

# CSA C22.2 No. 18.3:12 National Standard of Canada (reaffirmed 2022)



# Conduit, tubing, and cable fittings





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# **Revision History**

**CSA C22.2 No. 18.3:12, Conduit, tubing, and cable fittings** — originally published July 2012

Update No. 3 — March 2024	Revision symbol (in margin)
Title page, Copyright page, Clauses 1.7, 1.8, 2.2, 3.18A, 3.22A, 4.5, 5.5.1.2, 5.5.2.2, 5.22, 7.3.1, 7.11.2, 7.11.3, 7.20, 7.21, 8.1.6, 8.1.7, 8.40–8.42, Tables 7, 14, 15, 19, 20, 23, 24, 33 and 44, and Figure 16	
<b>Note:</b> Only the revised pages have been provided.	

#### **Update No. 2 — May 2020**

Cover, Copyright page, Preface, Clauses 1.1, 1.4, 3.22A, 5.6.2.2, 5.9.2, 7.10.5, 7.14.2, 8.11.1.2, 8.15.2.2, 8.22.2.4, 8.27.2.2, 8.28.2.2, 8.28.2.3, and 8.28.2.5, Tables 19 and 39, and Annex D

#### Update No. 1 — November 2014

Title page, Copyright page, Clauses 3.23, 3.26A, 5.4.1.2, 5.7.1.1, 5.7.1.1A, 5.7.1.2, 5.7.1.5–5.7.1.7, 5.7.1.10–5.7.1.13, 5.7.2, 5.7.2.1, 5.7.2.2–5.7.2.7, 5.7.3, 5.7.3.1–5.7.3.11, 5.8.1.3, 5.8.1.4, 5.18.2, 5.19.4, 5.21, 5.21.1, 5.21.2, 6.1.1A, 6.1.1B, 7.10.4A, 8.5.3, 8.5.4, 8.7.4, 8.34, 8.34.1, 8.34.1.1, 8.34.2, 8.34.2.1, 8.34.3, 8.34.3.1, 8.39, and 8.39.1–8.39.5, Tables 8–11, 16, and 39–41, and Figures 1 and 16

#### National Standard of Canada — March 2022

Outside front cover, National Standard of Canada text, title page, and preface.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

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CSA C22.2 No. 18.3:12 Update No. 3

The following is a list of revisions, additions and deletions to CSA C22.2 No. 18.3:12:

Update No. 3 — March 2024

MARCH 28, 2024 tr1

Standard for Safety for Conduit, Tubing, and Cable Fittings

Secon Edition, Dated July 13, 2012

#### **Summary of Topics**

This revision of ANSI/UL 514B dated March 28, 2024 includes the following changes in requirements:

- Replacement of Figure 16
- Clarification of sample requirements; 8.1.6
- Electrical Metallic Tubing Fittings, addition of trade sizes 5" & 6"; <u>5.5.1.2</u>, <u>5.5.2.2</u>, <u>7.3.1</u>, <u>Table 7, Table 14, Table 15, Table 23, Table 24</u>
- Distributed generation DG cable fittings; 1.8, Section 7.20, Section 8.41, and Table 44
- Push-to-connect fittings; 3.18A, Section 5.22, Section 7.21, Section 8.40
- Revision of definition for HEAVY DUTY FITTING FOR LIQUID-TIGHT FLEXIBLE METAL CONDUIT; 3.22A
- Male Threaded Fittings provided with a LOCKNUT and also intended for securement to: Enclosures with threaded entries, or Fittings with internal female threads (e.g., HUBs, conduit bodies, couplings). (1.7, 4.5, 7.11.2, 7.11.3, 8.1.7, Section 8.42, Table 19)
- Editorial corrections; Table 33



Association of Standardization and Certification NMX-J-017-ANCE Third Edition



CSA Group CSA C22.2 No. 18.3-12 Second Edition



ULSE Inc. UL 514B Sixth Edition

## **Conduit, Tubing, and Cable Fittings**

July 13, 2012

(Title Page Reprinted: March 28, 2024)



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This ANSI/UL Standard for Safety consists of the Sixth Edition including revisions through March 28, 2024. The most recent designation of ANSI/UL 514B as an American National Standard (ANSI) occurred on March 28, 2024. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

The Department of Defense (DoD) has adopted UL 514B on June 11, 1992. The publication of revised pages or a new edition of this Standard will not invalidate the DoD adoption.

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#### **Preface**

This is the harmonized ANCE, CSA Group, and ULSE standard for Conduit, Tubing, and Cable Fittings. It is the Third edition of NMX-J-017-ANCE, the Second edition of CSA C22.2 No. 18.3, and the Sixth edition of UL 514B. This edition of CSA-C22.2 No. 18.3 supersedes the previous edition(s) published in 2004. This edition of UL 514B supersedes the previous edition(s) published in 2004. This harmonized standard has been jointly revised on March 28, 2024. For this purpose, CSA Group and ULSE are issuing revision pages dated March 28, 2024, and ANCE is issuing a new edition dated March 28, 2024.

This harmonized standard was prepared by the Association of Standardization and Certification (ANCE), CSA Group and ULSE Inc. (ULSE). The efforts and support of the Technical Harmonization Subcommittee, Conduit and Cable Fittings, 23A, 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.

The present Mexican standard was developed by the CT 23, Electrical Accessories from the Comite de Normalizacion de la Asociacion de Normalizacion y Certificacion, A.C., CONANCE, with the collaboration of the conduit, tubing and cable fittings manufacturers and users.

This Standard was reviewed by the CSA Integrated Committee on Fittings, Hardware, and Positioning Devices, 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.

#### **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 to be considered equivalent to, an IEC standard. This standard is published as an equivalent standard for ANCE, CSA Group, and ULSE.

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**

This standard is not based on an IEC standard or IEC requirements, but is formatted and organized using the IEC formatting criteria. The Technical Harmonization Committee identified two main reasons the requirements in this standard were not harmonized with IEC requirements. First, there is no corresponding IEC standard covering fittings only. Instead, IEC requirements for fittings are included under several separate IEC standards that cover the specific systems in which a fitting is used. The time required to research and identify specific fittings requirements in each of the relevant IEC conduit, tubing, and cable