

Confirmation of Product Type Approval

Company Name: HAWKE INTERNATIONAL

Address: OXFORD STREET WEST, ASHTON-UNDER-LYNE, LANCASHIRE, United Kingdom, OL7

0NA

Product: Cable, Glands

Model(s): Type 321, 321 Oversize, Type 501/421, 501/421 Oversize, 501/423 Oversize, 501/453 RAC,

501/453 RAC Oversize, 501/414, Type 710, 711 and 753, Type 501/453 Universal / Type ICG 653

Universal, OMNI GLAND, PSG 553 RAC, PSG 421, SB474, CSB 656N, Type 701-X

Endorsements:

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA) Manufacturing Assessment (MA) Product Quality Assurance (PQA)	19-LD1876514-1-PDA	24-MAR-2020	09-JUL-2024
	21-4624373	03-MAR-2021	20-MAR-2026
	NA	NA	NA

Tier

3 - Type Approved, unit certification not required

Intended Service

For use on ABS Classed Vessels and Offshore Installations in accordance with the listed ABS Rules and International Standards.

Description

Type 321, 321 Oversize

They are certified for use with all types of unarmoured, armoured and braided cable. They can be used in both hazardous and/or non-hazardous locations on ships and offshore units. It is manufactured in brass, aluminium or stainless steel, and is produced with an entry thread size in the range MI6 to M75 for standard size glands and M80 to M120 in oversize glands, or equivalent sizes in NPT National Pipe Taper.

Type 501/453 Universal / ICG 653 /UNIV OMNI GLAND

501/453 Universal are certified for use with all types of armoured and braided cable particularly where the inner sheath of the cable is subject to cold flow. They can be used in both hazardous and/or non-hazardous locations on ships and offshore units.

ICG 653 /UNIV are certified for use with all types of unarmoured, armoured and braided cable. They can be used in both hazardous and/or non-hazardous locations on ships and offshore units and provide a seal around the individual conductors of the cable

They are manufactured in either brass, aluminium or stainless steel, and is produced with an entry

thread size in the range M16 to M75 or equivalent sizes in NPT National Pipe Taper.

Both product types may be marked on the stamping band (See Comments)

Type CSB 656N

They are certified for use with all types of unarmoured cable for use with conduit. They can be used in both hazardous and/or non-hazardous locations on ships and offshore units and provide a seal around the individual conductors of the cable.

They are manufactured in either brass, aluminium or stainless steel, and is produced with an entry thread size in the range M20 to M32 or equivalent sizes in NPT National Pipe Taper

Type 710, 711 and 753

They are certified for use with all types of armoured, un-armoured and braided cable. They can be used in both hazardous and/or non-hazardous locations on ships and offshore units. They are manufactured in brass, aluminium or stainless steel, and is produced with an entry thread size in the range Ml6 to M75 for standard size glands and M90 for H size glands (UL only), or equivalent sizes in NPT National Pipe Taper.

Type 501/421, 501/421 Oversize, 501/423 Oversize, 501/453 RAC, 501/453 RAC Oversize, 501/414, SB 474

They are certified for use with all types of unarmoured, armoured and braided cable. They can be used in both hazardous and/or non-hazardous locations on ships and offshore units. They are manufactured in brass, aluminium or stainless steel, and is produced with an entry thread size in the range Ml6 to M75 for standard size glands and M80 to M100 in oversize glands, or equivalent sizes in NPT National Pipe Taper.

Type PSG 553 RAC, PSG 421

It is certified for use with all types of unarmoured, armoured and braided cable. They can be used in both hazardous and/or non-hazardous locations on ships and offshore units and provide a seal around the individual conductors of the cable.

They are manufactured in either brass, aluminium or stainless steel, and is produced with an entry thread size in the range M20 to M32 or equivalent sizes in NPT National Pipe Taper

Type 701-X

This cable sealing fitting can be used in both hazardous and/or non-hazardous locations on ships and offshore units. For use with cable type MC-HL metal-clad cable employing continuous corrugated aluminum armor and cable type MC metal-clad cable employing interlocking aluminium or steel armor ground cable or continuous corrugated aluminium armor. Thread sizes 1/2 to 3 in. NPT inclusive or M20 to M75 inclusive, for vertical or horizontal mounting.

Ratings

Type 321, 321 Oversize

Ingress protection: IP 66/67

Temperature: Tamb = -60C to +80°C or +100°C for the gland types not using the iris type outer seal assembly

Type of Protection: Increased Safety and Dust Protection

Marking: Ex eb IIC Gb, Ex tb IIIC Db; IECEx Certificate: IECEx CML 19.0042X, Issue 0, Date: 04.06.2019,

: II 2GD Ex eb IIC Gb, Ex tb IIIC Db; ATEX Certificate: CML 19ATEX3164X, Issue 0, Date: 04.06.2019

Type 501/453 Universal / Type ICG653/UNIV (OMNI GLAND) / 710 / 711 / 753

Ingress protection: IP 66/67

Temperature: Tamb = Type 501/453 Universal / Type ICG653/UNIV = -60C to +80°C

Type /710 / 711 / 753 = -50C to $+80^{\circ}C$

Type of Protection: Flameproof, Increased Safety and Dust Protection

: II 2G Ex db IIC Gb, II 2G Ex eb IIC Gb, II 2D Ex tb IIIC Db; ATEX Certificate: CML 18ATEX1268X, Issue 0, Date: 10.05.2019

: UL Certification 20190530-E84940: Issue Date: 30.05.2019

Marking for 710 Class I, Groups A, B, C and D Hazardous Locations, Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G; and Class III Hazardous Locations

Marking for 711 Class I, Groups A, B, C and D Hazardous Locations

Type 501/421, 501/421 Oversize, 501/423, 501/421 Oversize, 501/453 RAC, 501/453 RAC Oversize, 501/414, Type SB474, Type PSG 553 RAC and PSG 421

Ingress protection: IP 66/67

Operating Temperature: -60C to +100°C (Except for PSG glands), Operating Temperature: -60C to +80°C (PSG glands)

Type of Protection: Flameproof, Increased Safety and Dust Protection

Marking: Ex db IIC Gb, Ex eb IIC Gb, Ex tb IIIC; IECEx Certificate: IECEx CML 19.0045X, Issue 0, Date: 04.06.2019

: II 2G D Ex db IIC Gb, Ex eb IIC Gb, Ex tb IIIC; ATEX Certificate: CML 19ATEX1167X Issue 0, Date: 04.06.2019

Type CSB 656N

Ingress protection: IP 66/67

Operating Temperature: -60C to +80°C

Type of Protection: Flameproof, Increased and Dust Protection

Marking: Ex db IIC Gb, Ex eb IIC Gb, Ex tb IIIC; IECEx Certificate: IECEx CML 19.0048X, Issue 0, Date: 04.06.2019

: II 2G D Ex db IIC Gb, Ex eb IIC Gb, Ex tb IIIC; ATEX Certificate: CML 19ATEX1170X Issue 0, Date: 04.06.2019

Type 701-X

Ingress protection: IP 66/67

Operating Temperature: -50C to +80°C

Type of Protection: Flameproof, Increased and Dust Protection

Marking: Class I, Zone I/2, AEx e IIC Gb; Zone 21/22, AEx tb IIIC Db and Ex eb IIC Gb/Gc; Ex tb IIIC Db/Dc, UL Certificate: 20191022-E84940, Date: 22.10.2019

Service Restrictions

- Unit Certification is not required for this product.
- If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
- ATEX certified equipment is not to be installed in hazardous areas on U.S vessels unless it can be proven to have been tested to the applicable IEC 60079 series standards by an independent laboratory accepted by the U.S coast Guard. USCG notice 01-12 (February 7, 2012).
- All electrical equipment intended for installation in hazardous areas are to be certified safe type based on the class of the hazardous area at its location of installation. Certificates in this regard are to be presented to the ABS Surveyor for verification on a case by case basis.
- Unless specially directed by Administration, this approval is not to be construed as a substitute for flag Administration's approval.

Comments

- 1) Special conditions apply as per IECEx and ATEX certificates for all of the cable gland types listed above.
- 2) Manufacturers' assembly instructions are to be strictly followed during installation.
- 3) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
- 4) The manufacturer's application instructions and manufacturer's assembly installation to be followed.
- 5) The attending Surveyor is to verify traceability between manufacturer's product type marking and type approval certificate
- 6) The internal parts of the following gland's (Type 501/453 Universal / Type ICG653/UNIV (OMNI GLAND) are interchangeable with respect to the type of application. The 'deluge boot' colour indicates the internal component that are used, the ICG/653/UNIV being indicated by a red deluge boot. The 501/453/UNIV being indicated by a black deluge boot. See IECEx CML 18.0131X
- 7) Specific conditions for 701-X gland apply as per Cable Gland Assembly Instructions

Notes, Drawings and Documentation

Drawing No. 1166X 0044X, General Arrangement 453 UNIV, Revision: A, Pages: 1

Drawing No. 1167X 0045X, General Arrangement for Unarmoured 501 421 Oversized Gland, Revision: H, Pages: 1

Drawing No. General Arrangement for Unarmoured 321,321 oversized Gland, Revision: A, Pages: 5

Drawing No. Glands Matrix 3014, Glands Matrix 3014, Revision: AD, Pages: 1

Drawing No. ICG-453-OMNI, General Arrangement 501_453_UNIV, 710, 711, 753, ICG_653_UNIV_X, Omni Gland X, Revision: A, Pages: 11

Drawing No. CML 18ATEX1268X, EU Type Examination Certificate, Revision: 0, Date: 10.05.2019, Pages: 7

Drawing No. CML 19ATEX1167X, EU Type Examination Certificate, Revision: 0, Date: 04.06.2019, Pages: 5

Drawing No. CML 19ATEX1170X, EU Type Examination Certificate, Revision: 0, Date: 04.06.2019, Pages: 3

Drawing No. CML 19ATEX3164X, EU Type Examination Certificate, Revision: 0, Date: 04.06.2019, Pages: 4

Drawing No. IECEx CML 18.0131X, IECEx Certificate of Conformity, Revision: 0, Date: 10.05.2019, Pages: 9

Drawing No. IECEx CML 19.0042X, IECEx Certificate of Conformity, Revision: 0, Date: 04.06.2019, Pages: 5

Drawing No. IECEx CML 19.0045X, IECEx Certificate of Conformity, Revision: 0, Date: 04.06.2019, Pages: 5

Drawing No. IECEx CML 19.0048X, IECEx Certificate of Conformity, Revision: 0, Date: 04.06.2019, Pages: 4

Drawing No. R11908A-00, Evaluation Report, CML EX Certification Management Limited, UK, Version: 16.0, Date: 04.06.2019, Pages: 24

Drawing No. R11909A_00, Evaluation Report, CML EX Certification Management Limited, UK, Version: 16.0, Date: 10.05.2019 Pages: 64

Drawing No. Al 2024, Cable Gland Assembly Instructions, Pages: 04

Drawing No. 20191022-E84940, UL Certificate of Compliance, Revision: -, Pages: 04

Drawing No. E84940-Project 4788687613, Report, Hawke International, UK, Revision: -, Date: 03.10.2019, Pages: 11

Drawing No. E84940-Project 02NK28179, Report, Hawke International, UK, Revision: -, Date: 28.06.2011, Pages: 14

Drawing No. 701, Cable Gland Assembly Instructions, Revision: -, Pages: 4

Drawing No. 701-X, Data sheet, Revision: -, Pages: 2

Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 09/Jul/2024 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

ABS Rules

- Marine Vessels Rules (2020): 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-8-3/1.7, 4-8-3/1.11, 4-8-3/13 and 4-8-4/27.5.1
- Steel Vessels for Service on Rivers and Intracoastal Waterways Rules (2020): 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-5-1/3.9, 4-5-1/13, 4-5-1/19, 4-5-3/11.1.1 (a)
- Steel Barge Rules (2020): 1-1-4/7.7, 1-1-A3, 1-1-A4
- High Speed Crafts (2020): 1-1-4/11.9, 1-1-A2, 1-1-A3, 4-6-1/3.9, 4-6-1/3.17, 4-6-1/3.17, 4-6-1/15, 4-6-1/17, 4-6-3/9.1.1 (a),
- Mobile Offshore Units (2020): 1-1-4/9.7, 1-1-A2, 1-1-A3, 6-1-1/9, 6-1-1/13, 4-1-1/7.9, 4-3-1/3.7, 4-3-1/3.17, 4-3-1/15, 4-3-1/17, 4-3-3/9.1.2

- Facilities on Offshore Installations (2020): 1-1-4/9.7, 1-1-A2, 1-1-A3;

International Standards

Type 321, 321 Oversize

IEC 60079-0 Ed 7.0: 2017, IEC 60079-7 Ed 5.0: 2015, IEC 60079-31 Ed 2.0:2013;

EN 60079-0: 2018, EN 60079-7: 2015, EN 60079-31:2014;

Type 501/453 Universal, Type ICG653/UNIV, OMNI GLAND, Type 710, 711, 753 and Type CSB 656N IEC 60079-0 Ed 7.0: 2017, IEC 60079-1 Ed 7.0:2014, IEC 60079-7 Ed 5.0: 2015, IEC 60079-31 Ed 2.0:2013:

EN 60079-0: 2018, EN 60079-1: 2014, EN 60079-7: 2015, EN 60079-31:2014;

UL 514B, UL2225 - only for Type 710, 711, 753;

Type 501/421, 501/421 Oversize, 501/423, 501/421 Oversize, 501/453 RAC, 501/453 RAC Oversize, 501/414, SB 474, Type PSG 553 RAC and PSG 421

IEC 60079-0 Ed 7.0: 2017, IEC 60079-1 Ed 7.0:2014, IEC 60079-7 Ed 5.0: 2015, IEC 60079-31 Ed 2.0:2013:

EN 60079-0: 2018, EN 60079-1: 2014, EN 60079-7: 2015, EN 60079-31:2014;

Type 701-X, 710, 711

UL 2225 Ed4.0; 2013, UL 514B Ed6.0; 2012;

CSA C22.2 No. 18.3-12, CSA C22.2 No. 60079-0: 2019, CSA C22.2 No. 60079-1: 2016, CSA C22.2 No. 60079-7: 2016, CSA C22.2 No. 60079-31: 2015;

EU-MED Standards

NA

National Standards

NA

Government Standards

ΝΔ

Other Standards

NA



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ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.