



Certificate no.:
TAE00004XK

TYPE APPROVAL CERTIFICATE

This is to certify:
that the Cable Gland

with type designation(s)
Hazardous Area Cable Gland

issued to
Peppers Cable Glands Limited
Surrey, United Kingdom

is found to comply with
DNV rules for classification – Ships, offshore units, and high speed and light craft

Application:

Hazardous areas cable glands. Manufacturer's installation description to be followed.
Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Material	See product description
Suitable for open deck	Yes
Suitable for Hazardous areas	Yes

Issued at **Høvik** on **2024-09-27**

for **DNV**

This Certificate is valid until **2029-09-26**.
DNV local unit: **UK & Ireland CMC & VMC**

Approval Engineer: **Ivar Bull**

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This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

Table 1: Cable glands Ex protection classes and test standards:

	Model Code	GA Drawing	Ex db IIC Gb	Ex eb IIC Gb	Ex ta IIC Da	Ex nR IIC Gc	Ex db I Mb	Ex eb I Mb	IEC 60079-0	IEC 60079-1	IEC 60079-7	IEC 60079-15	IEC 60079-31
CR Range Elastomeric Cable Glands	CR-***	PCG/ATX/CR	X	X	X	X			X	X	X	X	X
CR Range Elastomeric Cable Glands	CRD-**	PCG/ATX/CRD	X	X	X	X			X	X	X	X	X
CR Range Elastomeric Cable Glands	CRO-***	PCG/ATX/CRO		X	X				X		X		X
C Range Elastomeric Cable Glands	C****E*	PCG/ATX/CE		X	X				X		X		X
D Range Elastomeric Cable Glands	D****F	PCG/ATX/E1W	X	X	X	X			X	X	X	X	X
E Range Elastomeric Cable Glands	E****F*	PCG/ATX/E1W		X	X					X	X	X	
A Range Elastomeric Cable Glands	A****	PCG/ATX/A2L	X	X	X	X			X	X	X	X	X
A Range Elastomeric Cable Glands	A*L**	PCG/ATX/A2L	X	X	X	X			X	X	X	X	X
A Range Elastomeric Cable Glands	A*LC***	PCG/ATX/A2L	X	X	X	X			X	X	X	X	X
A Range Elastomeric Cable Glands	A*RC***	PCG/ATX/A2L	X	X	X	X			X	X	X	X	X
AE Range Elastomeric Cable Glands	A****	PCG/ATX/A*E	X	X	X	X			X	X	X	X	X
AE Range Elastomeric Cable Glands	A*E**	PCG/ATX/A*E	X	X	X	X			X	X	X	X	X
AE Range Elastomeric Cable Glands	A*EC***	PCG/ATX/A*E	X	X	X	X			X	X	X	X	X
AE Range Elastomeric Cable Glands	A*ERC***	PCG/ATX/A*E	X	X	X	X			X	X	X	X	X
A8 Range Flat Cable Elastomeric Cable Glands	A8**	PCG/ATX/UF	X	X	X	X			X	X	X	X	X
A8 Range Flat Cable Elastomeric Cable Glands	A8C***	PCG/ATX/UF	X	X	X	X			X	X	X	X	X
A8 Range Flat Cable Elastomeric Cable Glands	A8RC**	PCG/ATX/UF	X	X	X	X			X	X	X	X	X
D8 Range Flat Cable Elastomeric Cable Glands	D8X**	PCG/ATX/BF	X	X	X	X			X	X	X	X	X
D8 Range Flat Cable Elastomeric Cable Glands	D8XC***	PCG/ATX/BF	X	X	X	X			X	X	X	X	X
E8 Range Flat Cable Elastomeric Cable Glands	E8X**	PCG/ATX/BF	X	X	X	X			X	X	X	X	X
E8 Range Flat Cable Elastomeric Cable Glands	E8XC***	PCG/ATX/BF	X	X	X	X			X	X	X	X	X
ED Range of Elastomeric Cable Glands	ED*U***	PCG/ATX/ED*U***	X	X	X	X			X	X	X	X	X
CR Range of Barrier Cable Glands & Stopper Boxes	CR-C***	PCG/ATX/CRC	X	X	X	X	X	X	X	X	X	X	X
CR Range of Barrier Cable Glands & Stopper Boxes	CR-S**	PCG/ATX/CRS	X	X	X	X	X	X	X	X	X	X	X
CR Range of Barrier Cable Glands & Stopper Boxes	CR-U**	PCG/ATX/CRU	X	X	X	X	X	X	X	X	X	X	X
CR Range of Barrier Cable Glands & Stopper Boxes	CR-X**	PCG/ATX/CRU	X	X	X	X	X	X	X	X	X	X	X
CR Range of Barrier Cable Glands & Stopper Boxes	CX-C***	PCG/ATX/CRC	X	X	X	X	X	X	X	X	X	X	X
Eclipse, EC Range of Barrier Cable Glands	EC*-C***	PCG/ATX/EC-C	X	X	X	X	X	X	X	X	X	X	X
Eclipse, EC Range of Barrier Cable Glands	EC*-S**	PCG/ATX/EC-S	X	X	X	X	X	X	X	X	X	X	X
Eclipse, EC Range of Barrier Cable Glands	EC*-X**	PCG/ATX/EC-U	X	X	X	X	X	X	X	X	X	X	X
Eclipse, EC Range of Barrier Cable Glands	EC*-U**	PCG/ATX/EC-U	X	X	X	X	X	X	X	X	X	X	X
UL Range of Barrier Cable Glands	UL-C****	PCG/ATX/ULC	X	X	X	X	X	X	X	X	X	X	X
UL Range of Barrier Cable Glands	UL-U***	PCG/ATX/ULU	X	X	X	X	X	X	X	X	X	X	X

	Model Code	GA Drawing	Ex db IIC Gb	Ex eb IIC Gb	Ex ta IIC Da	Ex nR IIC Gc	Ex db I Mb	Ex eb I Mb	IEC 60079-0	IEC 60079-1	IEC 60079-7	IEC 60079-15	IEC 60079-31
UL Range of Barrier Cable Glands	UL-X***	PCG/ATX/ULU	X	X	X	X	X	X	X	X	X	X	X
LT-C Range of Barrier Cable Glands	LT-C**	PCG/ATX/LTC	X	X	X	X	X	X	X	X	X	X	X

ACCESSORIES:

AR Range of Adaptors & Reducers	AR*****	PCG/ATX/AR	X	X	X	X	X	X	X	X	X	X	X
ARFF Range of Female-to-Female Adaptors & Reducers	ARFF*****	PCG/ATX/ARFF	X	X	X	X	X	X	X	X	X	X	X
ARMM Range of Male-to-Male Adaptors & Reducers	ARMM*****	PCG/ATX/ARMM	X	X	X	X	X	X	X	X	X	X	X
ARFR Range of Female to Female 90° Adaptors & Reducers	ARFR*****	PCG/ATX/90	X	X	X	X	X	X	X	X	X	X	X
ARMR Range of Male to Female 90° Adaptors & Reducers	ARMR*****	PCG/ATX/90	X	X	X	X	X	X	X	X	X	X	X
AEFF Range of Female to Female 45° Adaptors & Reducers	AEFF*****	PCG/ATX/45	X	X	X	X	X	X	X	X	X	X	X
AEMF Range of Male to Female 45° Adaptors & Reducers	AEMF*****	PCG/ATX/45	X	X	X	X	X	X	X	X	X	X	X
ATFF Range of Female to Female 30° Adaptors & Reducers	ATFF*****	PCG/ATX/30	X	X	X	X	X	X	X	X	X	X	X
ATMF Range of Male to Female 30° Adaptors & Reducers	ATMF*****	PCG/ATX/30	X	X	X	X	X	X	X	X	X	X	X
RA Range of Range of Rotating Adaptors, Reducers & Elbows	RA**	PCG/ATX/RAFF, PCG/ATX/RAMF, PCG/ATX/RAMM	X	X	X	X	X	X	X	X	X	X	X
RA Range of Range of Rotating Adaptors, Reducers & Elbows	RA**90	PCG/ATX/RAFF90, PCG/ATX/RAMF90, PCG/ATX/RAMM90	X	X	X	X	X	X	X	X	X	X	X
SPA Range of Type A Metallic Stopping Plugs	SPA****	PCG/ATX/SPA	X	X	X		X	X	X	X	X		X
SPB Range of Type B Metallic Stopping Plugs	SPB****	PCG/ATX/SPB	X	X	X		X	X	X	X	X		X
SPHH Range of Hexagonal Head Metallic Stopping Plugs	SPHH*****	PCG/ATX/SPH	X	X	X	X	X	X	X	X	X	X	X
SPMH Range of Mushroom Head Metallic Stopping Plugs	SPMH*****	PCG/ATX/SPMH	X	X	X	X	X	X	X	X	X	X	X
SPMH*NE Range of Mushroom Head Non-Metallic Stopping Plugs	SPMH*NE**	PCG/ATX/SPMHN		X	X				X		X		X
ACDP Range of Breather Drain Plugs	ACDP*****	PCG/ATX/ACDP		X	X			X	X		X		X

Table 2. IECEx certificates, IP ratings and temperature ranges

(N) = Neoprene seals (S) = Silicone seals

CABLE GLANDS:

	IECEx Certificate	IP Rating	Temperature Range
CR Range Elastomeric Cable Glands	IECEx CML 19.0106X	IP66 / IP68	-35°C to +90°C (N) - 60°C to +180°C (S)
CR Range Elastomeric Cable Glands (CR-O only)	IECEx CML 19.0106X	IP66	-35°C to +90°C (N) - 60°C to +180°C (S)
C Range Elastomeric Cable Glands	IECEx CML 19.0031X	IP66	-35°C to +90°C (N) - 60°C to +180°C (S)
D Range Elastomeric Cable Glands	IECEx CML 19.0031X	IP66 / IP68	-35°C to +90°C (N) - 60°C to +180°C (S)
E Range Elastomeric Cable Glands	IECEx CML 19.0031X	IP66	-35°C to +90°C (N) - 60°C to +180°C (S)
A Range Elastomeric Cable Glands	IECEx CML 19.0103X	IP66 / IP68	-35°C to +90°C (N) - 60°C to +180°C (S)
AE Range Elastomeric Cable Glands	IECEx CML 20.0131X	IP66 / IP68 / IP69	-35°C to +90°C (N) - 60°C to +180°C (S)
A8 Range Flat Cable Elastomeric Cable Glands	IECEx CML 19.0104X	IP66 / IP68	-60°C to +180°C
D8 Range Flat Cable Elastomeric Cable Glands	IECEx CML 19.0104X	IP66 / IP68	-60°C to +180°C
E8 Range Flat Cable Elastomeric Cable Glands	IECEx CML 19.0104X	IP66 / IP68	-60°C to +180°C
ED Range of Elastomeric Cable Glands	IECEx CML 21.0157X	IP66 / IP68 / IP69	-35°C to +90°C (N) - 60°C to +180°C (S)
CR Range of Barrier Cable Glands & Stopper Boxes	IECEx CML 19.0046X	IP66 / IP68	-60°C to +135°C
Eclipse, EC Range of Barrier Cable Glands	IECEx CML 19.0035X	IP66 / IP68	Dependent upon sealing - See certificates
UL Range of Barrier Cable Glands	IECEx CML 19.0107X	IP66 / IP68	-60°C to +135°C
LT-C Range of Barrier Cable Glands	IECEx CML 19.0049X	IP66 / IP68	-60°C to +135°C

ACCESSORIES:

AR Range of Adaptors & Reducers	IECEx CML 19.0022X	IP66 / IP68	Dependent upon sealing - See certificates
ARFF Range of Female-to-Female Adaptors & Reducers	IECEx CML 19.0022X	IP66 / IP68	Dependent upon sealing - See certificates
ARMM Range of Male-to-Male Adaptors & Reducers	IECEx CML 19.0022X	IP66 / IP68	Dependent upon sealing - See certificates
ARFR Range of Female to Female 90° Adaptors & Reducers	IECEx CML 19.0023U	IP66 / IP68	Dependent upon sealing - See certificates
ARMR Range of Male to Female 90° Adaptors & Reducers	IECEx CML 19.0023U	IP66 / IP68	Dependent upon sealing - See certificates
AEFF Range of Female to Female 45° Adaptors & Reducers	IECEx CML 19.0023U	IP66 / IP68	Dependent upon sealing - See certificates
AEMF Range of Male to Female 45° Adaptors & Reducers	IECEx CML 19.0023U	IP66 / IP68	Dependent upon sealing - See certificates
ATFF Range of Female to Female 30° Adaptors & Reducers	IECEx CML 19.0023U	IP66 / IP68	Dependent upon sealing - See certificates

	IECEX Certificate	IP Rating	Temperature Range
ATMF Range of Male to Female 30° Adaptors & Reducers	IECEX CML 19.0023U	IP66 / IP68	Dependent upon sealing - See certificates
RA Range of Range of Rotating Adaptors, Reducers & Elbows	IECEX CML 19.0101X	IP66 / IP68	Dependent upon sealing - See certificates
RA Range of Range of Rotating Adaptors, Reducers & Elbows	IECEX CML 19.0101X	IP66 / IP68	Dependent upon sealing - See certificates
SPA Range of Type A Metallic Stopping Plugs	IECEX CML 19.0022X	IP66	-100°C to +400°C
SPB Range of Type B Metallic Stopping Plugs	IECEX CML 19.0022X	IP66	-100°C to +400°C
SPHH Range of Hexagonal Head Metallic Stopping Plugs	IECEX CML 19.0022X	IP66 / IP68	Dependent upon sealing - See certificates
SPMH Range of Mushroom Head Metallic Stopping Plugs	IECEX CML 19.0022X	IP66 / IP68	Dependent upon sealing - See certificates
SPMH*NE Range of Mushroom Head Non-Metallic Stopping Plugs	IECEX CML 17.0145X	IP66 / IP68	Dependent upon sealing - See certificates
ACDP Range of Breather Drain Plugs	IECEX CML 19.0105X	IP66	Dependent upon sealing - See certificates

Optional Accessories

Locknuts, sealing washers, serrated washers, earth tags, shrouds are available as installation accessories.

Application/Limitation

Note: All details about explosion protection mentioned in this certificate are for information only. For relevant binding information the corresponding Certificate of Conformity regarding electrical explosion protection, issued by a recognized Authority, shall be observed.

The manufacturers application instructions to be followed.
 The manufacturers assembly instructions to be followed.

Type Approval documentation

Datasheets: See each construction
 EC type examination certificates are only recognized together with a valid Quality Assurance Notification.

Tests carried out

Type tests according to IEC/EN 60079-0, IEC/EN 60079-1, IEC/ EN 60079-7, IEC/EN 60079/-15, IEC/EN 60079-31.

Marking of product

According to type examination certificate

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT shall be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE