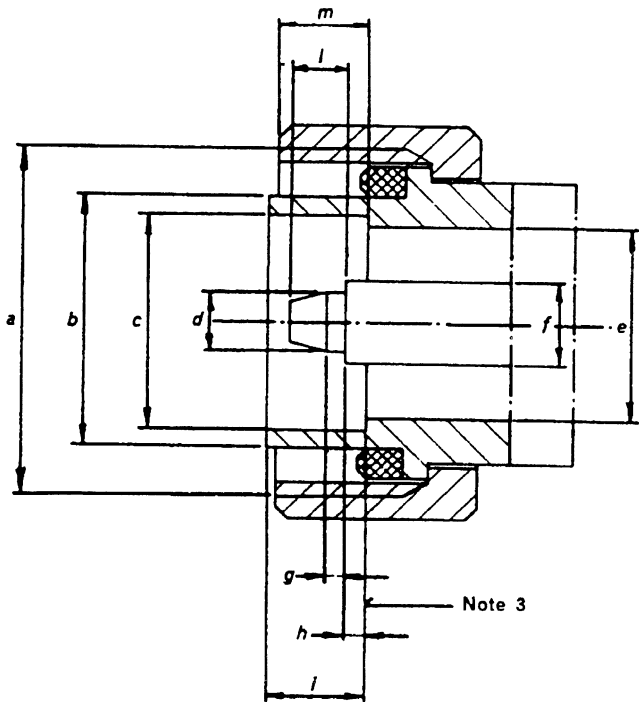


Figure 1 — Plug with male centre contact

Table 1

Ref.	mm		in		Note
	min.	max.	min.	max.	
a	M 29 × 1,5		M 29 × 1,5		2
b	20,6	21,4	0,811	0,843	
c	18,03	18,21	0,7098	0,7169	
d	4,96	5,04	0,1953	0,1984	
e	15,85	16,25	0,6240	0,6398	
f	7 nom.		0,276 nom.		1
g	1,4	1,6	0,0551	0,0630	
h	1,47	1,77	0,0579	0,0697	
i	7,00	8,00	0,276	0,315	
l	—	4,5	—	0,177	
m	7,00	9,00	0,276	0,354	

NOTE 1 The tolerance on this dimension is determined by the tolerance of the characteristic impedance.

NOTE 2 M 29 × 1,5 indicates metric screw thread with nominal diameter 29 mm (1,141 in) and pitch 1,5 mm (0,059 in).

NOTE 3 Mechanical and electrical reference plane.

2.1.2 Socket

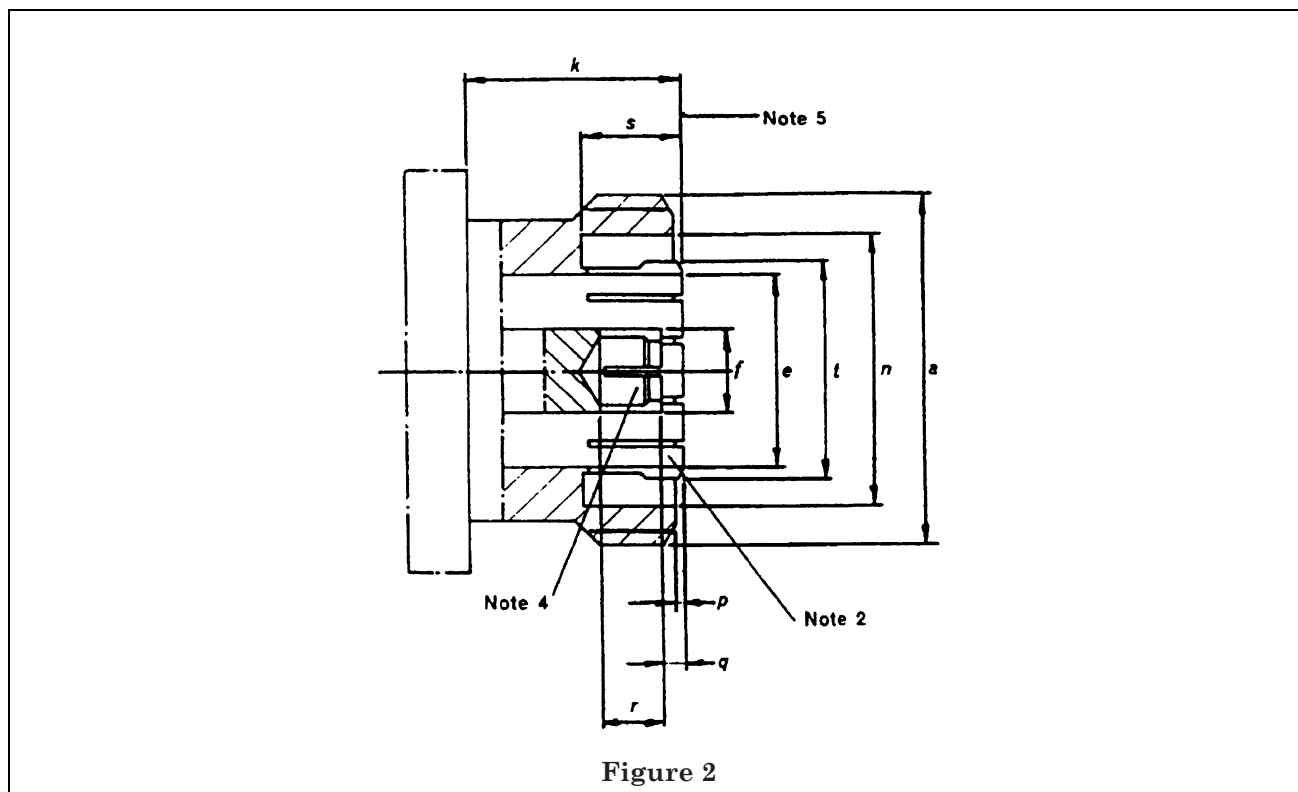


Figure 2

Table 2

Ref.	mm		in		Note
	min.	max.	min.	max.	
a	M 29 × 1,5		M 29 × 1,5		3
e	15,85	16,25	0,6240	0,6398	
f	7 nom.		0,276 nom.		1
k	10	—	0,394	—	
n	22,1	22,9	0,870	0,902	
p	0,5	0,7	0,0197	0,0276	
q	1,77	2,07	0,0697	0,0815	
r	5	—	0,197	—	
s	8,1	—	0,319	—	
t	17,84	18,02	0,7024	0,7094	2

NOTE 1 The tolerance on this dimension is determined by the tolerance of the characteristic impedance.

NOTE 2 To be measured before slotting. After slotting to be bent outwards to 18,5 mm (0,728 in) max. The slotted sleeve has to meet the requirements of gauge retention force. For special requirements, non-slotted sleeve is permitted.

NOTE 3 M 29 × 1,5 indicates metric screw thread with nominal diameter 29 mm (1,141 in) and pitch 1,5 mm (0,059 in).

NOTE 4 Slot design optional. Contact to be closed to meet performance requirements.

NOTE 5 Mechanical and electrical reference plane.