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

Part 1:  
**Dimensions, test methods and  
requirements for copper conductor  
cables**

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

*Partie 1: Dimensions, méthodes d'essai et exigences pour les câbles  
conducteurs en cuivre*



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# Contents

Page

Foreword .....	iv
<b>1 Scope .....</b>	<b>1</b>
<b>2 Normative references .....</b>	<b>1</b>
<b>3 Terms and definitions .....</b>	<b>2</b>
<b>4 General .....</b>	<b>2</b>
4.1 Safety concerns .....	2
4.2 Temperature classes .....	2
4.3 Conductors .....	3
4.4 Tests .....	3
4.5 General test conditions .....	5
4.6 Ovens .....	5
4.7 Representative conductor sizes for testing .....	5
4.8 Recommended colours .....	5
<b>5 Tests and requirements .....</b>	<b>5</b>
5.1 Outside cable diameter .....	5
5.2 Insulation thickness .....	6
5.3 Conductor diameter .....	8
5.4 Conductor resistance .....	8
5.5 Withstand voltage .....	10
5.6 Insulation faults .....	11
5.7 Insulation volume resistivity .....	12
5.8 Pressure test at high temperature .....	13
5.9 Strip force .....	14
5.10 Low temperature winding .....	15
5.11 Cold impact .....	17
5.12 Abrasion test .....	19
5.13 Long term heat ageing, 3 000 h .....	23
5.14 Short term heat ageing, 240 h .....	24
5.15 Thermal overload .....	25
5.16 Shrinkage by heat .....	26
5.17 Fluid compatibility .....	26
5.18 Durability of cable marking .....	30
5.19 Resistance to ozone .....	30
5.20 Resistance to hot water .....	31
5.21 Temperature and humidity cycling .....	33
5.22 Resistance to flame propagation .....	34
<b>Annex A (informative) Comparison temperature class rating .....</b>	<b>36</b>
<b>Annex B (informative) Construction .....</b>	<b>37</b>
<b>Annex C (informative) Recommended colours .....</b>	<b>40</b>
<b>Annex D (informative) Sources for reference materials .....</b>	<b>41</b>
<b>Bibliography .....</b>	<b>42</b>

## 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 6722-1 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 3, *Electrical and electronic equipment*.

This fourth edition of ISO 6722-1 cancels and replaces ISO 6722:2006, which has been technically revised.

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*<sup>1)</sup>

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1) To be published.

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

## Part 1:

# Dimensions, test methods and requirements for copper conductor cables

**WARNING** — The use of this International Standard may involve hazardous materials, operations, and equipment. This International Standard 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 International Standard 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 greater than  $>$  (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 copper conductor cables.

## 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 or thermoplastic — Determination of the effect of liquids*

ISO 6931-1, *Stainless steels for springs — Part 1: Wire*

IEC 60811-2-1, *Common test methods for insulating and sheathing materials of electric and optical cables — Part 2-1: Methods specific to elastomeric compounds — Ozone resistance, hot set and mineral oil immersion tests*

ASTM B1, *Standard Specification for Hard Drawn Copper Wire*

ASTM B3, *Standard Specification for Soft or Annealed Copper Wire*

ASTM B33, *Standard Specification for Tin Coated Soft or Annealed Copper Wire for Electrical Purposes*

ASTM B298, *Standard Specification for Silver Coated Soft or Annealed Copper Wire*

ASTM B355, *Standard Specification for Nickel Coated Soft or Annealed Copper Wire*

EN 13602, *Copper and copper alloys — Drawn, round copper wire for the manufacture of electrical conductors*