

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Cable Gland

with type designation(s)

EXCGM, EXCGA, EXCGMD, EXHCG, EXHCG..D, EXHMCG, EXHMCG..D, EXH-.., EX-..

Issued to

**Kopex-Ex, Cable Management Products Ltd, ABB UK Ltd
Birmingham, United Kingdom**

is found to comply with

Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

Application :

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

This Certificate is valid until **2021-01-27**.

Issued at **Høvik** on **2016-01-28**

DNV GL local station: **Manchester**

Approval Engineer: **Marta Alonso Pontes**

for **DNV GL**

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**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.

Product description

Polyamide cable glands :

Type	EXCGM..., EXCGA..., EXCGMD...
Design specification/ Compliance code	IEC 60079-0:2011, IEC 60079-31:2008, IEC 60079-7:2006, IEC 62444 :2010
Classification Hazardous area	Ex e IIC Gb/ Ex tb IIIC Db IP66/68
Certification	IECEX IMQ 13.0005X
Continuous operating temperature range	-40°C to + 80°C
Ingress protection	IP66/IP68
Gland material	Non metallic (polyamide)
Seal material	Chloroprene rubber
Cable type	Non armoured
Gland sizes	Metric thread size: 20,25,32,40,50,63 NPT thread size : 1/2",3/4",1" PG thread size: 13.5, 16, 21, 29, 36, 42, 48
Accessories	Tap BPM-X; BPT-X

Type	EXHCG..., EXHCG...D, EXHMCG..., EXHMCG...D
Design specification/ Compliance code	IEC 60079-0:2011, IEC 60079-31:2008, IEC 60079-7:2006, IEC 62444 :2010
Classification Hazardous area	Ex e IIC Gb/ Ex tb IIIC Db IP66/68
Certification	IMQ 13 ATEX 010X, IECEX IMQ 13.0003X
Continuous operating temperature range	-30°C to + 70°C (NBR sealing) -40°C to + 70°C (Chloroprene sealing) -60°C to + 70°C (Silicone sealing)
Ingress protection	IP66/IP68
Gland material	Non metallic (polyamide)
Seal material	Chloroprene rubber
Cable type	Non armoured
Gland sizes	Metric thread size: 12, 16, 20,25,32,40,50,63 NPT thread size : 3/8",1/2",3/4",1" PG thread size: 7, 9, 11, 13.5, 16, 21, 29, 36, 42, 48
Accessories	Tap BPM-X; BPT-X

Plugs:

Type	EXH-...
Design specification/ Compliance code	IEC 60079-0:2011, IEC 60079-31:2008, IEC 60079-7:2006, IEC 62444 :2010
Classification Hazardous area	Ex e IIC Gb/ Ex tb IIIC Db IP66/68
Certification	IMQ 13 ATEX 010X, IECEX IMQ 13.0003X
Continuous operating temperature range	-60°C to + 70°C
Ingress protection	IP66/IP68
Gland material	Non metallic (polyamide)
Seal material	Chloroprene rubber
Cable type	Non armoured
Gland sizes	Metric thread size: 12, 16, 20,25,32,40,50,63 NPT thread size : 1/4", 3/8", 1/2",3/4",1", 1 1/4", 1 1/2", 2" PG thread size: 7, 9, 11, 13,5, 16, 21, 29, 36, 42, 48 PF thread size: 1/4", 3/8", 1/2",3/4",1", 1 1/4", 1 1/2", 2"

Job Id: **262.1-021008-1**
Certificate No: **TAE00000Y4**

Type	EX-...
Design specification/ Compliance code	IEC 60079-0:2011, IEC 60079-31:2008, IEC 60079-7:2006, IEC 62444 :2010
Classification Hazardous area	Ex e IIC Gb/ Ex tb IIIC Db IP66/68
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Application/Limitation

Hazardous areas cable glands & cable gland's accessories. Manufacturer's application and assembly instructions shall be followed.

The information related to Ex certification from recognized test institution is given as information only. Applications where Ex certified equipment is required will in general be subject to approval case by case based on documentation as required in DNV rules.

Type Approval documentation

Documentation linked to App. Letter with Ref. MCANO381/PONT/262.1-018821-J-16 dated 06.02.2015
Ex certificates listed in the tables

Tests carried out

Type tests in accordance with IEC/EN60079-0, IEC/EN60079-7, IEC/EN60079-31 & IEC/EN 62444

Marking of product

Kopex – Ex- type designation – Ex rating

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 Routines (RT) checked (if not available tests according to 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.

Assessment to be performed at least every second year.

END OF CERTIFICATE