Certificate of Compliance

Certificate:	2140177	**Master Contract:**	245423
Project:	80269853	**Date Issued:**	2026-05-27
Issued to:	**Quintex GmbH** **i_Park Tauberfranken 13** **Lauda-Konigshofen, Baden-Württemberg 97922** **Germany** **Attention:** Benjamin Brandes	**Issued by:**	*Jayaraj Balaraman* Jayaraj Balaraman

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C', 'US' and ▲

C US

PRODUCTS

Class 4418 02 OUTLET BOXES AND FITTINGS - Boxes - For Hazardous Locations
Class 4418 82 OUTLET BOXES AND FITTINGS - Boxes - For Hazardous Locations - Certified to US Standards

Class 4418 02 OUTLET BOXES AND FITTINGS - Boxes - For Hazardous Locations

Class I, Division 1, Groups A, B, C, D
Ex db eb IIC Gb
Ex tb IIIC Db

Line Bushings and Plugs

Model(s)
Type: LB abcde/f

Line Bushings and Plugs, Models LB abcde/f, Rated voltage 6000 V max (depending on the model type and the voltage rating of the conductors), 95 mm^2 (Division) / 185 mm^2 (Zones) max, 50 conductors max (depending on model type); Ta: -55°C ≤ Ta ≤ 115 °C.

Type: LB abcde/f

Where:

a - Type
(S= Screwable; P= Pluggable; U= Screwable with shock protection; Z= Pluggable with shock Protection)

b – Thread / Gap type
(M=Metric; N=NPT Thread; 1 – without thread (12.5 mm ≤ gap length < 25 mm); 2 - without thread (25 mm ≤ gap length < 40 mm); 3 - without thread (40 mm ≤ gap length))

c – Size of thread / core diameter (two digits)
10 - 42mm or NPT equivalent

d – Rated insulation voltage
1. no wires; 1- 440V; 2- 690V; 3- 1000V; 4- 3000V; 5- 6000V)

e – Number of cores (two digits)
(00 - no cores to 50 – 50 cores)

f- option not relevant to this report

Conditions of Acceptability:

Class/Division

1. Suitability of end use installation to be determined by certification body or Local Authority having Jurisdiction.
2. Suitability of non-certified cable and wire to be determined by certification body or Local Authority having Jurisdiction.

Measuring voltage/Operating voltage (see condition of certification 2):
Type LB____1__ 440/500 V
Type LB____2__ 690/750 V
Type LB____3__ 1000/1100 V

Operating Current (see condition of certification 2)

0.25mm² - 3.0A	0.35mm² - 5.5A	0.5mm² - 7.5A	0.75mm² - 10A	1.0mm² - 12A	1.5mm² - 15A
2.5mm² - 21A	4.0mm² - 28A	6mm² - 36A	10mm² - 50A	16mm² - 67A	25mm² - 90A
35mm² - 110A	50mm² - 140A	70mm² - 170A	95mm² - 205A		

3. The line bushings are intended to provide the electrical connection between two explosion-proof enclosures or two compartments of an explosion-proof enclosure.
4. Joints formed between the line bushing and the end product must be evaluated as part of the evaluation on the end product. The

line bushing has not been subjected to explosion testing and flame propagation testing of an internal ignition.

5. The line bushings passed an overpressure test of 80 bar (1160 psig) in accordance with Clause 8.10 of C22.2 No. 30:20 and 6000 psig in accordance with section 22 of UL 1203 without any leakage or deformation.
6. A minimum of eight full threads must be engaged in the end application as appropriate.
7. The temperature and voltage of the conductors and the bushing in the end use should be evaluated in the end application. Operating temperature shall not exceed the marked maximum operating temperature of the conductor or 115°C whichever is less.
8. The line bushings are not for use or installations in ketone atmospheres.

Class/Zones

1. These line bushings have only been evaluated for use as a connection between flameproof, dust protection by enclosure, or increased safety compartments and not for use as a conduit seal.
2. Flameproof and dust protection by enclosure joints formed between the line bushing and the end product must be evaluated as part of the evaluation on the end product. The line bushing has not been subjected to explosion testing and non-transmission testing of an internal ignition.
3. The line bushing was subjected to an overpressure of 30 bar (435 psi) in accordance with Clause 6.1.2 of UL 60079-0. Additional testing may be necessary for inclusion in enclosures with explosion pressures higher than 7.5 bar (109 psi).
4. A minimum of eight full threads must be engaged in the end application as appropriate.
5. The temperature and voltage of the conductors and the bushing in the end use should be evaluated in the end application.
6. The epoxy material shall not be subjected to UV light sources.
7. The line bushing shall be mechanically protected by an enclosure that is certified per UL 60079-0 and CSA C22.2 No. 60079-0 and the mounting shall be verified in the end use.
8. The creepage and clearance shall be evaluated in the end use.

Class 4418 82 - OUTLET BOXES AND FITTINGS Boxes - For Hazardous Locations - Certified to US Standards

Class I, Division 1, Groups A, B, C, D
Class I, Zone 1, AEx db eb IIC Gb
Zone 21, AEx tb IIIC Db

Model(s)
Type: LB abcde/f

Line Bushings and Plugs, Models LB abcde/f, Rated voltage 6000 V max (depending on the model type and the voltage rating of the conductors), 95 mm^2 (Division) / 185 mm^2 (Zones) max, 50 conductors max (depending on model type); Ta: -55°C ≤ Ta ≤ 115 °C.

Type: LB abcde/f

Where:

a - Type
(S= Screwable; P= Pluggable; U= Screwable with shock protection; Z= Pluggable with shock Protection)

b – Thread / Gap type
(M=Metric; N=NPT Thread; 1 – without thread (12.5 mm ≤ gap length < 25 mm); 2 - without thread (25 mm ≤ gap length < 40

mm); 3 - without thread (40 mm ≤ gap length))

c – Size of thread / core diameter (two digits)
10 - 42mm or NPT equivalent

d – Rated insulation voltage
1. no wires; 1- 440V; 2- 690V; 3- 1000V; 4- 3000V; 5- 6000V)

e – Number of cores (two digits)
(00 - no cores to 50 – 50 cores)

f- option not relevant to this report

Conditions of Acceptability:

Class/Division

1. Suitability of end use installation to be determined by certification body or Local Authority having Jurisdiction.
2. Suitability of non-certified cable and wire to be determined by certification body or Local Authority having Jurisdiction.

Measuring voltage/Operating voltage (see condition of certification 2):
Type LB____1__ 440/500 V
Type LB____2__ 690/750 V
Type LB____3__ 1000/1100 V

Operating Current (see condition of certification 2)

0.25mm² - 3.0A	0.35mm² - 5.5A	0.5mm² - 7.5A	0.75mm² - 10A	1.0mm² - 12A	1.5mm² - 15A
2.5mm² - 21A	4.0mm² - 28A	6mm² - 36A	10mm² - 50A	16mm² - 67A	25mm² - 90A
35mm² - 110A	50mm² - 140A	70mm² - 170A	95mm² - 205A		

3. The line bushings are intended to provide the electrical connection between two explosion-proof enclosures or two compartments of an explosion-proof enclosure.
4. Joints formed between the line bushing and the end product must be evaluated as part of the evaluation on the end product. The line bushing has not been subjected to explosion testing and flame propagation testing of an internal ignition.
5. The line bushings passed an overpressure test of 80 bar (1160 psig) in accordance with Clause 8.10 of C22.2 No. 30:20 and 6000 psig in accordance with section 22 of UL 1203 without any leakage or deformation.
6. A minimum of eight full threads must be engaged in the end application as appropriate.
7. The temperature and voltage of the conductors and the bushing in the end use should be evaluated in the end application. Operating temperature shall not exceed the marked maximum operating temperature of the conductor or 115°C whichever is less.
8. The line bushings are not for use or installations in ketone atmospheres.

Class/Zones

1. These line bushings have only been evaluated for use as a connection between flameproof, dust protection by enclosure, or increased safety compartments and not for use as a conduit seal.
2. Flameproof and dust protection by enclosure joints formed between the line bushing and the end product must be evaluated as part of the evaluation on the end product. The line bushing has not been subjected to explosion testing and non-transmission

testing of an internal ignition.

3. The line bushing was subjected to an overpressure of 30 bar (435 psi) in accordance with Clause 6.1.2 of UL 60079-0. Additional testing may be necessary for inclusion in enclosures with explosion pressures higher than 7.5 bar (109 psi).
4. A minimum of eight full threads must be engaged in the end application as appropriate.
5. The temperature and voltage of the conductors and the bushing in the end use should be evaluated in the end application.
6. The epoxy material shall not be subjected to UV light sources.
7. The line bushing shall be mechanically protected by an enclosure that is certified per UL 60079-0 and CSA C22.2 No. 60079-0 and the mounting shall be verified in the end use.
8. The creepage and clearance shall be evaluated in the end use.

APPLICABLE REQUIREMENTS

Standards Used	Description
CSA C22.2 NO. 18.3:12 -Second Edition - Including Update No. 2 :May 2020	Conduit, tubing, and cable fittings: Update No. 1: November 2014; Update No. 2: May 2020
UL 514B (Sixth Edition) Reprint with revisions through and including May 22, 2020	Conduit, Tubing, and Cable Fittings
CSA C22.2 No. 30:20 - Fourth Ed - Including Update No. 1 - March 2023	Explosion-proof equipment
CAN/CSA C22.2 No. 60079-0:19	Explosive atmospheres - Part 0: Equipment - General requirements
CSA C22.2 No. 60079-1:16 - Third Edition	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
CAN/CSA C22.2 No. 60079-7:16 - Second Edition	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
CSA C22.2 No. 60079-31:15 - Second Edition	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
ANSI/UL 1203-2024 - Sixth Edition	UL Standard for Safety ExplosionProof and Dust-IgnitionProof Electrical Equipment for Use in Hazardous (Classified) Locations - Including revisions through May 30, 2024
UL 60079-0:2019 - Seventh Edition	Explosive Atmospheres - Part 0: Equipment - General Requirements
UL 60079-1:2015 - Seventh Edition	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures 'd'
UL 60079-7:2017 - Fifth Edition	Explosive Atmospheres - Part 7: Equipment Protection by Increased Safety 'e'
UL 60079-31:2015 - Second Edition	Standard for Safety Explosive Atmospheres – Part 31: Equipment Dust Ignition Protection by Enclosure “t”

Markings

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

Minimum required markings on line bushing or plug

1. Submittor's name, trademark, or CSA Master Contract Number "245423", adjacent to the CSA Mark in lieu of manufacturer's name.
2. Hazardous Location designations must appear on models having sizes M36 (d=36mm) to M42 (d=42mm). For smaller models, the hazardous designation must be accompanied with the device. The word "Class" may be abbreviated "CL", the word "Division" may be abbreviated "DIV", the word "Groups" may be abbreviated "GRP" or "GP", and the word "Zone" may be abbreviated "ZN".
3. The CSA Mark, with or without the "C" and "US" indicators, as shown on the Certificate of Conformity.
4. Operating temperature range (may be denoted as ambient temperature)

Additional marking to be accompanied with the device

1. Catalogue / Model designation.
2. Date code / Serial number traceable to month and year of manufacture.
3. Complete Electrical Ratings (Volts/Amps/Hz)
4. Ambient temperature ratings
5. Hazardous location designation for models having sizes lesser than M36 (where d is greater or equal to 10 mm and lesser than 36 mm)

Markings appear as shown in drawing G0009.

METHOD OF MARKING: The minimum required markings are permanently lasered or etched into the sealing plate of the bushing. Additional markings are accompanied with installation instruction or in the sales packaging. Additional markings may also be placed on flange of the line bushings.

Certificate: 2140177 **Master Contract**: 245423

Project: 80269853 **Date Issued**: 2026-05-27

Notes:

Products certified under Class(es) C441802, C441882 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca

Supplement to Certificate of Compliance

Certificate: 2140177 **Master Contract:** 245423

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Description
80269853	2026-05-27	Update to cCSAus Report 2140177 to accomplish the following: 1. To update the standard from CSA C22.2 No. 30-M1986 to CSA C22.2 No. 30:20 - Fourth Ed - Including Update No. 1 - March 2023 as per CSA Notice Hazardous Locations Products No. 38. 2. To update the standard ANSI/UL 1203 to the latest edition to ANSI/UL 1203-2024-Sixth Edition. 3. To update the standard C22.2 No. 18.3 to the latest edition CSA C22.2 NO. 18.3:12 - Second Edition - Including Update No. 2: May 2020 and to add UL 514B (Sixth Edition) Reprint with revisions through and including May 22, 2020, based on the letter of attestation. 4. To remove the standards C22.2 No. 0-M1991, UL 886 and ANSI/ISA-12.27.01-2003 from the applicable requirement. 5. To include the Class/Zone certification for the line bushing based on UL report.
2718972	2014-07-16	Update to report 2140177 to include change in model nomenclature from LE to LB and add label
2380446	2010-12-16	update to report 2140177 to include secondary seal evaluation.
2140177	2009-03-22	Evaluation of LE Series Line Bushings for hazardous locations