SLOVENSKI STANDARD
SIST EN ISO 8092-2:2006

01-september-2006

Cestna vozila ï Priključ ki za električ no opremo, vgrajeni na armaturi vozila ï 2. del: Definicije, preskusne metode in splošne zahtevane lastnosti (ISO 8092-2:2005)

Road vehicles - Connections for on-board electrical wiring harnesses - Part 2: Definitions, test methods and general performance requirements (ISO 8092-2:2005)

Straßenfahrzeuge - Steckverbindungen für das elektrische Fahrzeug-Bordnetz - Teil 2: Begriffe, Prüfungen und allgemeine Anforderungen (ISO 8092-2:2005)

Véhicules routiers - Connexions pour faisceaux de câblage électriques embarqués - Partie 2: Définitions, méthodes d'essai et exigences de performances générales (ISO 8092-2:2005)

Ta slovenski standard je istoveten z: **EN ISO 8092-2:2005**

ICS:

43.040.10	Električ na in elektronska oprema	Electrical and electronic equipment

SIST EN ISO 8092-2:2006 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 8092-2

December 2005

ICS 43.040.10

Supersedes EN ISO 8092-2:2001

English Version

Road vehicles - Connections for on-board electrical wiring harnesses - Part 2: Definitions, test methods and general performance requirements (ISO 8092-2:2005)

Véhicules routiers - Connexions pour faisceaux de câblage électriques embarqués - Partie 2: Définitions, méthodes d'essai et exigences de performances générales (ISO 8092-2:2005)

Straßenfahrzeuge - Steckverbindungen für das elektrische Fahrzeug-Bordnetz - Teil 2: Begriffe, Prüfungen und allgemeine Anforderungen (ISO 8092-2:2005)

This European Standard was approved by CEN on 4 September 2005.

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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 CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Foreword

This document (EN ISO 8092-2:2005) has been prepared by Technical Committee ISO/TC 22 "Road vehicles" in collaboration with CMC.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2006, and conflicting national standards shall be withdrawn at the latest by June 2006.

This document supersedes EN ISO 8092-2:2001.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

The text of ISO 8092-2:2005 has been approved by CEN as EN ISO 8092-2:2005 without any modifications.

INTERNATIONAL STANDARD

ISO 8092-2

Fourth edition
2005-12-01

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

Part 2: Definitions, test methods and general performance requirements

Véhicules routiers — Connexions pour faisceaux de câblage électriques embarqués —

Partie 2: Définitions, méthodes d'essai et exigences de performances générales

Reference number
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Tel. + 41 22 749 01 11
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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.

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 8092-2 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 3, *Electrical and electronic equipment*.

This fourth edition cancels and replaces the third edition (ISO 8092-2:2000), which has been technically revised.

ISO 8092 consists of the following parts, under the general title *Road vehicles — Connections for on-board electrical wiring harnesses*:

— *Part 1: Tabs for single-pole connections — Dimensions and specific requirements*

— *Part 2: Definitions, test methods and general performance requirements*

— *Part 3: Tabs for multi-pole connections — Dimensions and specific requirements*

— *Part 4: Pins for single- and multi-pole connections — Dimensions and specific requirements*

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

Part 2: Definitions, test methods and general performance requirements

1 Scope

This part of ISO 8092 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 part of ISO 8092 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 part of ISO 8092 is not applicable to internal connections of electronic devices.

2 Normative references

The following referenced documents are indispensable for the 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 1817; *Rubber, vulcanized — Determination of the effect of liquids*

ISO 3170; *Petroleum liquids — Manual sampling*

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

ISO 7309, *Road vehicles — Hydraulic braking systems — ISO reference petroleum base fluid*

ISO 9227, *Corrosion tests in artificial atmospheres — Salt spray tests*

ISO 20653, *Road vehicles — Degrees of protection (IP-code) — Protection against foreign objects, water and access — Electrical equipment*

IEC 60050-581, *International Electrotechnical Vocabulary — Electromechanical components for electronic equipment*

IEC 60068-2-27, *Environmental testing. Part 2: Tests. Test Ea and guidance: Shock*

IEC 60512-11-7, *Connectors for electronic equipment — Tests and measurements — Part 11-7: Climatic tests — Test 11 g: Flowing mixed gas corrosion test*

IEC 60512-11-14, *Connectors for electronic equipment — Tests and measurements — Part 11-14: Test 11p — Flowing single gas corrosion test*

SAE J311b, *Fluid for passenger car type automatic transmission*

3 Terms and definitions

For the purpose of this part of ISO 8092, the definitions given in IEC 60050-581 and the following apply.

3.1
connection
two mated connectors or contacts

EXAMPLE See Figure 1.

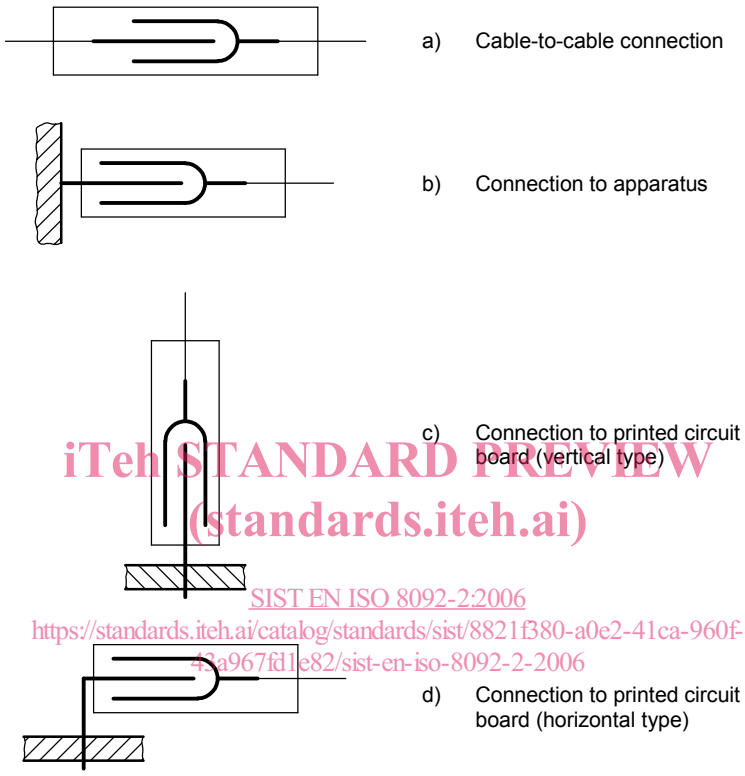


Figure 1 — Typical examples of connections

3.2
connector
assembly of contact and housing that terminates conductors for the purpose of providing connection and disconnection to a suitable mating connector

3.3
contact
conductive element in a connector (including means for cable attachment) that mates with a corresponding element to provide an electrical path

3.4
contact area
area in contact between two mated contacts that provides an electrical path

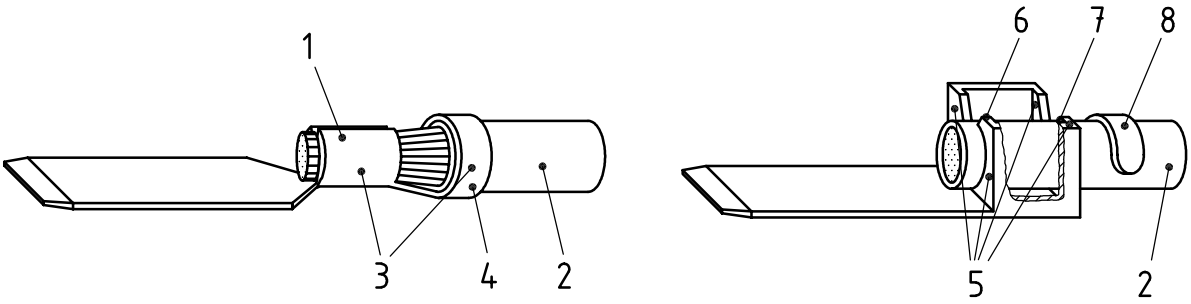
3.5
male contact
contact (including means for cable attachment) designed for electrical engagement on its outer surface and to enter a female contact, thus forming an electrical connection

EXAMPLE See Figure 2 (tab, pin, blade).

3.6
female contact
contact (including means for cable attachment) designed for electrical engagement on its inner surface, and to accept entry of a male contact, thus forming an electrical connection

EXAMPLE See Figure 3 (receptacle, sleeve).

Dimensions in millimetres

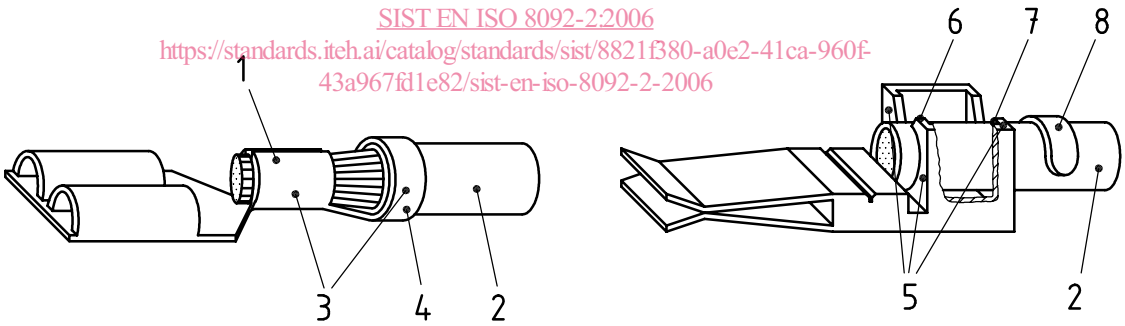


Key

1	conductor crimp	5	cable attachment by insulation displacement
2	cable	6	connection slot
3	cable attachment	7	connection slot/insulation support, if 8 is not available
4	insulation support/sealing grip	8	insulation support

Figure 2 — Male contact

Dimensions in millimetres



Key

1	conductor crimp	5	cable attachment by insulation displacement
2	cable	6	connection slot
3	cable attachment	7	connection slot/insulation support, if 8 is not available
4	insulation support/sealing grip	8	insulation support

Figure 3 — Female contact

3.7
positive-locking female contact
female contact with automatic positive-locking and manual unlocking device engaging a hole or dimple in the male contact

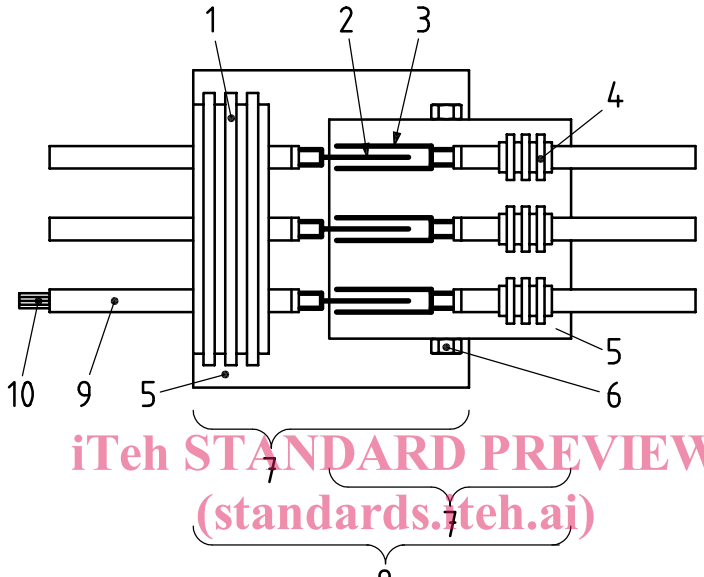
3.8
cable attachment
any permanent joining of cable to contact

EXAMPLES Include crimp, insulation, displacement, welding and screwing.

3.9
detent
raised portion of the female contact that engages a hole or dimple in the male contact thus providing a latch for the mated parts

3.10
multi-pole connection
two mated connectors with more than one contact pair

EXAMPLE See Figure 4.



Key

1	multiple cable seal	6	housing seal
2	male contact	7	connector
3	female contact	8	connection
4	single cable seal	9	cable
5	housing	10	conductor

Figure 4 — Multi-pole connectors/connection

3.11
connector coding
device, either for visual, mechanical or sensitive, or combinations of these preventing connection of connectors from the same family and having the same number of contacts but with different coding

4 Tests and requirements

4.1 General

4.1.1 Preconditioning

All test samples shall be preconditioned at (23 ± 5) °C and 45 % to 75 % relative humidity for 24 h before the start of any test sequence.