# INTERNATIONAL STANDARD

ISO 6722-2

Fourth edition 2013-12-01

# Road vehicles — 60 V and 600 V single-core cables —

Part 2:

Dimensions, test methods and requirements for aluminium conductor cables

Véhicules routiers — Câbles monoconducteurs de 60 V et 600 V —

Partie 2: Méthodes d'essai des dimensions et exigences pour les câbles conducteurs en aluminium





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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, *Electrical and electronic equipment*.

This fourth edition of ISO 6722-2 cancels and replaces ISO 6722:2006.

ISO 6722 consists of the following parts, under the general title *Road vehicles* — *60 V and 600 V single-core cables*:

- Part 1: Dimensions, test methods and requirements for copper conductor cables
- Part 2: Dimensions, test methods and requirements for aluminium conductor cables

### Introduction

ductuceneral, n. - compariso. ISO 6722 deals with single-core cables, with copper conductor cables covered in ISO 6722-1 and aluminium conductor cables covered in this part of ISO 6722. The performance of aluminium conductor cables is, in general, not to be expected to be the same as the performance of copper conductor cables in a one-to-one comparison basis.

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# Road vehicles — 60 V and 600 V single-core cables —

# Part 2:

# Dimensions, test methods and requirements for aluminium conductor cables

WARNING — The use of this part of ISO 6722 may involve hazardous materials, operations, and equipment. This part of ISO 6722 does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this part of ISO 6722 to establish appropriate safety practices and determine the applicability of regulatory limitations prior to use.

## 1 Scope

This part of ISO 6722 specifies the dimensions, test methods, and requirements for single-core 60 V cables intended for use in road vehicle applications where the nominal system voltage is  $\leq$  60 V d.c. or 25 V a.c. It also specifies additional test methods and/or requirements for 600 V cables intended for use in road vehicle applications, where the nominal system voltage is from > 60 V d.c. or 25 V a.c. to  $\leq$  600 V d.c. or 600 V a.c. It also applies to individual cores in multi-core cables.

This part of ISO 6722 specifies requirements for aluminium conductor cables.

### 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 6722-1, Road vehicles — 60 V and 600 V single-core cables — Part 1: Dimensions, test methods and requirements for copper conductor cables

ISO 6892-1, Metallic materials — Tensile testing — Part 1: Method of test at room temperature

EN 573-1, Aluminium and aluminium alloys – Chemical composition and form of wrought products – Part 1: Numerical designation system

EN 573-3:2009, Aluminium and aluminium alloys – Chemical composition and form of wrought products – Part 3: Chemical composition and form of products

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6722-1 apply.

NOTE Whenever a.c. voltage is specified throughout this part of ISO 6722, the a.c. rms value shall be used.

### 4 General

### 4.1 Safety concerns

See "WARNING" at the beginning of this part of ISO 6722.