### INTERNATIONAL STANDARD



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# Road vehicles — Connectors for the electrical connection of towing and towed vehicles —

Part 1:

#### Connectors for braking systems and running gear of vehicles with 24 V nominal supply voltage

Véhicules routiers — Connecteurs pour liaisons électriques entre véhicules tracteurs et véhicules tractés —

Partie 1: Connecteurs pour les équipements de freinage et les organes de roulement des véhicules à tension nominale de 24 V



Reference number ISO 7638-1:2003(E)

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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 Maison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 7638-1 was prepared by Technical Committee ISO/TC 22, Road vehicles, Subcommittee SC 3, Electrical and electronic equipment.

This second edition cancels and replaces the first edition (ISO 7638-1:1997), which has been technically revised taking into account the very latest revisions of SO 4009 and ISO 4091.

ISO 7638 consists of the following parts, under the general title Road vehicles — Connectors for the electrical connection of towing and towed vehicles:

- Part 1: Connectors for braking systems and running gear devehicles with 24 V nominal supply voltage
- Part 2: Connectors for braking systems and running gears of Verticles with 12 V nominal supply voltage

## Road vehicles — Connectors for the electrical connection of towing and towed vehicles —

#### Part 1:

## Connectors for braking systems and running gear of vehicles with 24 V mominal supply voltage



#### 1 Scope

This part of ISO 7638 gives the dimensions of, and specifies the contact allocation and tests and test requirements for, connectors for the electrical connection of the braking systems and running gear of towing and towed vehicles with 24 V nominal supply voltage. In addition, it specifies a park socket used to receive and store the plug when disconnected.

#### 2 Normative references

The following referenced documents are indispensable for application 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 4009, Commercial vehicles — Location of electrical and pneumatic connections between towing vehicles and trailers

ISO 4091, Road vehicles — Connectors for the electrical connection of towing vehicles and towed vehicles — Definitions, tests and requirements

ISO 4141 (all parts), Road vehicles — Multi-core connecting cable

ISO 7638-2, Road vehicles — Connectors for the electrical connection of towing and towed vehicles — Part 2: Connectors for braking systems and running gear of vehicles with 12 V nominal supply voltage

ISO 11992-1, Road vehicles — Interchange of digital information on electrical connections between towing and towed vehicles — Part 1: Physical layer and data-link layer

ISO 11992-2, Road vehicles — Interchange of digital information on electrical connections between towing and towed vehicles — Part 2: Application layer for brakes and running gear

ISO 12098<sup>1)</sup>, Road vehicles — Connectors for the electrical connection of towing and towed vehicles — 15-pole connector for vehicles with 24 V nominal supply voltage

<sup>1)</sup> To be published. (Revision of ISO 12098:1994)