TYPE APPROVAL CERTIFICATE

Certificate No:
TAE0000002

This is to certify:

That the Cable Gland

with type designation(s)
A2, CW, CX/CZ, E1W, E1X/Z, IPLUS CORROSION GUARD, POSI FLEX

Issued to
CCG Cable Terminations (Pty) Ltd.
KEMPTON PARK, South Africa

is found to comply with
DNV GL rules for classification – Ships and offshore units

Application :

Cable glands for electric installation.
Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

This Certificate is valid until **2020-10-14**.

Issued at **Høvik** on **2015-10-15**

DNV GL local station: **Newcastle-upon-Tyne** for **DNV GL**

Approval Engineer: **Ludovico Gullifa**

Marit Laumann
Head of Section

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.

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Product description

Cable glands for electric installation

Type	**A2**
Application	The A2 cable gland is used to terminate unarmoured cables into enclosures with threaded entries, or unthreaded entries where the gland is secured with a locknut. The A2 cable gland is supplied with a sealing washer as standard
Design Specification	IEC 62444
Operating temperature	-20° C to +125° C
Ingress protection	IP66, IP67, IP68
Gland material	Brass, nickel plated brass, aluminium or stainless steel
Seal material	Thermoset elastomer
Gland sizes	16s, 16ss, 20ss, 20s, 20, 25, 32, 40, 50, 63, 75, 80, 90, 100, 110, 120, 130.
Data sheet	GI020214
Assembly drawing No.	053500-053513 Rev 1

Type	**CW**
Application	The CW cable gland is used to terminate armoured cables into enclosures with threaded entries, or unthreaded entries where the gland is secured with a locknut. The CW cable gland is supplied with a sealing washer as standard.
Design Specification	IEC 62444
Operating temperature	-20° C to +125° C
Ingress protection	IP66
Gland material	Brass, nickel plated brass, aluminium or stainless steel
Seal material	Thermoset elastomer
Gland sizes	16ss, 20ss, 20s, 20, 25s, 25, 32s, 32, 40s, 40, 50s, 50, 63s, 63, 75s, 75, 80s, 80, 90s, 90, 100, 115, 120, 130.
Data sheet	GI050614E
Assembly drawing No.	E.00.00.06.000

Type	**CX / CZ**
Application	The CX / CZ cable gland is used to terminate braided and steel tape armoured cables into enclosures with threaded entries, or unthreaded entries where the gland is secured with a locknut. The CX / CZ cable gland is supplied with a sealing washer as standard.
Design Specification	IEC 62444
Operating temperature	-20° C to +125° C
Ingress protection	IP66
Gland material	Brass, nickel plated brass or stainless steel
Seal material	Thermoset elastomer
Gland sizes	20ss, 20s, 20, 25, 32, 40, 50, 63, 75, 80, 90.
Data sheet	GI090914E
Assembly drawing No.	051300-051309

Type	**E1W**
Application	The E1W cable gland is used to terminate armoured cables into enclosures with threaded entries, or unthreaded entries where the gland is secured with a locknut. It has seals that act against both the inner and outer sheaths of the cable. The E1W cable gland is supplied with a sealing washer as standard.
Design Specification	IEC 62444
Operating temperature	-20° C to +125° C
Ingress protection	IP66, IP67 IP68
Gland material	Brass, nickel plated brass, aluminium or stainless steel
Seal material	Thermoset elastomer
Gland sizes	16ss, 20ss, 20s, 20, 25, 32, 40, 50, 63, 75, 80, 90, 100, 115, 120, 130.
Data sheet	GI121014E
Assembly drawing No.	051800-051813

Type	**E1X/Z**
Application	The E1X/Z cable gland is used to terminate braided and steel tape armoured cables into enclosures with threaded entries, or unthreaded entries where the gland is secured with a locknut. It has seals that act against both the inner and outer sheaths of the cable. The E1X/Z cable gland is supplied with a sealing washer as standard.
Design Specification	IEC 62444
Operating temperature	-20° C to +125° C
Ingress protection	IP66, IP67 IP68
Gland material	Brass, nickel plated brass or stainless steel
Seal material	Thermoset elastomer
Gland sizes	20ss, 20s, 20, 25, 32, 40, 50, 63, 75, 80, 90.
Data sheet	GI160214E
Assembly drawing No.	051702

Type	**IPLUS CORROSION GUARD**
Application	The IPLUS CORROSION GUARD cable gland is used to terminate armoured cables into enclosures with threaded entries, or unthreaded entries where the gland is secured with a locknut. It is intended for use in highly corrosion and wet locations. The IPLUS CORROSION GUARD cable gland is supplied with a sealing washer as standard.
Design Specification	IEC 62444
Operating temperature	-20° C to +125° C
Ingress protection	IP66, IP67 IP68
Gland material	Nickel plated brass with a glass reinforced polyester (PBT) outer body.
Seal material	Thermoset elastomer
Gland sizes	16ss, 20ss, 20s, 20, 25, 32, 40, 50, 63, 75.
Data sheet	GI170614
Assembly drawing No.	054600-054610

Type	**POSI FLEX**
Application	The POSI FLEX cable gland is intended for use in highly corrosive environments to terminate unarmoured cables into enclosures with threaded entries, or unthreaded entries where the gland is secured with a locknut. The POSI FLEX cable gland is supplied with a sealing washer as standard.
Design Specification	IEC 62444
Operating temperature	-20° C to +125° C
Ingress protection	IP66, IP67 IP68
Gland material	Nickel plated brass encapsulated in glass reinforced polyester (PBT).
Seal material	Thermoset elastomer
Gland sizes	20ss, 20s, 20, 25, 32, 40.
Data sheet	GI180214
Assembly drawing No.	053800-053804

Optional accessories	Adaptors, reducers, unions, connectors, stopper plugs
Application	Adaptors & reducers are used to change a thread size or type. Unions are used to change a male thread to a female thread of the same or different size/type. Couplers are used to change a female thread to a male one of the same or different size / type. Hex head and dome head plugs are used to blank off threaded entries. Stopper plugs are used to blank off threaded entries without the use of a headed section. They are tightened with an Allan key and there are two versions – one where the plug is tightened from the outside of the enclosure and the other where it is tightened from inside the enclosure.
Certification	IECEx, ATEX
Operating temperature	-20° C to +125° C
Ingress protection	IP66, IP67 IP68
Material	Brass (nickel plated) or stainless steel
A2, CW, CX / CZ, E1W, E1X/Z, POSI FLEX.	Earth tags, locknut, serrated washer, shroud.
IPLUS CORROSION GUARD,	Earth tags, locknut, serrated washer.
POSI FLEX	Posi Flex spanner

Application/Limitation
Manufacturer's application and assembly instructions to be followed.

Type Approval documentation

Tests carried out
Type tests according to IEC 60529, BS 6121 and IEC 62444

Marking of product
CCG cable termination (PTY) LTD – Type designation – IP rating

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

The main elements of the periodical assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Production Sample Tests (PST) and Routines (RT) checked (if not available tests according to PST and RT to 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 to be performed at least every second year.

END OF CERTIFICATE