

# TYPE APPROVAL CERTIFICATE

## This is to certify:

that the **Cable Gland**

with type designation(s)

**VOL, VOLC, VOLF, VOLM, VOLS. VOLSC, VOLSF, VOLSM,, VOLE, VOLEC, VOLEF, VOLEM, CRX, CRXC, CRCF, CRXM**

issued to

**BIMED TEKNIK ALETLER SAN. TIC. A.S.**  
**ISTANBUL, Türkiye**

is found to comply with

**DNV rules for classification – Ships, offshore units, and high speed and light craft**

## Application:

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Type	Material	Suitable for open deck	Suitable for Hazardous areas
<b>VOL, VOLC, VOLF, VOLM</b>	<b>Metalic</b>	<b>Yes</b>	<b>Yes</b>
<b>VOLS. VOLSC, VOLSF, VOLSM,</b>	<b>Metalic</b>	<b>Yes</b>	<b>Yes</b>
<b>VOLE, VOLEC, VOLEF, VOLEM</b>	<b>Metalic</b>	<b>Yes</b>	<b>Yes</b>
<b>CRX, CRXC, CRCF, CRXM</b>	<b>Metalic</b>	<b>Yes</b>	<b>Yes</b>

Issued at **Høvik** on **2023-11-20**

for **DNV**

This Certificate is valid until **2028-11-19**.

DNV local unit: **Istanbul**

Approval Engineer: **Nicolay Horn**

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.



### Name and place of manufacturer

BIMED TEKNİK ALETLER SAN. TIC. A.S.  
 Istanbul, Turkey

### Product description

Type	VOL, VOLC, VOLF, VOLM
Design specification/ Compliance code	IEC 60079-0:2017, IEC 60079-1:2014-06, IEC 60079-31:2013, IEC60079-7 :2017
Classification Hazardous area	Ex db I Mb and Ex eb I Mb and/or Ex db IIC Gb and Ex eb IIC Gb and Ex tb IIIC Db
Certification	IECEX CES 22.0009X; CESI 21 ATEX 031X
Continuous operating temperature range	-60°C to + 130°C
Ingress protection	IP66/IP68
Gland material	Brass, Options: Stainless steel, Galvanized carbon steel or Nickel-plated Bras
Seal material	Chloroprene rubber or silicon rubber
Cable type	Circular cable
Gland sizes	Metric thread size:12,16,20,25,32,40,50,63,75,80,90,100,110,115,130 NPT thread size :1/4",3/8",1/2",3/4",1",1¼",1½",2", 2½",3", 3 ½",4",5"

Type	VOLS. VOLSC, VOLSF, VOLSM
Design specification/ Compliance code	IEC 60079-0:2017, IEC 60079-1:2014-06, IEC 60079-31:2013, IEC60079-7 :2017
Classification Hazardous area	Ex db I Mb and Ex eb I Mb and/or Ex db IIC Gb and Ex eb IIC Gb and Ex tb IIIC Db
Certification	IECEX CES 22.0009X; CESI 21 ATEX 031X
Continuous operating temperature range	-60°C to + 130°C
Ingress protection	IP66/IP68
Gland material	Brass, Options: Stainless steel, Galvanized carbon steel or Nickel-plated Bras
Seal material	Chloroprene rubber or silicon rubber
Cable type	Circular cable
Gland sizes	Metric thread size:12,16,20,25,32,40,50,63,75,80,90,100,110,115,130 NPT thread size :1/4",3/8",1/2",3/4",1",1¼",1½",2", 2½",3", 3 ½",4",5"

Type	VOLE, VOLEC, VOLEF, VOLEM
Design specification/ Compliance code	IEC 60079-0:2017, IEC 60079-1:2014-06, IEC 60079-31:2013, IEC60079-7 :2017
Classification Hazardous area	Ex eb IIC Gb and Ex tb IIIC Db
Certification	IECEX CES 22.0009X; CESI 21 ATEX 031X
Continuous operating temperature range	-60°C to + 130°C
Ingress protection	IP66
Gland material	Brass, Options: Stainless steel, Galvanized carbon steel or Nickel-plated Bras
Seal material	Chloroprene rubber or silicon rubber
Cable type	Circular cable
Gland sizes	Metric thread size:12,16,20,25,32,40,50,63,75,80,90,100,110,115,130 NPT thread size :1/4",3/8",1/2",3/4",1",1¼",1½",2", 2½",3", 3 ½",4",5"

Type	CRX, CRXC, CRCF, CRXM
Design specification/ Compliance code	IEC 60079-0:2017, IEC 60079-1:2014-06, IEC 60079-31:2013, IEC60079-7 :2017
Classification Hazardous area	Ex eb IIC Gb and Ex tb IIIC Db
Certification	IECEX CES 22.0009X; CESI 21 ATEX 031X
Continuous operating temperature range	-60°C to + 130°C
Ingress protection	IP66/68
Gland material	Brass, Options: Stainless steel, Galvanized carbon steel or Nickel-plated Brass
Seal material	Chloroprene rubber or silicon rubber
Cable type	Circular cable
Gland sizes	Metric thread size:12,16,20,25,32,40,50,63,75,80,90,100,110,115,130 NPT thread size :1/4",3/8",1/2",3/4",1",1¼",1½",2", 2½",3", 3 ½",4",5"

### 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

Technical info :

Bimed Technival note «Volans Ex-db cable gland series» document no. A4-TN-VOL1 rev 00 dated 2021-10-11.

Test reports:

IECEX Test Reports Nos. IT/CEX/ExTR22.0013/02 dated 2022-04-18,

IECEX Certificate of compliance, certificate no. IECEX CES 22.0009X dated, 2022-04-14,

CESI EU-TYPE EXAMINATION CERTIFICATE, certificate no. CESI 21 ATEX 031X, dated 2022-04-11

### Tests carried out

Type tests in accordance with IEC/EN60079-0, IEC/EN60079-1, IEC/EN60079-7, IEC/EN60079-31

### 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.

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 2 and 3.5 year and at renewal.

END OF CERTIFICATE