SLOVENSKI STANDARD
SIST EN 122140:1999

01-julij-1999

Sectional Specification: Radio frequency coaxial connectors - Series SMC

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Rahmenspezifikation: Hochfrequenz-Koaxial-Steckverbinder - Serie SMC

Spécification intermédiaire: Connecteurs coaxiaux pour fréquence radioélectrique - Série SMC

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Ta slovenski standard je istoveten z: EN 122140:1993

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ICS:

33.120.30	Radiofrekvenļ ni konektorji (RF)	R.F. connectors

SIST EN 122140:1999 **en**

2003-01.Slovenski inštitut za standardizacijo. Razmnoževanje celote ali delov tega standarda ni dovoljeno.

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 122140

May 1993

Descriptors: Quality, electronic components, connectors

Supersedes CECC 22140 Issue 1 : 198

English version

Sectional specification: Radio frequency coaxial connectors. Series SMC

Spécification intermédiaire: Connecteurs coaxiaux pour fréquence radioélectrique. Serie SMC

Rahmenspezifikation: Hochfrequenz-Koaxial-Steckverbinder. Serie SMC

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This European Standard was approved by the CENELEC Electronic Components Committee (CECC) on 7 May 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

CENELEC Electronic Components Committee
Comité des Composants Electroniques du CENELEC
CENELEC-Komitee für Bauelemente der Elektronik

General Secretariat: Gartenstr. 179, W-6000 Frankfurt/Main 70

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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 WG 22, 'RF Connectors'.

The text of the draft based on document CECC 22140 Issue 1 : 1984 (with A1 and A2) was submitted to the formal vote for conversion to a European Standard; together with the voting report, circulated as document CECC(Secretariat)3340 it was approved by CECC as EN 122140 on 7 May 1993.

The following dates were fixed:

- latest date of announcement of the EN at national level (doa) 1993-09-03
- latest date of publication of an identical national standard* (dop) 1994-03-03
- latest date of withdrawal of conflicting national standards* (dow) 1995-03-03

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* National standard (excluding national implementation of IECQ specifications)

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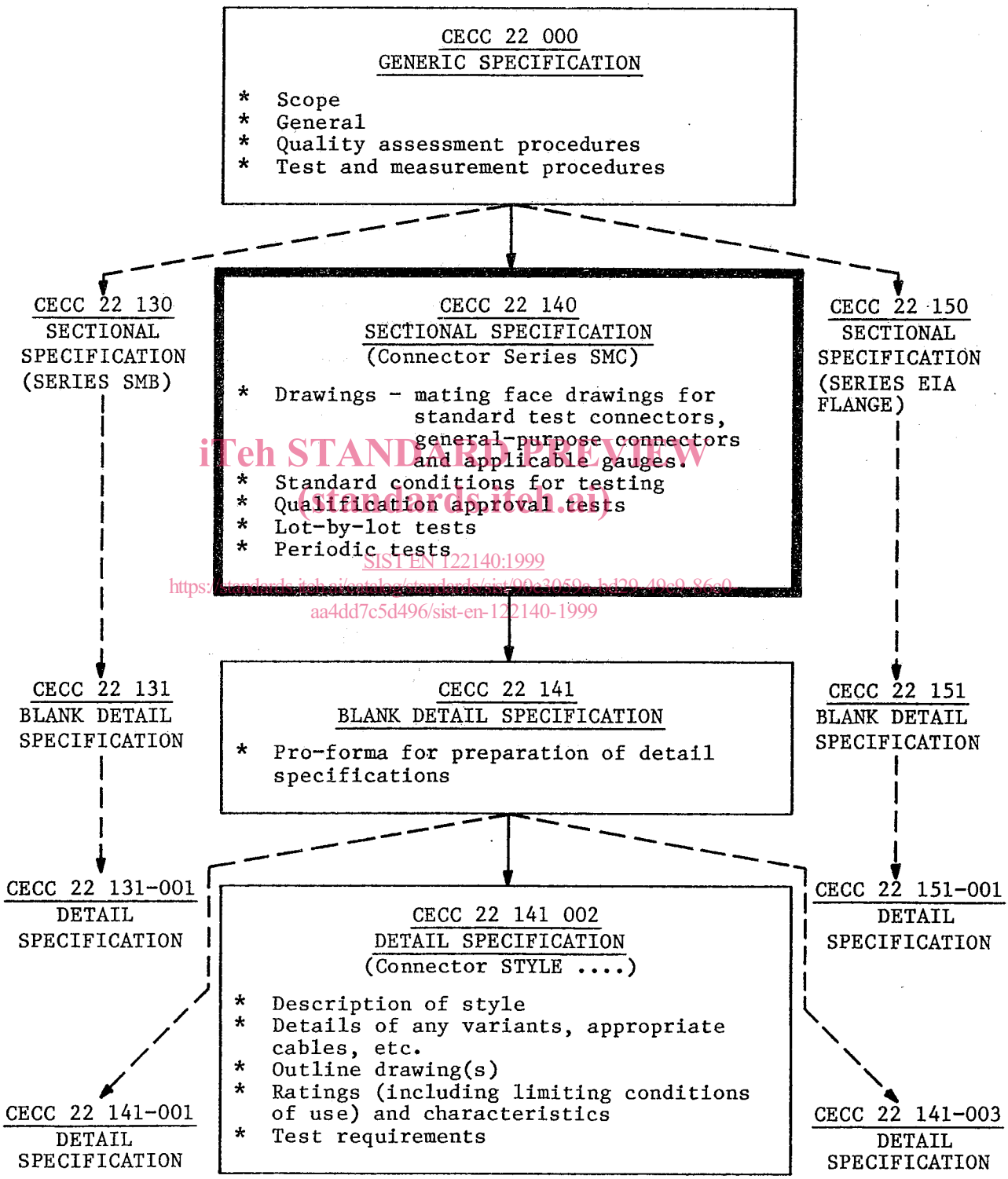
CECC SPECIFICATION SYSTEM
FOR R.F. CONNECTORS



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NOTE: A detail specification is a 'completed' blank detail specification.

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SECTION 1 - SCOPE

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

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 22 000, applicable to all DS relating to Series SMC 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.

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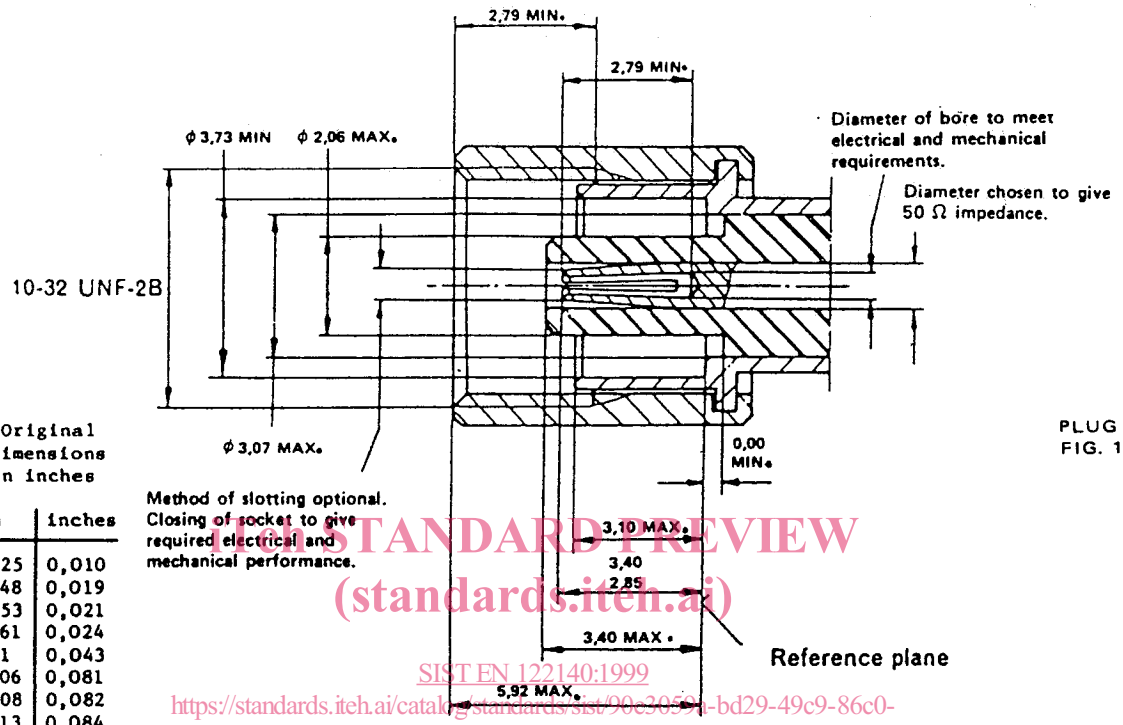
SECTION 2 - MATING FACE AND GAUGE INFORMATION

2.1 Dimensions - general purpose connectors.

All undimensioned pictorial configurations are for reference purposes only.



PLUG
FIG. 1.

Original dimensions in inches

mm	inches
0,25	0,010
0,48	0,019
0,53	0,021
0,61	0,024
1,1	0,043
2,06	0,081
2,08	0,082
2,13	0,084
2,30	0,090
2,79	0,110
2,85	0,112
3,07	0,121
3,10	0,122
3,12	0,123
3,38	0,133
3,40	0,134
3,71	0,146
3,73	0,147
5,92	0,233
5,94	0,234

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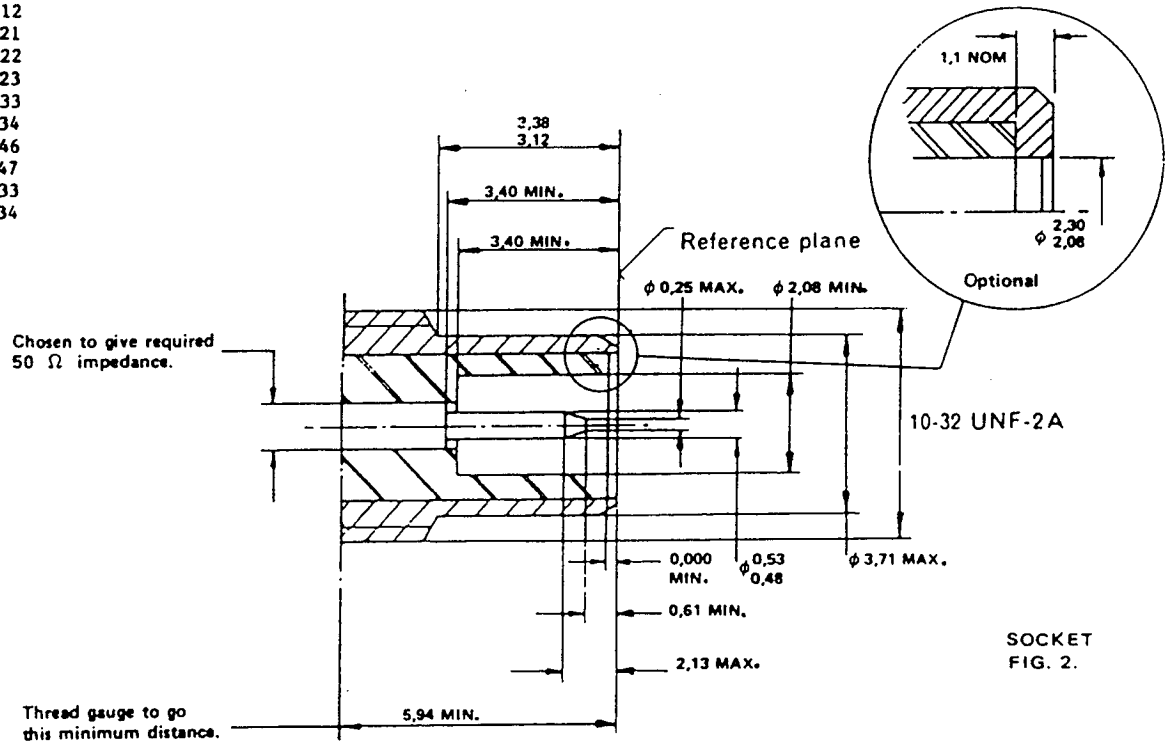

SOCKET
FIG. 2.

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2.2 Gauges for general purpose connectors

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

2.2.1 Gauge for female centre contact

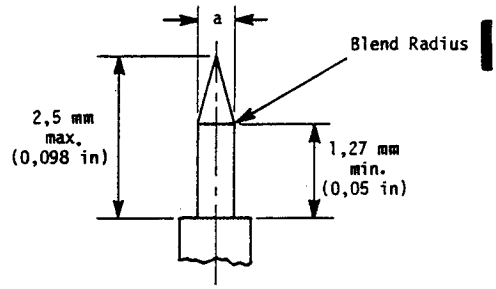

Fig. 3. Gauge pin for centre contact of socket connector (for dimension 'a' see below)

Gauge A - maximum material for sizing purposes					Gauge B - minimum material - for measurement of gauge retention force Mass (weight) of gauge: 28 ± 1 g			
	mm		in		mm		in	
Ref.	min.	max.	min.	max.	min.	max.	min.	max.
a Ø	0,533	0,538	0,0210	0,0212	0,477	0,482	0,0188	0,0190
Material: Steel, polished surface roughness Ra = 0,4 µm (16 µin) max.								

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Test procedure (see 4.5.1 of CECC 22 000).

Gauge A shall be inserted once only into the female centre contact. This is a sizing operation.

After this, Gauge B shall be inserted into the female centre contact. The contact shall support the mass of the gauge in a vertical downward attitude.

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Additional test

Following the sizing operation, and if prescribed in the DS, the force necessary to insert Gauge A fully into the female centre contact shall be measured. When this test is required, the maximum permitted insertion force shall then be specified and shall not exceed 11 N.

Notes: (for information only)

Gauge A is used for qualification approval tests only, see 4.5.1. The minimum diameter of Gauge A corresponds to the maximum diameter of a male contact pin.

The use of an oversize gauge (0,546 min./0,551 max.), as specified in IEC 169-9, is not mandatory. Oversize gauging is regarded as an effective quality control procedure for testing female centre contacts, separately from the connector, during manufacture.

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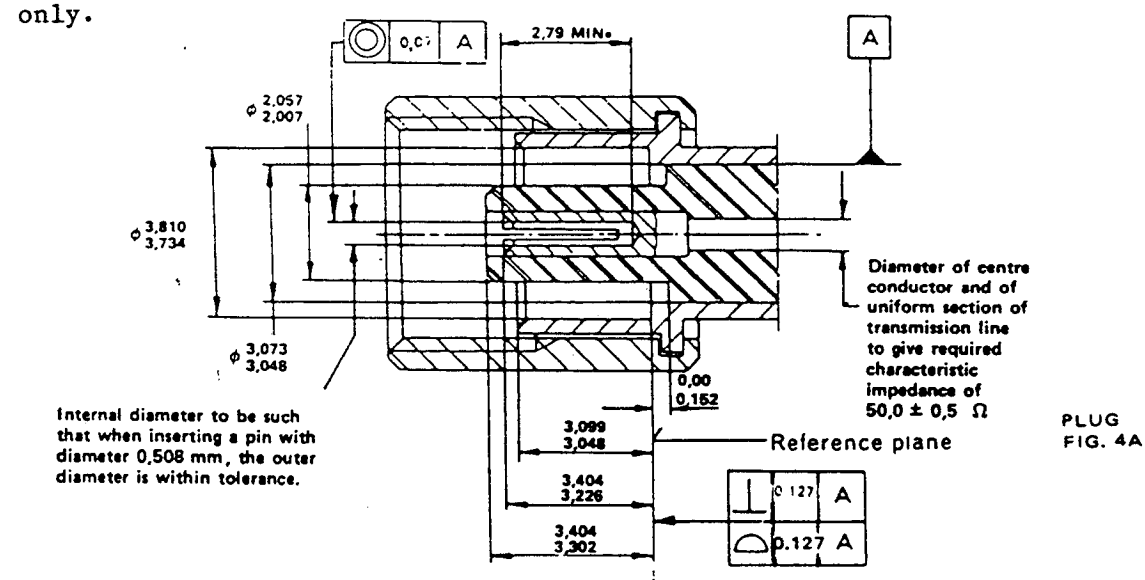
2.3 Dimensions - Standard test connectors (Grade 0)

(see 4.4.1 of CECC 22 000).

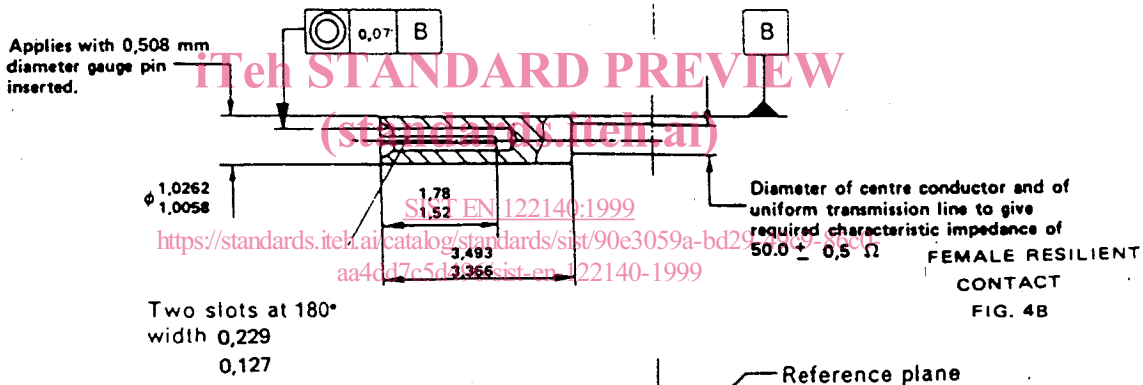
All undimensioned pictorial configurations are for reference purposes only.

Original dimensions in inches

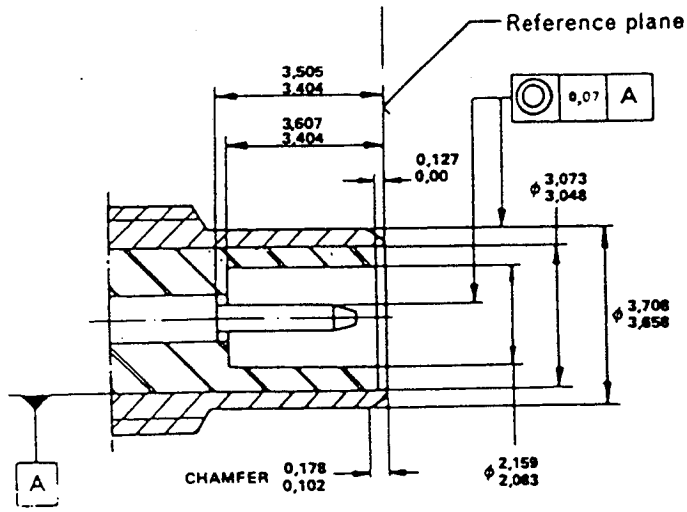
mm	inches
0,075	0,003
0,102	0,004
0,127	0,005
0,152	0,006
0,178	0,007
0,229	0,009
0,25	0,010
0,495	0,0195
0,508	0,020
0,521	0,0205
1,0058	0,0396
1,0262	0,0404
1,524	0,060
1,626	0,064
1,78	0,070
2,007	0,079
2,057	0,081
2,083	0,082
2,159	0,085
2,515	0,099
2,616	0,103
2,79	0,110
3,048	0,120
3,073	0,121
3,099	0,122
3,226	0,127
3,302	0,130
3,366	0,1325
3,404	0,134
3,493	0,1375
3,505	0,138
3,607	0,142
3,658	0,144
3,708	0,146
3,734	0,147
3,810	0,150



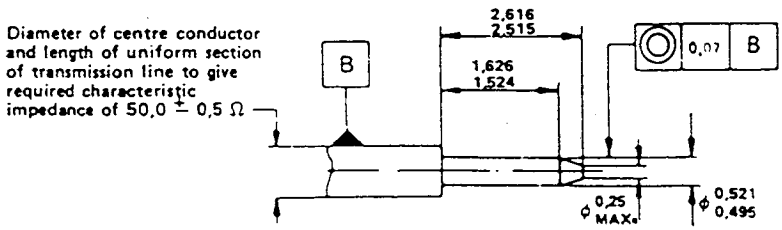
PLUG
FIG. 4A



FEMALE RESILIENT CONTACT
FIG. 4B



SOCKET
FIG. 5A



MALE CONTACT
FIG. 5B.

NOTE: Dimensions not indicated in these figures are included in figures 1 and 2.

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