
Road vehicles — Fuse-links —

**Part 1:
Definitions and general test
requirements**

Véhicules routiers — Liaisons fusibles —

Partie 1: Définitions et exigences générales d'essai

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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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 22, *Road vehicles*, Subcommittee SC 3, *Electric and electronic requirements*.

This fourth edition cancels and replaces the third edition (ISO 8820-1:2008), which has been technically revised.

ISO 8820 consists of the following parts, under the general title *Road vehicles — Fuse-links*:

- *Part 1: Definitions and general test requirements*
- *Part 2: User guidelines*
- *Part 3: Fuse-links with tabs (blade type) Type C (medium), Type E (high current) and Type F (miniature)*
- *Part 4: Fuse-links with female contacts (type A) and bolt-in contacts (type B) and their test fixtures*
- *Part 5: Fuse-links with axial terminals (strip fuse-links) Types SF30 and SF51 and test fixtures*
- *Part 6: Single-bolt fuse-links*
- *Part 7: Fuse-links with tabs (Type G) with rated voltage of 450 V*
- *Part 8: Fuse-links with bolt-in contacts (Type H and J) with rated voltage of 450 V*
- *Part 9: Fuse-links with shortened tabs (Type K)*
- *Part 10: Fuse-links with tabs Type L (high current miniature)*

Road vehicles — Fuse-links —

Part 1: Definitions and general test requirements

1 Scope

This part of ISO 8820 defines terms and specifies general test requirements for fuse-links for electrical DC systems of road vehicles.

This part of ISO 8820 is intended to be used in conjunction with other parts of ISO 8820, to which its requirements are applicable except where modified by the particular requirements of another part.

This part of ISO 8820 is not applicable to fuse holders used in the vehicles.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6722, *Road vehicles — 60 V and 600 V single core cables — Dimensions, test methods and requirements*

ISO 8820 (all parts), *Road vehicles — Fuse-links*

ISO 16750-3, *Road vehicles — Environmental conditions and testing for electrical and electronic equipment — Part 3: Mechanical loads*

ISO 16750-5, *Road vehicles — Environmental conditions and testing for electrical and electronic equipment — Part 5: Chemical loads*

IEC 60068-2-70, *Environmental testing — Part 2: Tests — Test Xb: Abrasion of markings and letterings caused by rubbing of fingers and hands*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 8820-1 and the following apply.

3.1

breaking capacity

I_B

value of prospective breaking current a fuse-link is capable of breaking at rated voltage under prescribed conditions of use and behaviour

3.2

fuse

protective device that interrupts the circuit irreversibly when the current flow reaches a specified value for a specific time

Note 1 to entry: The fuse is an assembly of all parts forming the protective device. This includes the fuse holder and the fuse-link.