
Road vehicles — Connections for on-board electrical wiring harnesses —

**Part 5:
Test methods and general
performance requirements for wiring
harness connector operation**

Véhicules routiers — Connexions pour faisceaux de câblage électrique embarqués —

Partie 5: Méthodes d'essai et exigences générales de performance pour le raccordement du connecteur du faisceau de câblage



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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

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A list of all parts in the ISO 8092 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Along with the increase of electrical components mounted on a road vehicle, the types and numbers of connectors mounted on the automobile increase and the connector mating work becomes harder in such circumstances. Especially from the viewpoint of ergonomics, this problem is addressed seriously. To comprehend the characteristics of connector mate/unmate operation, their test procedures are specified in this document.

Road vehicles — Connections for on-board electrical wiring harnesses —

Part 5:

Test methods and general performance requirements for wiring harness connector operation

1 Scope

This document defines terms and specifies test methods and general performance requirements for single-pole and multi-pole connections used with on-board electrical wiring harnesses of road vehicles. This document is applicable to connectors designed to be disconnected after mounting in the vehicle for repair and maintenance only. It does not cover one-part connections, i.e. where one part of the connection has direct contact to the pattern of the printed circuit board. This document is not applicable to internal connections of electronic devices.

2 Normative references

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

ISO 19642 (all parts), *Road vehicles — Automotive cables*

IEC 61672-1, *Electroacoustics — Sound level meters — Part 1: Specifications*

3 Terms and definitions

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

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

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

3.1

male connector

assembly of male *terminal* (3.3) and housing that terminates conductors for the purpose of providing connection and disconnection to a suitable mating connector

3.2

female connector

assembly of female *terminal* (3.3) and housing that terminates conductors for the purpose of providing connection and disconnection to a suitable mating connector

3.3

terminal

connector contact connected with a corresponding element of the same purpose, used to form an electric circuit (including wiring parts)