INTERNATIONAL STANDARD

ISO 10487-1

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1992-11-15

Passenger car radio connections —

Part 1:
Dimensions and general requirements

Connexions pour autoradios —

Partie 1: Dimensions et exigences générales

Reference number
ISO 10487-1:1992(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 10487-1 was prepared by Technical Committee ISO/TC 22, *Road vehicles*.

ISO 10487 consists of the following parts, under the general title *Passenger car radio connections*:

— *Part 1: Dimensions and general requirements*

— *Part 2: Performance requirements*

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Passenger car radio connections —

Part 1:
Dimensions and general requirements

1 Scope

This part of ISO 10487 specifies dimensions and general requirements of the multi-pole connector and the positions of antenna sockets for radios intended for fitting in passenger cars.

It also specifies the contact allocation of the connector.

This connector is both for permanent connection of the car radio to the vehicle harness and for extractable car radios.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 10487. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 10487 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 8092-3:—[1], *Road vehicles — Connections for on-board electrical harnesses — Part 3: Multi-pole connector tabs — Dimensions and specific requirements.*

ISO 8820-2:—[1], *Road vehicles — Blade type electric fuse-links — Part 2: Dimensional requirements.*

IEC 268-15:1987, *Sound system equipment — Part 15: Preferred matching values for the interconnection of sound system components.*

3 Requirements

3.1 The sockets of the multi-pole connector and the antenna sockets shall be mounted at the back of the radio, as shown in figure 1. If a second antenna socket (defined as subantenna socket) is provided, it shall be located symmetrical to the main antenna socket, in relation to the horizontal axis of the radio.

3.2 The sockets of the multi-pole connector and the antenna sockets shall be permanently mounted on the car radio as shown in figure 1. The plug forms a part of the vehicle harness.

3.3 The distance between the trim plate and the connector face shall be as agreed between vehicle and car radio manufacturers.

3.4 The socket shall have a maximum of 26 male contacts grouped into three parts, A, B and C, as shown in figure 1. These contacts shall be tabs 2,8 × 0,5 0N with neither shoulder nor hole, in accordance with ISO 8092-3.

1) To be published.

3.5 Each part of the plug shall have a polarizing key to ensure that the part only fits into the correct socket part A, B or C.

3.6 Each part of the socket shall include a locking zone.

3.7 The socket provide a space for a blade-type electric fuse link as specified in ISO 8820-2.

3.8 The impedance of connections shall be in accordance with IEC 268-15.

3.9 Part 2 of this International Standard (under study) will cover tests and performance requirements.

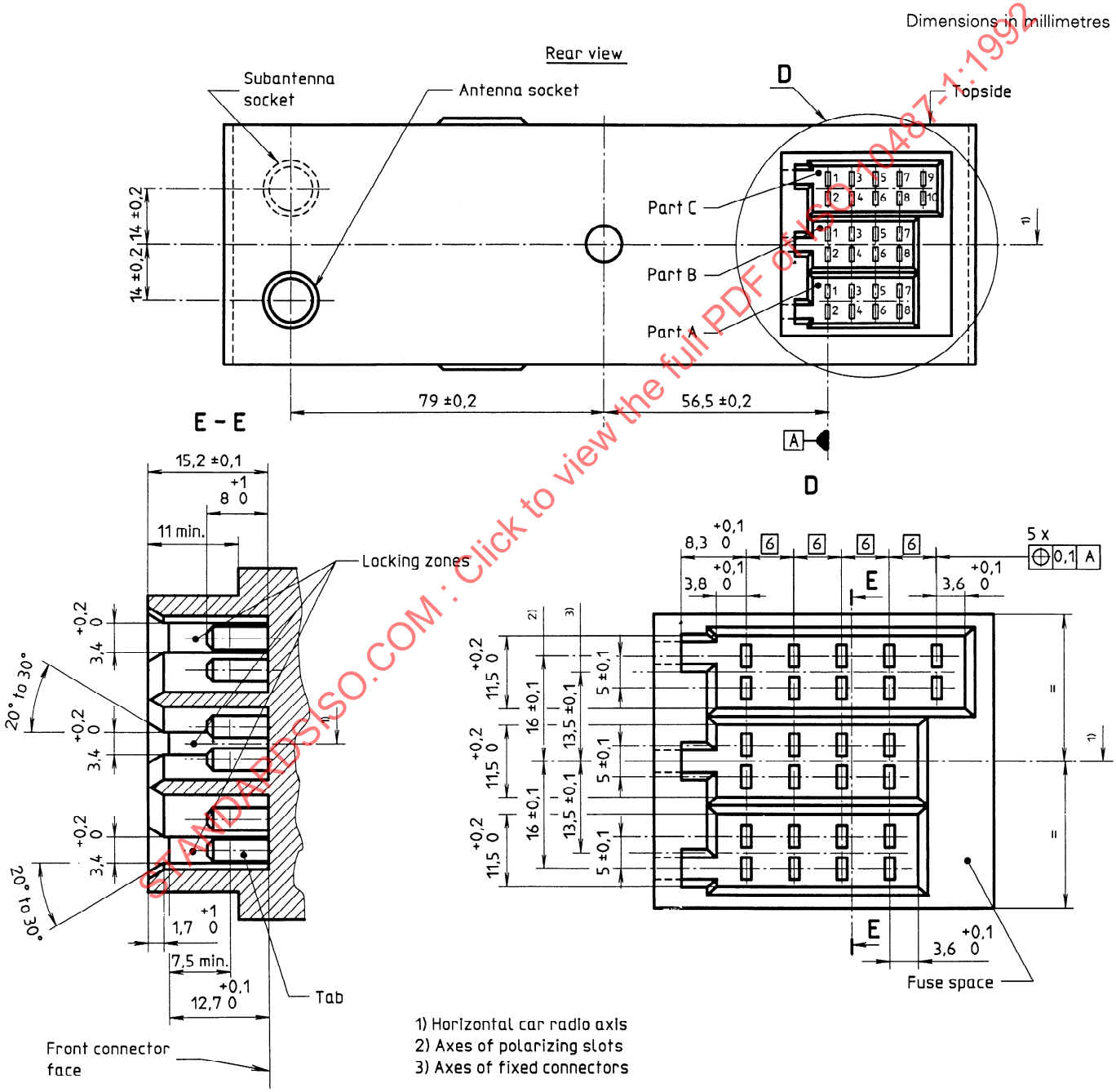

Figure 1

4 Contact allocation

The contact allocation within the socket shall be as indicated in table 1.

Table 1

Contact No.	Contact function within		
	part A	part B	part C
1	Volume control, vehicle speed-related	Loudspeaker positive: rear right channel	1)
2	Ground for A1	Loudspeaker negative: rear right channel 2)	1)
3	1)	Loudspeaker positive: front right channel	1)
4	Battery positive: commutated in vehicle only when A7 contact is not commutated. 0,3A max.	Loudspeaker negative: front right channel 2)	1)
5	Battery positive: commutated by radio for antenna supply, max. 0,3A	Loudspeaker positive: front left channel	1)
6	Battery positive: radio illumination controlled by dashboard illumination	Loudspeaker negative: front left channel 2)	1)
7	Battery positive: for main power supply, permanent or commutated in vehicle only when A4 contact is not commutated	Loudspeaker positive: rear left channel	1)
8	Battery negative	Loudspeaker negative: rear left channel 2)	1)
9	— 3)	— 3)	1)
10	— 3)	— 3)	1)

1) For future application to be determined. Some of the not-yet-allocated contacts will be reserved for RDS (Radio Data System).

2) Common negative wiring of loudspeakers is not allowed in the vehicle.

3) The contact does not exist.

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