

Large ferrules



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CSA C22.2 No. 342:22
March 2022

Title: *Large ferrules*

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Standard for Safety for Large Ferrules

First Edition, Dated March 25, 2022

Summary of Topics

This is the First edition of the Standard for Large Ferrules, dated March 25, 2022 and applies to bare and covered ferrules intended for field wiring and factory wiring for use.

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CSA Group
CSA C22.2 No. 342:22
First Edition



Underwriters Laboratories Inc.
UL 486L
First Edition

Large Ferrules

March 25, 2022



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ISBN 978-1-4883-3904-2 © 2022 Canadian Standards Association

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This ANSI/UL Standard for Safety consists of the First Edition.

The most recent designation of ANSI/UL 486L as an American National Standard (ANSI) occurred on March 25, 2022. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page (front and back), or the Preface.

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PREFACE

This is the harmonized CSA Group and UL standard for Large Ferrules. It is the first edition of CSA C22.2 No. 342 and the first edition of UL 486L.

This harmonized standard was prepared by CSA Group and Underwriters Laboratories Inc. (UL). The efforts and support of the Technical Harmonization Subcommittee, CANENA Technical Harmonization Committee 99 – Electrical Connectors of the Council on the Harmonization of Electrotechnical Standards of the Nations of the Americas (CANENA), are gratefully acknowledged.

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

This standard was reviewed by the CSA Integrated Committee on Electrical Connectors, under the jurisdiction of the CSA Technical Committee on Wiring Products and the CSA Strategic Steering Committee on Requirements for Electrical Safety, and has been formally approved by the CSA Technical Committee. This standard has been developed in compliance with the Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

Application of Standard

Where reference is made to a specific number of samples to be tested, the specified number is to be considered a minimum quantity.

Note: 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.

Level of Harmonization

This standard uses the IEC format but is not based on, nor is it considered equivalent to, an IEC standard.

This standard is published as an equivalent standard for CSA Group and UL.

An equivalent standard is a standard that is substantially the same in technical content, except as follows: Technical national differences are allowed for codes and governmental regulations as well as those recognized as being in accordance with NAFTA Article 905, for example, because of fundamental climatic, geographical, technological, or infrastructural factors, scientific justification, or the level of protection that the country considers appropriate. Presentation is word for word except for editorial changes.

Reasons for differences from IEC

At present there is no IEC standard for large ferrules. Therefore, this standard does not employ any IEC standard for base requirements.

Interpretations

The interpretation by the standards development organization of an identical or equivalent standard is based on the literal text to determine compliance with the standard in accordance with the procedural rules of the standards development organization. If more than one interpretation of the literal text has been identified, a revision is to be proposed as soon as possible to each of the standards development organizations to more accurately reflect the intent.

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1 Scope

1.1 This standard applies to bare and covered ferrules intended for field wiring and factory wiring for use in accordance with the National Electrical Code, ANSI/NFPA-70, and Canadian Electrical Code, Part I, CSA C22.1.

1.2 Ferrules covered by this standard are intended to facilitate the connection of stranded wire onto devices, such as terminal blocks and mechanical wire connectors, and to treat stripped wire and prevent turned back strands during installation.

1.3 These ferrules are intended to be terminated in wire connection devices rated for copper Class B and C conductors.

1.4 These ferrules are suitable for use with 2/0 AWG to 750 kcmil, 70 mm² to 380 mm² copper conductors that are more finely stranded than Class B or C conductors.

Note: Examples of stranding classes more finely stranded than class B or C are classes G, H, I, K, M, DLO, 5, and 6.

1.5 These ferrules are intended for use in aluminum and copper body mechanical connectors with dome and conical shaped screws that apply direct pressure to the conductor being terminated.

1.6 These ferrules are not intended for use in other types of connectors, including, but not limited to, IDC (insulation displacement connection) connectors.

1.7 This standard does not apply to wire connectors such as pin adapters covered in CAN/CSA C22.2 No. 65 / UL 486A-486B.

2 Reference Publications

2.1 Where reference is made to other publications, such reference shall be considered to refer to the latest edition and any revisions thereto.

CSA Group

C22.1:21
Canadian Electrical Code, Part I

C22.2 No. 0:20
General requirements – Canadian Electrical Code, Part II

CAN/CSA-C22.2 No. 0.17 (R2018)
Evaluation of Properties of Polymeric Materials

CAN/CSA-C22.2 No. 65-18
Wire Connectors

UL Standards

UL 94
Tests for Flammability of Plastic Materials for Parts in Devices and Appliances

UL 486A-486B
Wire Connectors