DNV·GL

TYPE APPROVAL CERTIFICATE

Certificate No: E-14045 File No: 828.90 Job Id: 262.1-018821-1

This is to certify: That the Cable Gland

with type designation(s) BM-X, BN-X, BP-X, BPF-X, BMDC-X, HIBM-X, HIBM(DS), MHIBM-X, MHIMX(DS), HITP-X (plug), BM-X(axb), TP-X (plug)

Issued to

Bimed Teknik Aletler San. Tic. A.S. ISTANBUL, Turkey

is found to comply with Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

Application :

Hazardous areas cable glands & cable gland's accessories. Manufacturer's installation description shall be followed.

This Certificate is valid until **2019-06-30**. Issued at **Høvik** on **2015-03-10**

DNV GL local station: Istanbul

Approval Engineer: Marta Alonso Pontes

for **DNV GL**

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.

Certificate No:	E-14045
File No:	828.90
Job Id:	262.1-018821-1

Product description Polyamide cable glands :

Туре	BM-X,BN-X,BP-X,BPF-X, BMDC-X
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	-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"
Accessories	Tap BPM-X; BPT-X

Туре	HIBM-X, HIBM (DS), MHIBM-X, MHIBM(DS)
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: 20,25,32,40,50,63 NPT thread size : 1/2",3/4",1"
Accessories	Tap BPM-X; BPT-X

Polyamide cable glands for non circular:

Туре	BM-X (axb)
Design specification/ Compliance	IEC 60079-0:2011, IEC 60079-31:2008, IEC 60079-7:2006,
code	IEC 62444 :2010
Classification Hazardous area	Ex e IIC Gb/ Ex tb IIIC Db IP66/68
Certification	IMQ 13 ATEX 011X, IECEx IMQ 13.0004X
Continuous operating temperature	-40°C to + 80°C (M20 size and chloroprene sealing ring)
range	-60°C to + 80°C (M25 size with silicone sealing ring)
Ingress protection	IP66/IP68
Gland material	Non metallic (polyamide)
Seal material	Chloroprene or silicone
Cable type	Non armoured
Gland sizes	Metric thread size: 20,25,32
	NPT thread size : 1/2",3/4",1"

Certificate No:	E-14045
File No:	828.90
Job Id:	262.1-018821-1

Plugs:

Туре	НІТР-Х
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: 20,25,32,40,50,63 NPT thread size : 1/2",3/4",1"

Туре	ТР-Х
Design specification/ Compliance	IEC 60079-0:2011, IEC 60079-31:2008, IEC 60079-7:2006,
code	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	-40°C to + 80°C
range	
Ingress protection	IP66/IP68
Gland material	Non metallic (polyamide)
Seal material	Chloroprene rubber
Cable type	Non armoured
Gland sizes	Metric thread size: 12,20,25,32,40,50,63

Application/Limitation

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

Tests carried out

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

Marking of product

BMD – 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.

Certificate No:	E-14045
File No:	828.90
Job Id:	262.1-018821-1

The main elements of the periodical 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. •

Periodical assessment to be performed at least every second year.

END OF CERTIFICATE