
Road vehicles - Connections for on-board electrical wiring harnesses - Part 2:
Terms and definitions, test methods and general performance requirements
(ISO/DIS 8092-2:2004)

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English version

Road vehicles - Connections for on-board electrical wiring harnesses - Part 2: Terms and definitions, test methods and general performance requirements (ISO/DIS 8092-2:2004)

Véhicules routiers - Connexions pour faisceaux de câblage électrique embarqués - Partie 2: Termes et définitions, méthodes d'essai et exigences de fonctionnement générales (ISO/DIS 8092-2:2004)

This draft European Standard is submitted to CEN members for parallel enquiry. It has been drawn up by the Technical Committee CEN/SS T03.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (prEN ISO 8092-2:2004) has been prepared by Technical Committee ISO/TC 22 "Road vehicles" in collaboration with CMC.

This document is currently submitted to the parallel Enquiry.

This document will supersede EN ISO 8092-2:2001.

Endorsement notice

The text of ISO 8092-2:2004 has been approved by CEN as prEN ISO 8092-2:2004 without any modifications.

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

Part 2:

Terms and definitions, test methods and general performance requirements

Véhicules routiers — Connexions pour faisceaux de câblage électrique embarqués —

Partie 2: Termes et définitions, méthodes d'essai et exigences de fonctionnement générales

[Revision of third edition (ISO 8092-2:2000)]

ICS 43.040.10

ISO/CEN PARALLEL ENQUIRY

The CEN Secretary-General has advised the ISO Secretary-General that this ISO/DIS covers a subject of interest to European standardization. **In accordance with the ISO-lead mode of collaboration as defined in the Vienna Agreement, consultation on this ISO/DIS has the same effect for CEN members as would a CEN enquiry on a draft European Standard.** Should this draft be accepted, a final draft, established on the basis of comments received, will be submitted to a parallel two-month FDIS vote in ISO and formal vote in CEN.

In accordance with the provisions of Council Resolution 15/1993 this document is circulated in the English language only.

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Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Tests and requirements	4
4.1 General	4
4.2 Visual examination	5
4.3 Connection and disconnection	7
4.4 Tensile strength for crimped connections	7
4.5 Locking device strength	8
4.6 Contact insertion force	9
4.7 Contact retention in housing	9
4.8 Connection resistance (voltage drop)	9
4.9 Influence of water	11
4.10 Temperature / humidity cycling	12
4.11 Combined temperature / vibration	14
4.12 Insulation resistance	16
4.13 Withstand voltage	17
4.14 Temperature rise	17
4.15 Connector coding and polarisation	18
4.16 Salt spray	19
4.17 Current cycling	19
4.18 Thermal ageing	19
4.19 Mechanical shock	19
4.20 Drop	20
4.21 Dust	20
4.22 Rapid change of temperature (thermal shock)	21
4.23 Chemical fluids	22
4.24 Flowing gas corrosion test	22
Annex A (normative) Additional cable dimensions	24
Annex B (informative) Cable attachment by insulation-displacement connection (IDC) - Bending test	25
Bibliography	27

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 third edition cancels and replaces the second edition 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: Terms and 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, vulcanised - 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 contact – Electrical equipment¹⁾*

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; *Electromechanical components for electronic equipment – Basic testing procedures and measuring methods – Part 11-7: Climatic tests – Test 11 g - Flowing mixed gas corrosion test*

IEC 60512-11-14; *Electromechanical components for electronic equipment – Basic testing procedures and measuring methods – Part 11-14: Test 11p - Flowing single gas corrosion test*

1) under preparation

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

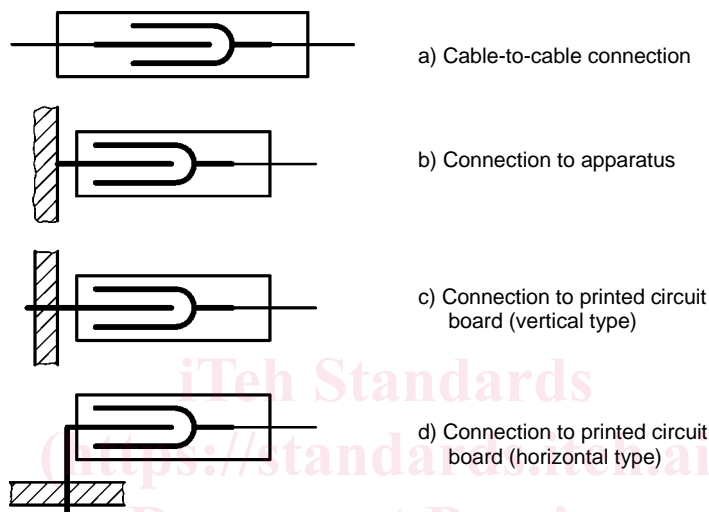


Figure 1 — Typical examples of connections

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)

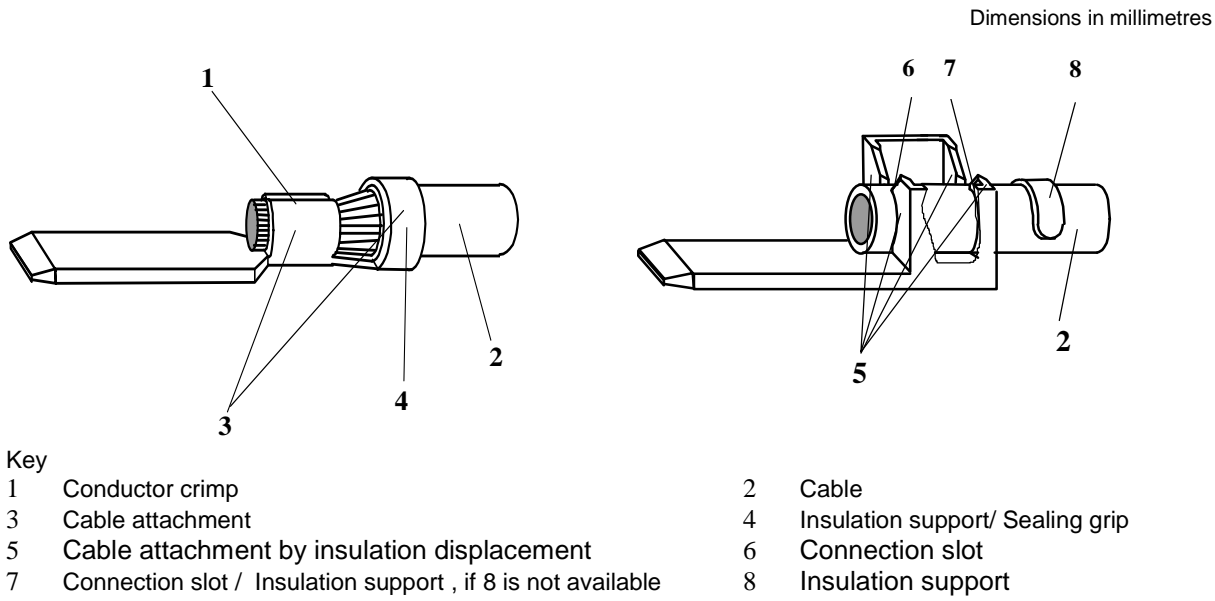


Figure 2 — Male contact

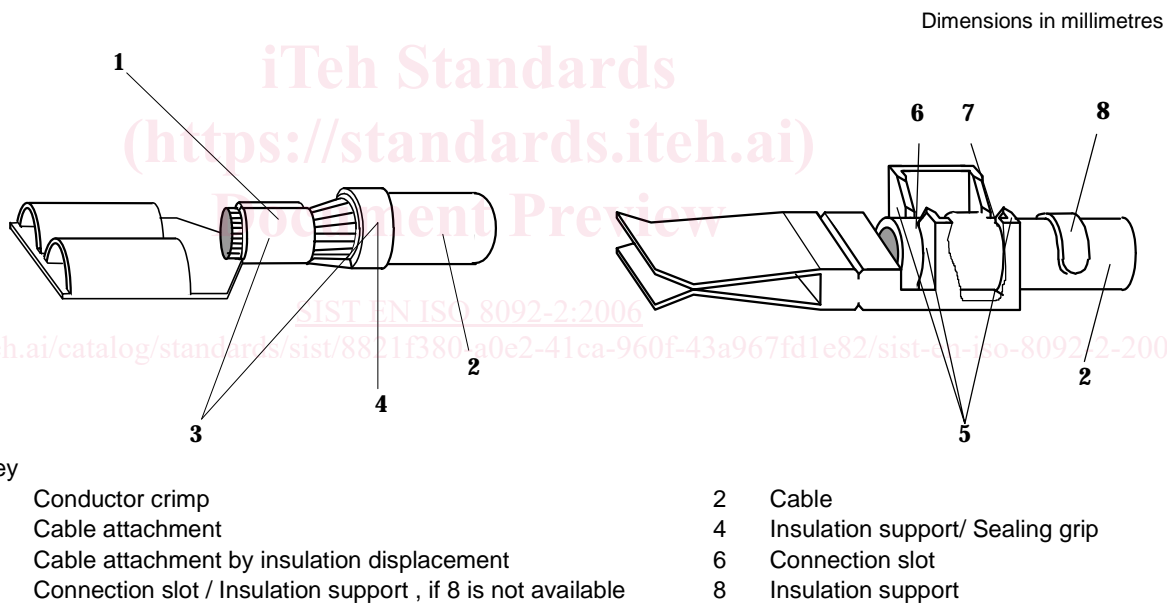


Figure 3 — Female contact

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

EXAMPLE crimp, insulation, displacement, welding, screwing