



Certificate of Compliance

Certificate: 1024328 (078713_0_000)

Master Contract: 178267

Project: 70036604

Date Issued: 2015-06-26

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



Issued by: *Donald Verbeem*
Donald Verbeem

PRODUCTS

CLASS - C441805 - CABLE-Hardware - For Hazardous Locations

CLASS - C441885 - CABLE-Hardware-For Hazardous Locations-Certified to U.S. Standards

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CLASS - C441885 - CABLE-Hardware-For Hazardous Locations-Certified to U.S. Standards

4418 05 - CABLE - Hardware For Hazardous Locations

4418 05 - CABLE - Hardware For Hazardous Locations- Certified to US Standards

PRODUCTS

4418 05 - CABLE - Hardware For Hazardous Locations



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Class I Div 1, Grps ABCD, Marine Shipboard application only
Class I Div 2, Grps ABCD; Class II, Div 2, Grps EFG; Class III; IP66

Ex d IIC, Ex e IIC;
Class II Div 1, Grps EFG; Class III, Div 1;
-60°C ≤ T_a ≤ 80°C,
IP 66

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
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 unarmoured or appropriate Steel Tape Armour (STA), Steel Wire Armour (SWA), and appropriate braided cables and conduits.
5. Glands must comply with the Canadian Electrical and 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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4418 85 - CABLE - Hardware For Hazardous Locations- Certified to US Standards

Class I Div 1, Grps ABCD, (Marine Shipboard application only)
Class 1 Div2, Grps ABCD, Class II Div 2, Grps EFG, Class III

Class I, Zone 1, AEx d IIC & AEx e IIC; Class II,
Zone 21 AEx tD,
 $-60^{\circ}\text{C} \leq T_a \leq 80^{\circ}\text{C}$,
IP 66

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
CSB656	Yes	No	-60 °C to 80 °C
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5. Glands must comply with the Canadian Electrical and 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

CSA Standard C22.2 No. 0-M1991	-	General Requirements - Canadian Electrical Code Part II.
C22.2 No 174-M1984	-	Cables and Cable Glands for Use in Hazardous Locations. (For Reference.)
CSA C22.2 No.60079-0-11	-	Electrical apparatus for explosive gas atmospheres. PART 0: General requirements 2 nd Edition.
CSA C22.2 No.60079-1-11	-	Electrical apparatus for explosive gas atmospheres. Part 1: Flameproof enclosure protection 'd' 1 st Edition.
CSA C22.2 No.60079-7-12	-	Electrical apparatus for explosive gas atmospheres. Part 7: Increased Safety 'e'. 1 st Edition
CSA C22.2 No E60079-31-12	-	Explosive atmospheres Part 31: Dust ignition protection by enclosure "t"
ANSI/UL Standard	UL514B	- Conduit , Tubing and Cable Fittings
	UL1203	- Outlet boxes and fitting for Use in Hazardous (Classified) Locations. Fourth Edition
	UL 2225	- Cables and Cable Glands for Use in Hazardous Locations (3 rd Edition)
	UL 60079-0	- UL Standard for Safety for Electrical Equipment for Use in Class I, Zone 0,1,2 Hazardous Locations- Part 0 Fifth Edition
	UL 60079-1	- UL Standard for Safety for Electrical Equipment for Use in Class I, Zone 0,1,2 Hazardous Locations- Part 1 Sixth Edition
	UL 60079-7	- UL Standard for Safety for Electrical Equipment for Use in Class I, Zone 0,1,2 Hazardous Locations- Part 7 Fourth Edition
	ISA 60079-31	- Explosive Atmospheres Part 31 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.



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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,
- (3) Thread form and Trade size.
- (4) Method of Protection/Area Classification:
- (5) Ambient Temperature Range; $-60^{\circ}\text{C} \leq T_a \leq 80^{\circ}\text{C}$
- (6) Ingress Protection; IP 66

- (7) The Cus Mark 

Note: Glands shall be provided with and assembled in accordance with manufacturer's assembly sheet AI 305.

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

Project	Date	Description
70036604	2015-06-26	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.