



Certificate of Compliance

Certificate: 1003277

Master Contract: 185887

Project: 70217342

Date Issued: 2019-10-03

Issued to: Eaton Electrical Systems Ltd.
4185 EXI Aldridge
1 Kingsway South Westgate Aldridge
West Midlands WS9 8FS
UNITED KINGDOM
Attention: Samuel Mauger

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only



Issued by: Jared Gillespie

PRODUCTS

CLASS 4418 03 - CONDUIT FITTINGS - Fittings - For Hazardous Locations

Ex db IIC Gb

Adaptors types AB & AJ; Reducers types BB & BJ; Stopping plugs types CF, CB, CK, CY & CQ
Rated Ambient Temperature Range -60°C to +200°C.

Adaptors, types AB & AJ:

Material: Brass or Stainless Steel 316.
Thread form: NPT (Male) to Metric (Female)

Male Thread	to	Female Thread
1/2" NPT		M20 x 1.5
3/4" NPT		M25 x 1.5
1" NPT		M32 x 1.5
1-1/4" NPT		M40 x 1.5



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1-1/2" NPT		M50 x 1.5
2" NPT		M63 x 1.5
2-1/2" NPT		M75 x 1.5

Alternate Thread forms: NPT to PG or NPT to BSP (Tapered or Parallel)

Male Thread	to	Female Thread	or	Female Thread
1/2" NPT		PG11		1/2 " BSP
3/4" NPT		PG16		3/4" BSP
1" NPT		PG21		1" BSP
1-1/4" NPT		PG29		1-1/4" BSP
1-1/2" NPT		PG36		1-1/2" BSP
2" NPT		PG42		2" BSP
2-1/2" NPT		PG48		2-1/2" BSP

Reducers, types BB & BJ:

Material: Brass or Stainless Steel 316.
 Thread form: NPT (Male) to Metric (Female)

External Thread	to	Internal Thread
1/2" NPT		M20 x 1.5
3/4" NPT		M25 x 1.5
1" NPT		M32 x 1.5
1-1/4" NPT		M40 x 1.5
1-1/2" NPT		M50 x 1.5
2" NPT		M63 x 1.5
2-1/2" NPT		M75 x 1.5

Alternate Thread forms: NPT to PG or NPT to BSP (Tapered or Parallel).

External Thread	to	Internal Thread	or	Internal Thread
1/2" NPT		PG11		1/2 " BSP
3/4" NPT		PG16		3/4" BSP
1" NPT		PG21		1" BSP
1-1/4" NPT		PG29		1-1/4" BSP
1-1/2" NPT		PG36		1-1/2" BSP
2" NPT		PG42		2" BSP
2-1/2" NPT		PG48		2-1/2" BSP

Stopping Plugs, Types CF, CB, CK, CY & CQ:

Material: Brass or Stainless Steel 316.
 Thread form: NPT and Metric



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NPT Thread size	Metric Thread size
1/2" NPT	M20 x 1.5
3/4" NPT	M25 x 1.5
1" NPT	M32 x 1.5
1-1/4" NPT	M40 x 1.5
1-1/2" NPT	M50 x 1.5
2" NPT	M63 x 1.5
2-1/2" NPT	M75 x 1.5

Alternate Thread forms: PG and BSP (Tapered or Parallel).

PG Thread Sizes	BSP Thread Sizes
PG7	1/2 " BSP
PG9	3/4" BSP
PG11	1" BSP
PG13.5	1-1/4" BSP
PG16	1-1/2" BSP
PG21	2" BSP
PG29	2-1/2" BSP
PG36	
PG42	
PG48	

CLASS 4418 83 - CONDUIT FITTINGS - Fittings - For Hazardous Locations - Certified to US Standards

Class I Zone 1 AEx db IIC Gb

Adaptors types AB & AJ; Reducers types BB & BJ; Stopping plugs types CF, CB, CK, CY & CQ
 Rated Ambient Temperature Range -60°C to +200°C.

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Material: Brass or Stainless Steel 316.
 Thread form: NPT (Male) to Metric (Female)

Male Thread	to	Female Thread
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3/4" NPT		M25 x 1.5
1" NPT		M32 x 1.5
1-1/4" NPT		M40 x 1.5
1-1/2" NPT		M50 x 1.5
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External Thread	to	Internal Thread
1/2" NPT		M20 x 1.5
3/4" NPT		M25 x 1.5
1" NPT		M32 x 1.5
1-1/4" NPT		M40 x 1.5
1-1/2" NPT		M50 x 1.5
2" NPT		M63 x 1.5
2-1/2" NPT		M75 x 1.5

Stopping Plugs, Types CF, CB, CK, CY & CQ:

Material: Brass or Stainless Steel 316.
Thread form: NPT and Metric

NPT Thread size	Metric Thread size
1/2" NPT	M20 x 1.5
3/4" NPT	M25 x 1.5
1" NPT	M32 x 1.5
1-1/4" NPT	M40 x 1.5
1-1/2" NPT	M50 x 1.5
2" NPT	M63 x 1.5
2-1/2" NPT	M75 x 1.5

Conditions of Use:

1. Stopping plugs used for Ex d applications must maintain five full threads engagement for enclosure volumes $\leq 100 \text{ cm}^3$ and eight full threads engagement for enclosure volumes $> 100 \text{ cm}^3$.
2. Stopping plugs shall not be used with any form of adapters or reducers.

APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 0-10 (r 2015)	General requirements — Canadian Electrical Code, Part II
CSA C22.2 No. 18.3-12 (r2017)	Conduit, Tubing, and Cable Fittings
CAN/CSA-C22.2 No. 60079-0:15	Explosive atmospheres –



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<i>Update No. 1 — April 2018</i>	Part 0: Equipment – General requirements
CAN/CSA-C22.2 No. 60079-1:16	Explosive atmospheres — Part 1: Equipment protection by flameproof enclosures “d”
ANSI/UL 514B-2014	Conduit, Tubing, and Cable Fittings
ANSI/UL 60079-0-2013 (r2017)	Explosive atmospheres – Part 0: Equipment – General requirements
ANSI/UL 60079-1-2015	Explosive Atmospheres – Part 1: Equipment Protection by Flameproof Enclosures “d”

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.

The following markings are permanently laser engraved, die stamped, etched, or rolled stamped on each service surface of the component.

- Manufacturer’s name: “Eaton Electrical Systems Ltd.” or CSA Master Contract Number “185887”, adjacent to the CSA Mark in lieu of manufacturer’s name.
- Model designation: As specified in the PRODUCTS section, above.
- Ambient temperature rating: As specified in the PRODUCTS section, above.
- Trade Size: As specified in the PRODUCTS section, above.
- Manufacturing date in MMY format, or serial number, traceable to year and month of manufacture.
- The CSA Mark, with or without the “C” and “US” indicators, as shown on the Certificate of Conformity.
- Alternate Thread forms (PG and BSP) for adaptors, reducers and stopping plugs, shall not bear the “US” indicator or the “AEx db” marking.
- The designation “CSA 99CA1003277U”
- Method of Protection markings: As specified in the PRODUCTS section, above.
- Hazardous Location designation: As specified in the PRODUCTS section, above. The word “Class” may be abbreviated “CL”, the word “Zone” may be abbreviated “Zn”.
- Temperature Code: As specified in the PRODUCTS section, above.
- The following optional markings may be used: “Class 1 Division 2 Groups A, B, C, D”
- Hazardous Location designation: As specified, above. The word “Class” may be abbreviated “CL”, the word “Division” may be abbreviated “DIV”, and the word “Groups” may be abbreviated “GRP” or “GP”.



Supplement to Certificate of Compliance

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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
70217342	2019-10-03	Update to report 1003277 to the most recent applicable requirements replace obsolete drawings with new drawings for Adapters AB & AJ, Reducers BB & BJ, and Plugs CK, CB and add three additional models Plugs CQ, CY, & CF. Update includes a name change of the certificate holder to Eaton Electrical Systems Ltd.
70032099	2015-08-18	Update Existing Report 1003277 (LR 105591) to add the NPT version of Hexagon Plugs and Stopping Plugs and update drawings as needed.
1003277	1999-12-03	Original Certification