

# Certificate of Compliance

**Certificate:** 1024328

**Master Contract:** 178267

**Project:** 80007825

**Date Issued:** 2019-08-21

**Issued To:** Hawke International A Division of Hubbell Limited  
Oxford St W  
Ashton-Under-Lyne, Lancashire, OL7 0NA  
United Kingdom

**Attention:** Andy Tindall

*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:** Jimmy Solanki  
Jimmy Solanki



## PRODUCTS

### **CLASS - C4418 05 - CABLE Hardware - For Hazardous Locations**

Class I, Div. 1, Groups ABCD,  
Class II, Div. 2, Groups EFG; Class III; IP66

Ex db IIC Gb  
Ex eb IIC Gb  
Ex tb IIIC Db IP66  
(-60°C ≤ t<sub>a</sub> ≤ +80°C)



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Models

“HAWKE” Glands

Series	Size (Os to F)	Oversized G, H,J	Operating Temperature
ICG623	Yes	No	-60 °C to 80 °C
ICG 653	Yes	No	-60 °C to 80 °C
ICG653 UNIV	Yes	No	-60 °C to 80 °C
ICG653 UNIV-X	Yes	No	-60 °C to 80 °C
CSB656	Yes	No	-60 °C to 80 °C
CSB656N	Yes	No	-60 °C to 80 °C

**NOTES:**

1. Cable Gland Connectors’ Material may be brass, nickel plated brass, aluminium or stainless steel.
2. Class I, Division 1 suitable for Marine Shipboard applications only according to CSASD 245 and IEEE45/IEC600092-353 Standards, or Certified equivalent), for use on Shipboards and Offshore Rigs/ Platforms only.
3. Additional marking denoting trade size, and manufacturer information will be included.
4. These cable glands are designed for use with un-armoured or appropriate Steel Tape Armour (STA) cables, appropriate braided cables, conduits, corrugated TECK 90 type cables and ACW 90 type cables.
5. Glands must comply with the Canadian Electrical Code requirements for threaded entries.
6. To maintain integrity, these cable glands are to be used with the appropriate designed cable, as per the manufacturer’s specifications.
7. For Exe applications a sealing washer or thread sealant may be required between the enclosure and the gland to maintain the IP rating of the enclosure.
8. Drain wires and earth screening may pass through the compound barrier using one of methods which are detailed in the manufacturers assembly instructions ; heat shrink or cold shrink tubing, or addition of an insulated crimped or soldered conductor, or insulation by varnish or paint.



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**CLASS - C4418 85 - CABLE Hardware For Hazardous Locations- Certified to US Standards**

Class I, Div. 1, Groups ABCD,  
Class II, Div. 2, Groups EFG, Class III

Class I, Zone 1 AEx db IIC Gb;  
Class I, Zone 1 AEx eb IIC Gb;  
Zone 21, AEx tb IIIC Db; IP66  
(-60°C ≤ t<sub>a</sub> ≤ +80°C)

Models

“HAWKE” Glands

Series	Size (Os to F)	Oversized G, H,J	Operating Temperature
ICG623	Yes	No	-60 °C to 80 °C
ICG 653	Yes	No	-60 °C to 80 °C
ICG653 UNIV	Yes	No	-60 °C to 80 °C
ICG653 UNIV-X	Yes	No	-60 °C to 80 °C
CSB656	Yes	No	-60 °C to 80 °C
CSB656N	Yes	No	-60 °C to 80 °C

**NOTES:**

1. Cable Gland Connectors' Material may be brass, nickel plated brass, aluminium or stainless steel.
2. Class 1 Division 1 suitable for Marine Shipboard applications only according to CSASD 245 and IEEE45/IEC600092-353 Standards, or Certified equivalent), for use on Shipboards and Offshore Rigs/ Platforms only.
3. Additional marking denoting trade size, and manufacturer information will be included.
4. These cable glands are designed for use with un-armoured or appropriate Steel Tape Armour (STA) cables, appropriate braided cables, conduits and suitable armoured cables as per NEC wiring methods.
5. Glands must comply with the National Electrical Code requirements for threaded entries.
6. To maintain integrity, these cable glands are to be used with the appropriate designed cable, as per the manufacturer's specifications.
7. For Exe applications a sealing washer or thread sealant may be required between the enclosure and the gland to maintain the IP rating of the enclosure.
8. Drain wires and earth screening may pass through the compound barrier using one of methods which are detailed in the manufacturers assembly instructions ; heat shrink or cold shrink tubing, or addition of an insulated crimped or soldered conductor, or insulation by varnish or paint.



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### **APPLICABLE REQUIREMENTS**

CAN/C22.2 No. 0-10	General Requirements - Canadian Electrical Code Part II
CAN/C22.2 No.60079-0-15	Electrical apparatus for explosive gas atmospheres. Part 0
CAN/C22.2 No.60079-1-16	Electrical apparatus for explosive gas atmospheres. Part 1: Flameproof 'd'
CAN/C22.2 No.60079-7- 16	Electrical apparatus for explosive gas atmospheres. Part 7: Increased Safety 'e'
CAN/C22.2 No E60079-31-15	Explosive atmospheres Part 31: Dust ignition protection by enclosure "t"
ANSI/UL514B 6 <sup>th</sup> Ed	Conduit, Tubing and Cable Fittings
ANSI/UL1203 4 <sup>th</sup> Ed	Outlet boxes and fitting for Use in Hazardous Locations.
ANSI/UL 2225 3 <sup>rd</sup> Ed	Cables and Cable Glands for Use in Hazardous Locations
ANSI/UL 60079-0 6 <sup>th</sup> Ed	UL Standard for Safety for Electrical Equipment for Use in Class I, Zone 0,1,2 Hazardous Locations- Part 0
ANSI/UL 60079-1 7 <sup>th</sup> Ed	UL Standard for Safety for Electrical Equipment for Use in Class I, Zone 0,1,2 Hazardous Locations- Part 1
ANSI/UL 60079-7 5 <sup>th</sup> Ed	UL Standard for Safety for Electrical Equipment for Use in Class I, Zone 0,1,2 Hazardous Locations- Part 7
ANSI/UL 60079-31 2 <sup>nd</sup> Ed	Explosive Atmospheres Part 31 Dust ignition protection by enclosure "t"
CAN/C22.2 No 174-M1984	Cables and Cable Glands for Use in Hazardous Locations.
C22.2 No 174-18	Cables and Cable Glands for Use in Hazardous Locations.

### **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.

- (1) Submitter's name, trademark, or the CSA file number (adjacent the CSA Mark).
- (2) Model designation; As specified in the PRODUCTS section, above.
- (3) Thread form and Trade size;
- (4) The designation "CSA 13CA1024328";
- (5) Hazardous Location designation: As specified in the PRODUCTS section, 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".



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- (6) Method of Protection markings (Ex -- markings): “Ex db IIC Gb”; “Class I Zone 1 AEx db IIC Gb”, “Ex eb IIC Gb”, “Class I Zone 1 AEx eb IIC Gb”, “Ex tb IIIC Db”, and “Zone 21 AEx tb IIIC Db”;
  - (7) Ambient Temperature Range;  $-60^{\circ}\text{C} \leq T_a \leq 80^{\circ}\text{C}$
  - (8) Ingress Protection; IP 66
  - (9) The letters “SL” if the gland has an integral seal;
  - (10) The CSA Mark, with or without the “C” and “US” indicators, as shown on the Certificate of Conformity

Note: Glands shall be provided with Manufacturer’s installation instruction sheet AI305.

METHOD OF MARKING:

The marking shall be permanent such as cast, etched or engraved.



## *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**

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<b>Project</b>	<b>Date</b>	<b>Description</b>
80007825	2019-08-21	Scope: Update certificate 1024328 to include new construction for ICG 653 UNIV-X series
70159216	2017-11-22	Update report 1024328 to include product assessment to the latest standards
70036604	2015-07-23	Update report 1024328 to remove supplementary Gland Assembly note.
70018752	2015-04-09	Update reports (1024328 and 1407560) covering various gland series to include an alternate Seal compound (Hawkeseal 2) based on acceptability of submitted UL test report information.
2524265	2013-02-15	Update report 1024328 to add new series ICG 656N and expand IEC zone markings for Canadian and US requirements.