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**C22.2 No. 123-16**

## **Metal sheathed cables**

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***Metal sheathed cables***



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# Preface

This is the sixth edition of CSA C22.2 No. 123, *Metal sheathed cables*. It is part of a series of Standards issued by the Canadian Standards Association under Part II of the *Canadian Electrical Code*. It supersedes the previous editions published in 2008, 1996, 1985, 1964, and 1962 under the title *Aluminum Sheathed Cables*.

This Edition of CSA C22.2 No. 123 *Metal sheathed cables* includes changes in the Conductor shielding specifications, Changes on the test methods from C22.2 No 0.3 to C22.2 No 2556 and addition of marking instructions for Halogen free Cables.

For general information on the Standards of the *Canadian Electrical Code, Part II*, see the preface to CAN/CSA-C22.2 No. 0.

This Standard is considered suitable for use for conformity assessment within the stated scope of the Standard.

This Standard was prepared by the Subcommittee on ICWC03-Metal Clad Cables, under the jurisdiction of the Technical Committee on Wiring Products and the Strategic Steering Committee on Requirements for Electrical Safety, and has been formally approved by the Technical Committee.

**Interpretations:** The Strategic Steering Committee on Requirements for Electrical Safety has provided the following direction for the interpretation of standards under its jurisdiction: “The literal text shall be used in judging compliance of products with the safety requirements of this Standard. When the literal text cannot be applied to the product, such as for new materials or construction, and when a relevant committee interpretation has not already been published, CSA’s procedures for interpretation shall be followed to determine the intended safety principle”.

## Notes:

- 1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
- 2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
- 3) *This Standard was developed by consensus, which is defined by CSA Policy governing standardization — Code of good practice for standardization as “substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity”. It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*
- 4) *To submit a request for interpretation of this Standard, please send the following information to [inquiries@csagroup.org](mailto:inquiries@csagroup.org) and include “Request for interpretation” in the subject line:*
  - a) *define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;*
  - b) *provide an explanation of circumstances surrounding the actual field condition; and*
  - c) *where possible, phrase the request in such a way that a specific “yes” or “no” answer will address the issue.*

*Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are available on the Current Standards Activities page at [standardsactivities.csa.ca](http://standardsactivities.csa.ca).*

- 5) *This Standard is subject to review five years from the date of publication. Suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to [inquiries@csagroup.org](mailto:inquiries@csagroup.org) and include “Proposal for change” in the subject line:*
  - a) *Standard designation (number);*
  - b) *relevant clause, table, and/or figure number;*
  - c) *wording of the proposed change; and*
  - d) *rationale for the change.*

# C22.2 No. 123-16

## ***Metal sheathed cables***

### **1 Scope**

#### **1.1**

This Standard applies to single-conductor and multi-conductor Type RA90 and RC90 cables having a maximum temperature rating of 90 °C in both dry and wet locations and intended for installation in accordance with CSA C22.1, *Canadian Electrical Code, Part I*.

#### **1.2**

Cables covered in this Standard are intended for use on systems having nominal voltages up to 5000 V, except for 2-conductor, parallel, smooth aluminum sheathed cable, which is limited to 600 V.

#### **1.3**

Type RA90 aluminum or RC90 copper sheathed cables covered by this Standard consist of a seamless, smooth metal sheath or seamed or seamless, corrugated metal sheath applied over one or more insulated conductors. In some cases an optional nonmetallic overall covering is applied over the sheath.

#### **1.4**

In CSA standards, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; “should” is used to express a recommendation or that which is advised but not required; and “may” is used to express an option or that which is permissible within the limits of the standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

## **2 Reference publications**

This Standard refers to the following publications, and where such reference is made, it shall be to the edition listed below, including all amendments published thereto.

### **CSA Group**

C22.1-15

*Canadian Electrical Code, Part I*

CAN/CSA-C22.2 No. 0-10 (R2015)

*General requirements — Canadian Electrical Code, Part II*