

**Maantesõidukid. Sõidukis olevate
juhtmekimpude pistikühendused. Osa
2: Määratlused, testimismeetodid ja
põhiliste tööparameetrite nõuded**

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 8092-2:2006 sisaldab Euroopa standardi EN ISO 8092-2:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 25.01.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 8092-2:2006 consists of the English text of the European standard EN ISO 8092-2:2005.</p> <p>This document is endorsed on 25.01.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
--	---

<p>Käsitlusala:</p> <p>Käesolev ISO 8092 osa määrab kindlaks nõuded maanteeõidukites olevate elektrijuhtmete kimpude ühe- ja mitmepooluseliste pistikühenduste ning nende testimise meetodite ja põhiliste tööparameetrite kohta.</p>	<p>Scope:</p> <p>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.</p>
--	--

ICS 43.040.10

Võtmesõnad: elektri lised pistikühendused, elektrilised ühendused, elektripaigaldis, kaablikimbud, maanteeõidukid, mõõtmed, määratlused, tehnilised andmed, testimised, tähistus, tööomadused

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.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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.

CEN members are the national standards bodies of 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.



EUROPEAN COMMITTEE FOR STANDARDIZATION
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.

**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*



PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2005

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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	8
4.5 Locking device strength	9
4.6 Contact insertion force.....	9
4.7 Contact retention in housing.....	9
4.8 Connection resistance (voltage drop)	10
4.9 Influence of water	12
4.10 Temperature / humidity cycling.....	13
4.11 Combined temperature / vibration	16
4.12 Insulation resistance	18
4.13 Withstand voltage	18
4.14 Temperature rise.....	19
4.15 Connector coding and polarisation	21
4.16 Salt spray	21
4.17 Current cycling.....	21
4.18 Thermal ageing	21
4.19 Mechanical shock	22
4.20 Drop.....	22
4.21 Dust	23
4.22 Rapid change of temperature (thermal shock)	24
4.23 Chemical fluids	24
4.24 Flowing gas corrosion test	25
Annex A (normative) Additional cable dimensions	26
Annex B (informative) Cable attachment by insulation-displacement connection (IDC) — Bending test	27
Bibliography	29

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*