

Certificate of Compliance

Certificate: 1015065 (LR 78713-7)

Master Contract: 178267

Project: 1409121 (Edition 7)

Date Issued: January 10, 2003

Issued to: Hawke International
(t/a) Hawke Cable Glands Limited
Oxford St. W.
Ashton-Under-Lyne
Lancashire, OL7 0NA
United Kingdom

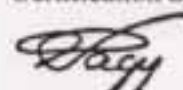
The products listed below are eligible to bear the CSA Mark shown



Issued by:


D. Adams, P.Eng.
Certification Specialist

Authorized by: Terry Nagy,
Operations Manager



PRODUCTS

CLASS 4418 05 - CABLE - Hardware For Hazardous Locations

Ex d IIC & Ex e II; -50 °C to 60 °C, IP 66

"HAWKE" Type 501/421 Flameproof Compression Glands; 501/421 (2K) Flameproof Compression Glands; 501/421 Oversize Cable Gland; 501/423; 501/423 Oversize Cable Gland; 501/453 Dedicated; 501/453 Oversize Cable Gland; 501/453 RAC, 501/453 UNIV; 501/414, Cable Glands.

NOTE:

1. Additional marking denoting trade size, and manufacturer information will be included.
2. These cable glands are designed for use with unarmoured or appropriate Steel Tape Armour (STA), Steel Wire Armour (SWA), and appropriate braided cable. These cables must be with extruded sealing (solid polymeric) completely surrounding the 'core' (insulation and conductor), allowing for no holes or ventilation through the inner jacket or along the cores.
3. Glands are for use with Ex d Enclosures with less than 2000 cc (2 Litres) internal volume.

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4. According to CEC C22.1-98, Section 18-106 Part 3, Tapered Threads shall have 5 fully engaged threads, and where non-tapered threads are used in Groups IIC there must be 8 fully engaged threads.
5. IEC Canadian Standards may have either tapered or non-tapered threads which comply to ISO Standards.
6. These cable glands are designed for appropriate cable, as per the manufacturers specifications, to maintain integrity of the installation.
7. For Ex c 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. Glands when used with unarmoured or braided cables are only suitable for use with fixed apparatus, the cable must be effectively clamped and cleated elsewhere, to be noted in Installation Instructions.
9. Cable Gland may only be installed when temperature is above -5°C. After completion of the installation, the assembly is then suitable for -50 °C to 60 °C.

APPLICABLE REQUIREMENTS

The following standards were used as a guide in the evaluation of the products covered by this report.

CSA Standard C22.2 No	0-M1991	- General Requirements - Canadian Electrical Code Part II.
	174-M1984	- Cables and Cable Glands for Use in Hazardous Locations. (For Reference.)
CAN/CSA E79-0-95		- Electrical apparatus for explosive gas atmospheres. PART 0: General requirements.
	E79-1-95	- Electrical apparatus for explosive gas atmospheres. PART 1: Construction and verification test of flameproof enclosures of electrical apparatus.
	E79-7-95	Electrical apparatus for explosive gas atmospheres. Part 7: Increased Safety 'e'.



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
LR 78713-7	September 30, 1998	Certification of the 501/453/Univ, ICG 653 and 501/453 Series of Cable Glands for Hazardous Locations.
LR 78713-9 LR 78713-10	March 31, 1999	Separation of the LR 78713-7 file in the -9 and -10, this file has the 501/453 Cable Glands for Hazardous locations.
LR 78183-11	April 21, 1999	Update to -7 report to include Clarifications of gland restrictions.
1015065	October 5, 1999	Supercedes LR 78713-7 to include new gland assembly. Originally issued as 2500001330.
2500003099	April 6, 2000	Update to 1015065 to include addition of testing and investigation of 501/453 Univ cable gland.
1205534	August 20, 2001	Update to 1015065 to include new Model nomenclature and rationalization of components
1409121	January 10, 2003	Update 1015065 to include Oversize (G, H and J) Cable Glands.