Maanteesõidukid. 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



FESTI STANDARDI FESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 8092-2:2002 sisaldab Euroopa standardi EN ISO 8092-2:2001 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 19.06.2002 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas. This Estonian standard EVS-EN ISO 8092-2:2002 consists of the English text of the European standard EN ISO 8092-2:2001.

This standard is ratified with the order of Estonian Centre for Standardisation dated 19.06.2002 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

ICS 43.040.10

Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega: Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

Right to reproduce and distribute Estonian Standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without permission in writing from Estonian Centre for Standardisation.

If you have any questions about standards copyright, please contact Estonian Centre for Standardisation: Aru str 10 Tallinn 10317 Estonia; www.evs.ee; Phone: +372 605 5050; E-mail: info@evs.ee

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 8092-2

December 2001

ICS 43.040.10

Supersedes EN 28092-2:1998

English version

Road vehicles - Connections for on-board electrical wiring harnesses - Part 2: Definitions, test methods and general performance requirements (ISO 8092-2:2000)

Véhicules routiers - Connexions pour faisceaux de câblage électrique embarqués - Partie 2: Définitions, méthodes d'essai et exigences générales (ISO 8092-2:2000) Straßenfahrzeuge - Steckverbindungen für das elektrische Fahrzeug-Bordnetz - Teil 2: Begriffe, Prüfungen und allgemeine Anforderungen (ISO 8092-2:2000)

This European Standard was approved by CEN on 17 November 2001.

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 Management Centre 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, 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

CORRECTED 2002-11-14

Foreword

The text of ISO 8092-2:2000 has been prepared by Technical Committee ISO/TC 22 "Road vehicles" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 8092-2:2001 by 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 2002, and conflicting national standards shall be withdrawn at the latest by June 2002.

This document supersedes EN 28092-2:1998.

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

Endorsement notice

as EN ISO δ. The text of ISO 8092-2:2000 has been approved by CEN as EN ISO 8092-2:2001 without any modifications.

INTERNATIONAL STANDARD

ISO 8092-2

Third edition 2000-12-15

Corrected and reprinted 2002-01-15

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 électrique embarqués —

Partie 2: Définitions, méthodes d'essai et exigences 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

Adobe is a trademark of Adobe Systems Incorporated.

ystems
.s used to cre
.very care has b
.is found, please int.

**utilized in any form or
? at the address b.** 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 2000

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.ch Web www.iso.ch

Printed in Switzerland

Contents

Page

Forew	vord	iv
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Tests and requirements	5
4.1	General	
4.2	Visual examination	7
4.3	Connection and disconnection	7
4.4	Tensile strength of conductor-to-contact attachment	8
4.5	Locking device strength	8
4.6	Contact insertion force	9
4.7	Contact retention in housing	
4.8	Connection resistance (voltage drop)	10
4.9	Influence of water	
4.10	Temperature/humidity cycling	15
4.11	Combined temperature and vibration	
4.12	Insulation resistance	
4.13	Withstand voltage	
4.14	Temperature rise	
4.15	Connector coding and polarization	
4.16	Salt spray	
4.17	Current cycling	
4.18	Thermal ageing	
4.19	Mechanical shock	
4.20	Drop	22
4.21	Dust	
4.22	Rapid change of temperature (thermal shock)	
4.23	Chemical fluids	
4.24	Flowing gas corrosion	
Annex	κ A (informative) Flowing single-gas corrosion test	26
	k B (informative) Cable attachment by insulation-displacement connection (IDC) — Tensile	20
AIIIICA	strength test	28
Biblio	graphy	30
DIDIIO	graphy	30
	· · · · · · · · · · · · · · · · · · ·	
	O'	

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 3.

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 part of ISO 8092 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard 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 (ISO 8092-2:1996), 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

Annexes A and B of this part of ISO 8092 are for information only.

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 singleand multi-pole connections used with on-board electrical wiring harnesses in 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 with the pattern of the printed circuit board.

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

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 8092. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 8092 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 1817, Rubber, vulcanized — Determination of the effect of liquids.

ISO 6722-3, Road vehicles — Unscreened low-tension cables — Part 3: Conductor sizes and dimensions for thickwall insulated cables.

ISO 6722-4, Road vehicles — Unscreened low-tension cables — Part 4: Conductor sizes and dimensions for thinwall insulated cables.

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

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

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: Climatic tests — Section 7: Test 11 g: Flowing mixed gas corrosion test.

IEC 60529, Degrees of protection provided by enclosures (IP code).

SAE J311b, Fluid for passenger car type automatic transmissions.

© ISO 2000 – All rights reserved