



Certificate of Compliance

Certificate: 70004604

Master Contract: 203679

Project: 70004604

Date Issued: September 29, 2014

Issued to: Peppers Cable Glands Ltd
Stanhope Rd.
Camberley,

Surrey, GU15 3BT
UNITED KINGDOM
Attention: Mr Richard Ward

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:

A handwritten signature in black ink, appearing to read 'A. Smith'.

A Smith

PRODUCTS

CLASS 4418 05 – CABLE – Hardware For Hazardous Locations

Class I, Div. 2, Groups A, B, C and D; Class II, Div. 1, Groups E, F and G; Class III; for type TC Tray Cable (Oil Resistant II) and Marine Shipboard type cable. Vertical or horizontal mounting.

SL

Ex d IIC Gb, Ex e IIC Gb,

Ex ta IIIC Da

IP66, IP68; Type 4X

(Ta = -60°C to +135°C)



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CLASS 4418 85 – CABLE – Hardware For Hazardous Locations-Certified to U.S. Standards

Class I, Div. 2, Groups A, B, C and D; Class II, Div. 1, Groups E, F and G; Class III; for type TC Tray Cable (Oil Resistant II) and Marine Shipboard type cable. Vertical or horizontal mounting.

Class I, Zone 1, AExd IIC Gb; Class I, Zone 1, AEx e IIC Gb,

Class II, Zone 21 AEx ta IIIC Da

IP66, IP68; Type 4X

(Ta = -60°C to +135°C)

The UL* range:

- UL-U cable glands comprising a range of entry thread sizes between 16 and 75.
- UL-X cable glands comprising a range of entry thread sizes between 20 and 75.
- UL-C cable glands comprising a range of entry thread sizes between 16 and 75.

Series: UL-abc-ddd-eee

- a Product Type
- | | | |
|---|---|----------------------------------------------------------------------|
| X | = | For use with unarmoured cable, no outer seal |
| U | = | For use with unarmoured cable and fitted with elastomeric outer seal |
| C | = | For use with armoured cable and fitted with elastomeric outer seal |
- b Material of manufacture
- | | | |
|---|---|-----------------|
| B | = | Brass |
| S | = | Stainless steel |
- c Outer Seal Option (UL-C only)
- | | | |
|-------|---|--------------------|
| Blank | = | Standard bore seal |
| R | = | Reduced bore seal |
- d Gland size
- 16, 20S, 20, 25, 32, 40, 50S, 50, 63S, 63, 75S, 75
- e Thread type and size
- Mxx, x" NPT

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Class I, Div. 1, Groups A, B, C and D; Class II, Div. 1, Groups E, F and G; Class III; for type Marine Shipboard type cable. Vertical or horizontal mounting.

SL

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Class I, Div. 1, Groups A, B, C and D; Class II, Div. 1, Groups E, F and G; Class III; for type Marine Shipboard type cable. Vertical or horizontal mounting.

**Class I, Zone 1, AExd IIC Gb; Class I, Zone 1, AEx e IIC Gb,
Class II, Zone 21 AEx ta IIIC Da
IP66, IP68; Type 4X
(Ta = -60°C to +135°C)**

The UL-C range:

- UL-C cable glands comprising a range of entry thread sizes between 16 and 75.

Series: UL-abc-ddd-eee

- a Product Type
C = For use with armoured cable and fitted with elastomeric outer seal
- b Material of manufacture
B = Brass
S = Stainless steel
- c Outer Seal Option
Blank = Standard bore seal
R = Reduced bore seal
- d Gland size
16, 20S, 20, 25, 32, 40, 50S, 50, 63S, 63, 75S, 75
- e Thread type and size
Mxx, x" NPT

Conditions of Acceptability

The following are applicable to cable glands.

- The cable glands shall not be used in enclosures where the temperature, at the point of mounting, is outside the range of -60°C to +135°C.
- These glands are suitable for use with Certified Marine Shipboard armoured/ unarmoured cables constructed to CSA Std 245 and IEEE 45/IEC 600092-353 Standards (or certified equivalent) for use on Shipboards and Offshore Rigs/ platforms. These cable glands are also suitable for use with CSA Certified Tray Cables in which in accordance with Canadian (CEC) and US (NEC) wiring methods describing the types of cables that can be used in Class 1 Div. 1 and 2 and Class 1 Zone 1 and 2 classified areas, in accordance with CEC /NEC and 60079-14 installation wiring methods restrictions.

The following are only applicable to cable glands when used in zones.

- The Ingress Protection rating that is required to ensure compliance with the standards used in this certificate was determined by testing the devices fitted into a representative enclosure having a smooth flat mounting surface. In



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- practice, the interface between the male thread of the glands and their associated enclosure cannot be defined; therefore, it is the user's responsibility to ensure that the appropriate Ingress Protection level is maintained at these interfaces.
- iv. When glands without sealing rings are installed in an explosive dust atmosphere, they shall only be fitted into enclosures that have entries that will ensure that a minimum of 5 full threads of contact will be maintained.

APPLICABLE REQUIREMENTS

C22.2 No 0 – M91 General Requirements - Canadian Electrical Code Part II.
C22.2 No 25 – 1966, Enclosures for Use in Class II Groups E, F and G Hazardous Locations
C22.2 No 30 – M1986, Explosion-Proof Enclosures for Use in Class I Hazardous Locations
C22.2 No 94.1-07 – Enclosures for Electrical Equipment, Non-Environmental Considerations
C22.2 No 94.2-07 – Enclosures for Electrical Equipment, Environmental Considerations
C22.2 No 174 – M1984, Cables and Cable Glands for Use in Hazardous Locations
CAN/CSA 22.2 No. 60079-0-11 – Electrical apparatus for explosive gas atmospheres – Part 0: General Requirements
CAN/CSA 22.2 No. 60079-1-11 – Electrical apparatus for explosive gas atmospheres – Part 1: Flameproof Enclosures “d”
CAN/CSA E 60079-7-03 – Electrical apparatus for explosive gas atmospheres – Part 7: Equipment protection by increased safety “e”
CAN/CSA E 60079-31-12 – Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure “t”
UL 50 (12 th Ed.) - Enclosures for Electrical Equipment
UL 50E (12 th Ed.) - Enclosures for Electrical Equipment
UL514B Edition 6- Conduit, Tubing, and Cable Fittings
UL 1203 (5th Ed.) - Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations
UL 2225(3rd Edition) - Cables and Cable Glands for Use in Hazardous Locations
UL 60079-0 Edition 6 (2013) - Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements
ANSI/UL 60079-1 Sixth Edition (2009) - Electrical Apparatus for Explosive Gas Atmospheres - Part 1: Flameproof Enclosures “d”
ANSI/UL 60079-7 Fourth Edition (2008) - Electrical Apparatus for Explosive Gas Atmospheres - Part 7: Increased Safety “e”
ANSI/IEC 60529:2004 - Degrees of Protection Provided by Enclosures (IP Code)
ANSI/ISA-60079-31 (12.10.03)-2013 – Explosive Atmospheres – Part 31: Equipment Dust Ignition Protection by Enclosure “t” (Edition 1.1)

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.

Markings are permanently etched or stamped on the surface of the cable glands.

CSA Monogram or the CSA monogram with adjacent indicators “C” and “US”



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Manufacturer's name: Peppers Cable Glands Ltd or PEPPERS, or, the CSA Master Contract number
Model code/size
Product markings as per "PRODUCTS" section
Ambient range
Serial number or Year of manufacture: YY

Note: Where the size of the product limits the amount of marking that can be applied, the marking may be reduced with a repeat of the full marking detailed on the appropriate label and/or instructions supplied with the product. The following abbreviated markings will be permitted where necessary due to space limitations:

For UL-U and UL-X the markings may be reduced as follows:

CSA Monogram
PEPPERS
UL-xxx-xxx-xxx
CL I DIV 2 ABCD CL II EFG CL III SL
Type 4X
Ex d IIC / Ex e IIC / Ex ta IIIC
AEx d IIC / AEx e IIC / AEx ta IIIC
Size

For UL-C the markings may be reduced as follows:

CSA Monogram
PEPPERS
UL-Cxx-xxx-xxx
CL I ABCD CL II EFG CL III SL
Type 4X
Ex d IIC / Ex e IIC / Ex ta IIIC
AEx d IIC / AEx e IIC / AEx ta IIIC
Size