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**Radio frequency and coaxial cable assemblies - Part 3-2: Detail specification for semi-flexible coaxial cable assemblies for GSM use (0,8 GHz - 1 GHz) (IEC 60966-3-2:1996)**

Radio frequency and coaxial cable assemblies -- Part 3-2: Detail specification for semi-flexible coaxial cable assemblies for GSM use (0,8 GHz - 1 GHz)

Konfektionierte Koaxial- und Hochfrequenzkabel -- Teil 3-2: Bauartspezifikation für halbflexible konfektionierte Koaxialkabel für GSM-Anwendungen (0,8 GHz - 1 GHz)

Ensemble de cordons coaxiaux et de cordons pour fréquences radioélectriques -- Partie 3-2: Spécification particulière pour cordons coaxiaux semi-flexibles pour applications GSM (0,8 GHz - 1 GHz)

**Ta slovenski standard je istoveten z: EN 60966-3-2:1999**

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**ICS:**

33.120.10 Koaksialni kabli. Valovodi Coaxial cables. Waveguides

**SIST EN 60966-3-2:2001****en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60966-3-2**

February 1999

ICS 33.120.10

English version

**Radio frequency and coaxial cable assemblies**  
**Part 3-2: Detail specification for semi-flexible coaxial cable assemblies**  
**for GSM use (0,8 GHz - 1 GHz)**  
(IEC 60966-3-2:1996)

Ensemble de cordons coaxiaux et  
de cordons pour fréquences  
radioélectriques  
Partie 3-2: Spécification particulière  
pour cordons coaxiaux semi-flexibles  
pour applications GSM  
(0,8 GHz - 1 GHz)  
(CEI 60966-3-2:1996)

Konfektionierte Koaxial- und  
Hochfrequenzkabel  
Teil 3-2: Bauartspezifikation für  
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für GSM-Anwendungen  
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[SIST EN 60966-3-2:2001](https://standards.iteh.ai/catalog/standards/sist/d0fd0b69-07e2-4a4d-9a5f-7afe10990a6c/sist-en-60966-3-2-2001)

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This European Standard was approved by CENELEC on 1999-01-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

**CENELEC**

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 text of the International Standard IEC 60966-3-2:1996, prepared by SC 46A, Coaxial cables, of IEC TC 46, Cables, wires, waveguides, R.F. connectors, and accessories for communication and signalling, was submitted to the formal vote and was approved by CENELEC as EN 60966-3-2 on 1999-01-01 without any modification.

The following dates were fixed:

- latest date by which the EN has to be implemented  
at national level by publication of an identical  
national standard or by endorsement (dop) 2000-01-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2000-01-01

This standard is to be used in conjunction with EN 60966-1:1993 and EN 60966-3:1994.

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### Endorsement notice

The text of the International Standard IEC 60966-3-2:1996 was approved by CENELEC as a European Standard without any modification.

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**NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD**

**CEI  
IEC**

**966-3-2**

Première édition  
First edition  
1996-08

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**Ensemble de cordons coaxiaux et de cordons  
pour fréquences radioélectriques –**

**Partie 3-2:**

**Spécification particulière pour cordons coaxiaux  
semi-flexibles pour applications GSM  
(0,8 GHz – 1 GHz)**

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**Radio frequency and coaxial cable assemblies –**

**Part 3-2:**

**Detail specification for flexible coaxial  
cable assemblies for GSM use (0,8 GHz – 1 GHz)**

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International Electrotechnical Commission  
Международная Электротехническая Комиссия

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## RADIO FREQUENCY AND COAXIAL CABLE ASSEMBLIES –

### Part 3-2: Detail specification for semi-flexible coaxial cable assemblies for GSM use (0,8 GHz – 1 GHz)

#### FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
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- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 966-3-2 has been prepared by sub-committee 46A: Coaxial cables, of IEC technical committee 46: Cables, wires, waveguides, r.f. connectors and accessories for communication and signalling.

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

FDIS	Report on voting
46A/254/FDIS	46A/266/RVD

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

## INTRODUCTION

This detail specification relates to the subfamily of coaxial cables and connector assemblies operating in the frequency range of GSM (0,8 Ghz – 1 GHz)

They are designed with cable with a diameter of 13 mm and connectors from IEC 169-4 (type 7-16).

This detail specification should be used together with IEC 966-3 and IEC 966-1.

It gives subfamily requirements and severities to be applied.

Under Qualification Approval, the qualification will be conducted in accordance with 13.3 of IEC 966-6 taking into account the specified variants. Only the tests whose results might depend on the variants will be repeated.

Under Capability Approval, the Qualification will be conducted on the relating CQCs as defined in 13.4 of IEC 966-3 and described in the CM. Unless otherwise specified in the CM, only lot-by-lot tests from groups Ba and Eb will be conducted on delivered products, all other tests will be performed on CQCs as defined in 13.4 of IEC 966-3 and described in the CM.


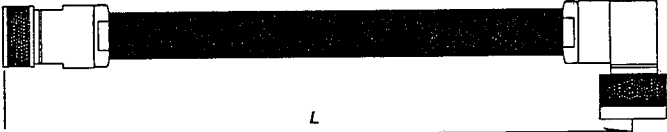
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Reference document:

**(standards.iteh.ai)**

IEC 169-4:1975, *Radio-frequency connectors – Part 4: R.F. coaxial connectors with inner diameter of outer conductor 16 mm (0,63 in) with screw lock – Characteristic impedance 50 ohms (type 7-16)*

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[1] Elaboré par Prepared by  IEC SC 46A		[2] Document n° 966-3-2 Indice/Issue: First Issue Date: 30/07/96												
[3] Disponible auprès de: Available from:  IEC/CEI 3 rue de Varembe Genève Suisse	[4] Spécification générique: CEI/IEC 966-1 Generic specification:  Spécification intermédiaire: CEI/IEC 966-3 Sectional specification  Spécification particulière cadre: CEI/IEC 966-3-1 Blank detail specification:													
[5] Références complémentaires: CEI/IEC 169-4 Additional references:														
<b>Spécification particulière pour cordons coaxiaux semi-flexibles pour applications GSM (0,8 GHz – 1 GHz)</b>  <b>Detail specification for semi-flexible coaxial assemblies for GSM use (0,8 GHz – 1 GHz)</b>														
[6] <div style="text-align: center;">  <p style="color: red; font-weight: bold; font-size: 1.2em;">iTeh STANDARD PREVIEW (standards.iteh.ai)</p> </div>														
[7] Impédance caractéristique: 50 Ω Characteristic impedance:	[8] Bande de fréquence: 0,8 GHz à/to 1 GHz Frequency range:													
[9] Masse: 200 g/m + 180 g/m Weight:	[10] Rayon de courbure minimal: Minimum inside radius: – pour les pliages statiques 30 mm for static bending – pour les pliages dynamiques 180 mm for dynamic bending													
[11] Catégorie climatique: 40/70/21 Climatic category:	[12] Groupes d'essais applicables: Ba, Eb, Eh, Ee, Et, Mn, Applicable test group: Vv, Vc, Vt, Vf													
<table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;"></th> <th style="width: 33%; text-align: center;">a</th> <th style="width: 33%; text-align: center;">b</th> <th style="width: 33%; text-align: center;">c</th> </tr> </thead> <tbody> <tr> <td>[13] Connecteur/Connector type</td> <td style="text-align: center;">IEC 169-4(7-16) Fiche droite/Straight plug</td> <td style="text-align: center;">IEC 169-4(7-16) Fiche droite/Straight plug</td> <td style="text-align: center;">IEC 169-4(BNC) Fiche coudée/Right angle plug</td> </tr> <tr> <td>Type de câble/Cable type</td> <td style="text-align: center;">13 mm</td> <td style="text-align: center;">13 mm</td> <td style="text-align: center;">13 mm</td> </tr> </tbody> </table> <p>Méthode de marquage/Marking method: Manchons/Marking sleeves Marquage/Marking text: Identification du fabricant et référence CEI/Manufacturer identification and IEC reference: 966-3-2</p>				a	b	c	[13] Connecteur/Connector type	IEC 169-4(7-16) Fiche droite/Straight plug	IEC 169-4(7-16) Fiche droite/Straight plug	IEC 169-4(BNC) Fiche coudée/Right angle plug	Type de câble/Cable type	13 mm	13 mm	13 mm
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[14] Variantes/variants <table border="0" style="margin-left: 20px;"> <tr><td>1</td><td>a-a</td></tr> <tr><td>2</td><td>c-c</td></tr> <tr><td>3</td><td>a-b</td></tr> <tr><td>4</td><td>b-c</td></tr> </table>	1	a-a	2	c-c	3	a-b	4	b-c	[15] Page 1 sur 5 pages Page 1 of 5 pages					
1	a-a													
2	c-c													
3	a-b													
4	b-c													



[16] Valeurs et caractéristiques à respecter Inspection values, ratings or characteristics	[17] Paragraphe Subclause	[18] Valeur Value	[19] Remarques Remarks
<b>Electrique/Electrical</b>			
Caractéristiques de réflexion Reflection properties	9.1	> 26dB	0,8 GHz à/to 1 Ghz des deux extrémités/ from both ends
Pertes d'insertion Insertion loss	9.3	< 0,2 dB/m	à/at 1 GHz à/at 25 °C
Stabilité des pertes d'insertion Insertion loss stability	9.4	< 0,1 dB	à/at 1 GHz à/at 25°C 5 tours/cycles 100 mm
Temps de propagation Propagation time	9.5	< 8,3 ns/m	800–900 MHz
Efficacité d'écran Screening effectiveness	9.9	> 110 dB	Jusqu'à/Up to 1 GHz
Tension de tenue Voltage proof	9.10	2,5 kV	Valeur crête 50 Hz Peak value
Résistance d'isolement Insulation resistance	9.11	10 <sup>5</sup> MΩ	Tension d'essai/Test voltage 500 V, 1 min
Continuité du conducteur intérieur et du conducteur extérieur Inner and outer conductor continuity	9.12	OK/ non/ no	Basse tension continue/Low voltage d.c.
Puissance nominale Power rating	9.14	Under consideration	
Niveau d'intermodulation Intermodulation level	9.5	Under consideration	
<b>Mécanique/Mechanical</b>			
Traction Tensile	10.1	interface OK/non/no	280 N Durée/duration 3 mn ROS/Return loss > 26 dB
Ecrasement du câble Cable crushing	10.4	interface OK/non/no	70 N ROS/Return loss > 26 dB
Couple Torque	10.5	interface OK/non/no	> 4 Nm ROS/Return loss > 26 dB
Pliages multiples Multiple bending	10.6	interface OK/non/no	20 cycles, r = 100 mm ROS/Return loss > 26 dB