C22.2 No. 208-14

CSA Group

Fire alarm and signal cable

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Fire alarm and signal cable

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Preface

This is the third edition of CSA C22.2 No. 208, *Fire Alarm and Signal Cable*. It supersedes the previous editions published in 2003 and 1986. It is one of a series of Standards issued under Part II of the *Canadian Electrical Code*.

This Standard covers the cable types used for installing fire alarm equipment in buildings and other structures.

The main changes in this edition are as follows:

a) inclusion of type FAS 150;
b) elimination of lead-coated copper wires;
c) inclusion of an alternative dielectric strength test;
d) inclusion of armour tests; and
e) inclusion of requirements for limited smoke cable, i.e., cable that meets the flame test classification FT4-ST1.

For general information on the Standards of the *Canadian Electrical Code, Part II,* see the Preface of CAN/CSA-C22.2 No. 0-10, *General Requirements — Canadian Electrical Code, Part II.*

This Standard was prepared by the Subcommittee on Control, Instrument, Communication, and Marine Cables, under the jurisdiction of the Technical Committee on Wiring Products and the Strategic Steering Committee on Requirements for Electrical Safety.

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 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.

5) *This Standard is subject to review five years from the date of publication, and 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 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. 208-14
Fire alarm and signal cable

1 Scope

1.1
This Standard applies to single- and multiple-conductor fire alarm and signal cables with a maximum nominal voltage rating of 300 V and a minimum temperature rating of 60 °C for use in buildings and other structures in dry or damp locations in accordance with the Rules of Sections 16 and 32 of the *Canadian Electrical Code, Part I.*

1.2
Because other CSA Group Standards specify requirements for certain constructions suitable for use as fire alarm and signal cable, this Standard does not cover all such constructions.

1.3
The designations for constructions covered by this Standard use the letters FAS followed, for constructions rated above 60 °C, by the temperature rating. The type designations are as follows:
a) FAS;
b) FAS 90;
c) FAS 105;
d) FAS 150; and
e) FAS 200.

1.4
In this Standard, “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 (nonmandatory) to define their application.