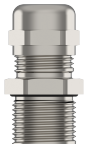
SAFETY, MAINTENANCE AND MOUNTING INSTRUCTIONS

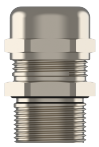
IMQ 13 ATEX 018X / IECEx IMQ

13.0006X/ CML 21 UKEX1474X

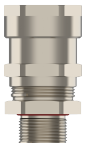
GLAND TYPES FOR CIRCULAR CABLES



OCTANS-EBU



VELA-EBS



OCTANS DOUBLE COMPRESSION-EBUDC

GLAND TYPES FOR FLAT CABLES

OCTANS-EBU(axb)*

VELA-EBS(axb)*

***Only for Ex eb / Ex tb execution.**

bimed
TEKNİK ALETLER SANAYİ VE TİCARET A.Ş.

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1 MARKINGS & APPLICABLE STANDARDS

MARKINGS

BMD EBU.. BMD EBS..	CE 0722 Ex	II2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db IP66/68 IMQ 13 ATEX 018X /IECEx IMQ 13.0006X
BMD EBU..(axb) BMD EBS..(axb)	CE 0722 Ex	II2GD Ex eb IIC Gb Ex tb IIIC Db IP66/68 IMQ 13 ATEX 018X /IECEx IMQ 13.0006X
BMD EBUDC...	CE 0722 Ex	II 2GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db IP 66/68 Ta -60°C to +80°C IMQ 13 ATEX 018X IECEx IMQ 13.0006X

APPLICABLE STANDARDS

DIRECTIVE 2014/34/EU	SI 2016 No. 1107(amended by SI 2019 No.696)
EN IEC 60079-0:2018	IEC 60079-0:2017 Ed.7.0
EN 60079-1:2014	IEC 60079-1:2014 Ed.7.0
EN 60079-7:2015	IEC 60079-31:2022 Ed.3.0
EN IEC 60079-7:2015/A1:2018	IEC 60079-31:2013 Ed.2
EN 60079-31:2014	IEC 60079-7:2017 Ed.5.1
EN IEC 60079-0/A11:2024	IEC 60529:2013
EN IEC 60079-31:2024	
EN 60529:1991+A1:2000+A2:2013	

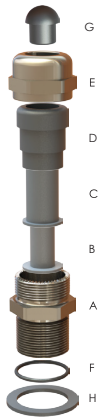
OPERATING TEMPERATURES

for Ex db, Ex eb, Ex tb execution,
supplied with Silicon sealing rings, O-rings or washers: Ta-60°C +80°C
supplied with Chloroprene sealing rings, O-rings or washers: Ta -40°C +80°C
for Ex eb, Ex tb execution,
supplied with Silicon sealing rings, O-rings or washers: Ta-60°C +140°C
supplied with Chloroprene sealing rings, O-rings or washers: Ta -40°C +80°C

2 OCTANS & VELA & OCTANS DOUBLE COMPRESSION PARTS

OCTANS

Nr.	Items
A	Body
B	Inner seal
C	Middle seal
D	Outer seal
E	Cap
F	O-ring
G	Dome Plug
H	Washer



VELA

Nr.	Items
A	Body
B	Inner seal
C	Middle seal
D	Outer seal
E	Cap
F	Pressurering
G	Spring
H	O-ring
I	Washer



SEALING COMBINATIONS

Triple Seal



Double Seal



Single Seal

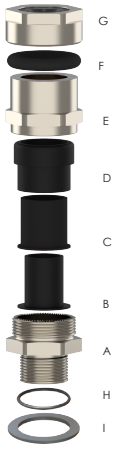


Flat Seal



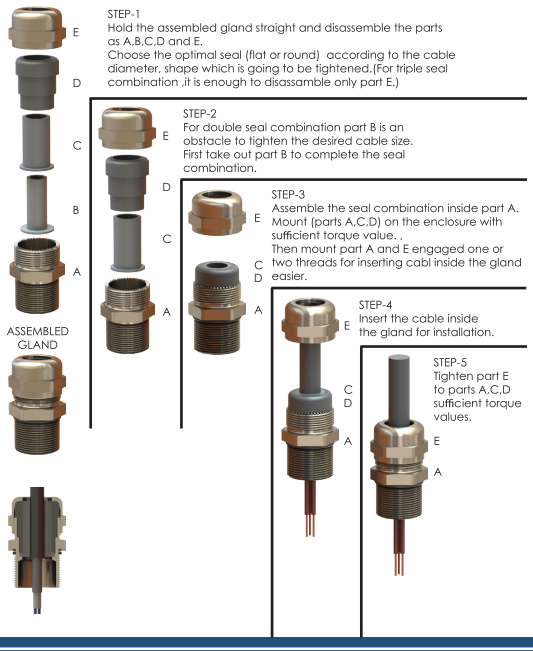
OCTANS **DOUBLE COMPRESSION**

Nr.	Items
A	Body
B	Inner seal
C	Inner seal
D	Outer seal
E	Upper body
F	O-ring seal
G	Cap
H	O-ring
I	Washer

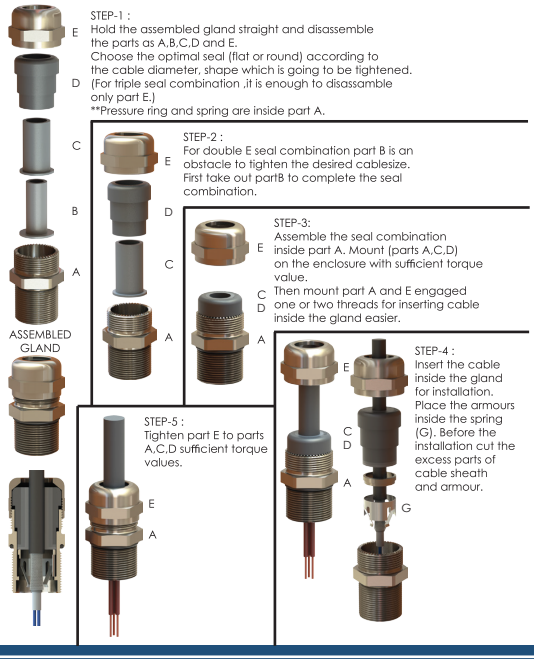


Rev.12

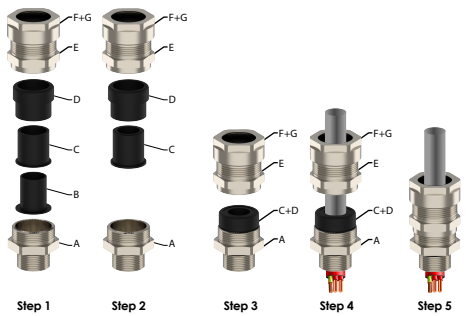
3 Mounting Instruction for OCTANS (EBU)



4 Mounting Instruction for VELA (EBS)



5 MOUNTING INSTRUCTION FOR OCTANS DOUBLE COMPRESSION (EBUDC)



Step_1
1- Hold the assembled gland straight and disassemble the parts as A, B, C, and D separately, while parts E+F+G should be removed as a single unit. There is no need to separate E, F, and G individually.
2- Choose the optimal seal combination according to the cable diameter which is going to be tightened. For a triple seal combination, it is sufficient to remove parts E+F+G as a single unit.
Step_2
3- For double seal combination, part B is an obstacle to tighten the desired cable size. First take out part B to complete the seal combination.
Step_3
4- Assemble the seal combination inside part A. Mount parts A, C, D, and E+F+G on the enclosure with sufficient torque value.
Step_4
5- Insert the cable inside the gland for installation.
Step_5
6- Tighten part E, F, G to parts A, C, D sufficient torque values.

6 SAFETY INSTRUCTION

-Qualified personnel in compliance with the nation laws shall carry out the maintanence in accordance with EN/IEC 60079-17 and installation in accordance with EN/IEC 60079-14.
-Changes to products are not allowed.
-Only Bimed spare parts must be used.
-Everyday and extraordinary maintenance operations must be carried out only by qualified personnel after approval from expert technicians.
-The maintenance operations must be carried out only after the engine has been cut off from mains or from the related electrical appliance.
-The following instructions must be strictly followed in order to get a correct installation.
-The national safety rules and accident prevention regulations, must be strictly respected.
-In case of ambient temperature is below -30oC, austenitic steels must be used according to EN10213-3 (Brass or Stainless steel AISI 316).
-The clamping of the cables must be realised outside of enclosure by appropriate toque values to guarantee the mechanical characteristics.
-The cable glands can be used with Ex i circuits.
-The cable glands are only suitable for fixed installations. Cables shall be effectively clamped to prevent pulling or twisting.
-The cable gland installation shall be done according to safety manufacturer instructions to maintain degree of protection.
-Cable gland installation shall be done taking into account the temperature range declared for cable glands in relation to protection mode execution, versus the ambient temperature proper of installation.
-When cable glands are installed with polyamide insert BDPX..., mechanical risk have to taken into account, depending on cable gland and insert tap. The upper operating temperature is limited to 70oC. When insert tap is removed in order to install to proper cable, the integrity of sealing rings have to be checked, in order to guarentee the correct tightness. If necessary, sealing rings have to be replaced with new ones. Precautions shall be taken in order to guarentee protection against risk of mechanical demage is provided, when insert taps are suitable for low mechanical risk (4J) only.
-Cable glands for non-circular cables shall be fitted with proper cables, suitable for sealing ring, according to manufacturer's instruction.
-The certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed in the first page of the manuel.
-The certificate does not cover hazards coming from environmental conditions different from those clearly and precisely indicated in clause 1 of EN 60079-0.
-Flat washer material should be same material with the inner sealing of the gland.Service temperature of the gland is related to the material of the sealing ring but can additionally be limited by the material of the flat washer/oring/accessories.

7 SAFETY INSTRUCTION (IP PROTECTION)

IP protection for Non Threaded enclosure applications

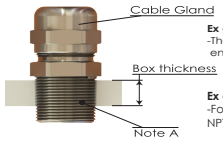
Metric Threads		G Threads (GAS UNI ISO 228/1)		PG Threads	
Thread	Hole Diameter (min. - max. mm)	Thread	Hole Diameter (min. - max. mm)	Thread	Hole Diameter (min. - max. mm)
M8x1,25	8,0-8,2	G 1/4"	13,2-13,4	PG 7	12,5-12,7
M12x1,5	12,0-12,2	G 3/8"	16,6-16,8	PG 9	15,2-15,4
M16x1,5	16,0-16,2	G 1/2"	21,0-21,2	PG 11	18,6-18,8
M20x1,5	20,0-20,2	G 3/4"	26,4-26,6	PG 13,5	20,4-20,6
M25x1,5	25,0-25,2	G 1"	33,3-33,6	PG 16	22,5-22,7
M32x1,5	32,0-32,3	G 1 1/4"	41,9-42,2	PG 21	28,3-28,5
M40x1,5	40,0-40,3	G 1 1/2"	47,8-48,1	PG 29	37,0-37,3
M50x1,5	50,0-50,3	G 2"	59,6-59,9	PG 36	47,0-47,3
M63x1,5	63,0-63,3	G 2 1/2"	75,2-75,5	PG 42	54,0-54,3
M75x1,5	75,0-75,3	G 3"	87,9-88,2	PG 48	59,3-59,6
M90x1,5	90,0-90,3	G 4"	113,1-113,4		
M100x1,5	100,0-100,3	G 5"	138,5-138,8		
M110x1,5	110,0-110,3				
M115x2,0	115,0-115,3				
M130x2,0	130,0-130,3				

Recomended Hole Diameters For Non Threaded enclosure applications in relation with the used thread types are shown above.
For non-threaded enclosures it is recomended to use flat washer,between the gland body and enclosure. The recomended wall thickness is 1,5 mm for non threaded enclosures. For non-threaded enclosures, in case of enclosure wall thickness is equal or lower than 1,5 mm, Bimed flat washer should be used. Oring can stay in the channel if it is necessary. During the assembly it is recommended to rotate the locknut. If the assembly needs to be done by rotating the gland, then oring should be preferred.

7 SAFETY INSTRUCTION (IP PROTECTION)

Ingress Protection: In order to guarantee the specified IP66/68 rating, sealant agent shall be applied on at least two full threads before fitting the gland to the box. In any case you must pay attention to guarantee the metallic continuity.
For threaded enclosures min. wall thickness must be equal to the thickness of the relevant

IP Protection for Tapered Threaded Joints



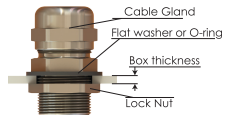
Ex d Execution:
-The wall has to be thick enough to engage at least 5 full threads.

Ex e & Ex tb Execution:
-For Ex eb applications please refer to NPT ANSI B1.20.1 standart.

NPT"	Minimum Engaged Thread Depth	
	mm	inch
1/4	7,055	0,277
3/8	7,055	0,277
1/2	9,070	0,357
3/4	9,070	0,357
1	11,045	0,434
1 1/4	11,045	0,434
1 1/2	11,045	0,434
2	11,045	0,434
2 1/2	15,875	0,625
3	15,875	0,625
4	15,875	0,625
5	15,875	0,625

7 SAFETY INSTRUCTION (IP PROTECTION)

IP Protection for Cylindrical Threaded Joints



Ex d Execution:
-Assemble the gland with o-ring or flat washer through the threaded hole.
-The wall has to be thick enough to engage at least 5 full threads.
-The minimum engaged thread depth must be at least 8 mm.

Ex e & Ex tb Execution:
-Assemble the gland with o-ring or flat washer through the threaded hole.
-You have to respect the minimum wall thickness of 1,5 mm.

8 VELA (EBS) SIZE TABLE

Outer Thread Size (Male)	Clamping Range			Torque			Part Number
	S1+S2+S3 min-max mm	S1+S2 min-max mm	S1 min-max mm	S1+S2+S3 Nm	S1+S2 Nm	S1 Nm	
M16x1,5	-	4-6	6-8	-	25	18	EBS01MS
	-	4-6	6-8	-	25	18	EBS01M
M20x1,5	4-6	6-9	9-12	20	18	15	EBS1M
M25x1,5	10-12	12-14,5	14,5-18	25	20	18	EBS2M
M32x1,5	14-17	17-20	20-24	35	23	20	EBS3M
M40x1,5	22-24	24-27	27-32	56	35	45	EBS4M
M50x1,5	26-28	28-31	31-35	56	54	50	EBS5M
M63x1,5	35-38	38-41	41-45	190	155	140	EBS6M
M75x1,5	46-51	51-56	56-62	185	175	150	EBS7M
M90x1,5	60-65	65-70	70-75	123	118	110	EBS8M
M100x1,5	75-78	78-81	81-85	130	125	120	EBS10M
M110x1,5	85-88	88-91	91-95	155	160	170	EBS11M

Note: These torque values are recommended according to the tests performed in Bimed laboratory.

9 DOME PLUG (BDPX) SIZE TABLE

Size	Plug Ø P mm	Dome Ø D mm	Part Number
15	5.8	15.0	BDPX-15-21
22	11.8	21.5	BDPX-22-20
28	16.8	27.5	BDPX-28-21
36	23.8	36.0	BDPX-36-21
40	27.8	40.0	BDPX-40-21
50	37.8	50.0	BDPX-50-21
63	47.8	63.0	BDPX-63-21

10 OCTANS (EBU) SIZE TABLE

Outer Thread Size (Male)	Clamping Range			Torque	Torque	Torque	Part Number
	S1+S2+S3 min-max mm	S1+S2 min-max mm	S1 min-max mm	S1+S2+S3 Nm	S1+S2 Nm	S1 Nm	
M12x1,5	4-6	6-8	-	20	18	-	EBU0SM
	-	3-6	6-8	-	25	18	EBU0M
M16x1,5	-	3-6	6-9	-	28	18	EBU01SM
	4-6	6-9	9-12	20	18	15	EBU01M
M20x1,5	-	3-6	6-9	-	25	18	EBU1SM
	4-6	6-9	9-12	20	18	15	EBU1M
	10-12	12-14,5	14,5-16	22	20	18	EBU12M
M25x1,5	4-6	6-9	9-12	20	18	16	EBU2SM
	10-12	12-14,5	14,5-18	25	20	18	EBU2M
	14-17	17-20	-	35	23	-	EBU23M
M32x1,5	10-12	12-14,5	14,5-18	25	20	18	EBU3SM
	14-17	17-20	20-24	35	23	20	EBU3M
	22-24	24-27	27-28	34	34	34	EBU34M
M40x1,5	14-17	17-20	20-24	35	23	20	EBU4SM
	22-24	24-27	27-32	56	35	45	EBU4M
	26-28	28-31	31-34	56	54	50	EBU45M
M50x1,5	22-24	24-27	27-32	56	50	45	EBU5SM
	26-28	28-31	31-35	56	54	50	EBU5M
	35-38	38-41	41-44	130	125	120	EBU56M
M63x1,5	26-28	28-31	31-35	57	55	52	EBU6SM
	35-38	38-41	41-45	190	125	140	EBU6M
	46-48	48-52	52-56	130	125	120	EBU67M
M75x1,5	35-38	38-41	41-45	190	155	140	EBU7SM
	46-51	51-56	56-62	130	125	120	EBU7M
	60-65	65-69	-	120	115	-	EBU78M
M90x1,5	46-51	51-56	56-62	185	175	150	EBU8SM
	60-65	65-70	70-75	123	115	107	EBU8M
	75-78	78-81	81-82	130	125	120	EBU810M
M100x1,5	60-65	65-70	70-75	123	118	110	EBU10SM
	75-78	78-81	81-85	130	125	120	EBU10M
M110x1,5	85-88	88-91	91-95	155	160	170	EBU11
M115x2,0	75-78	78-81	81-85	135	130	125	EBU115XSM
	85-88	88-91	91-95	180	175	170	EBU115SM
	95-98	98-101	101-105	450	450	450	EBU115M
M130x2,0	105-108	108-111	111-115	526	500	535	EBU13M

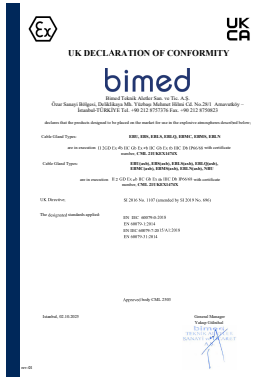
Note: These torque values are recommended according to the tests performed in Bimed laboratory.

11 OCTANS DOUBLE COMPRESSION (EBUDC) SIZE TABLE

Outer Thread Size (Male)	Clamping Range			Torque (Upper Body)	Torque (Upper Body)	Torque (Upper Body)	Torque (Cap)	Part Number
	S1+S2+S3 min-max mm	S1+S2 min-max mm	S1 min-max mm	S1+S2+S3 Nm	S1+S2 Nm	S1 Nm	Nm	
M16x1.5	-	5,5-6	6-9	-	25	18	15	EBUDC01SM
M16x1.5	-	-	9-12	-	-	16	20	EBUDC01M
M20x1.5	-	5,5-6	6-9	-	25	18	15	EBUDC1SM
M20x1.5	-	-	9-12	-	-	16	20	EBUDC1M
M20x1.5	-	12-14,5	14,5-16	-	22	18	20	EBUDC12M
M25x1.5	-	-	9-12	-	-	16	20	EBUDC2SM
M25x1.5	-	12-14,5	14,5-18	-	22	18	20	EBUDC2M
M25x1.5	16-17	17-20	-	28	23	-	20	EBUDC23M
M32x1.5	-	12-14,5	14,5-18	-	22	18	20	EBUDC3SM
M32x1.5	16-17	17-20	20-24	28	23	20	20	EBUDC3M
M32x1.5	22-24	24-27	27-28	56	50	35	25	EBUDC34M
M40x1.5	16-17	17-20	20-24	28	23	20	20	EBUDC4SM
M40x1.5	22-24	24-27	27-32	56	50	45	25	EBUDC4M
M40x1.5	-	29-31	31-34	-	55	52	50	EBUDC45M
M50x1.5	22-24	24-27	27-32	56	50	45	25	EBUDC5SM
M50x1.5	-	29-31	31-35	-	55	52	50	EBUDC5M
M50x1.5	35-38	38-41	-	190	155	-	55	EBUDC55M
M50x1.5	36-38	38-41	41-44	190	155	140	55	EBUDC56M
M63x1.5	-	29-31	31-35	-	55	52	50	EBUDC6SM
M63x2.0	-	29-31	31-35	-	55	52	50	EBUDC652M
M63x1.5	35-38	38-41	-	190	155	-	55	EBUDC665M
M63x1.5	36-38	38-41	41-45	190	155	140	55	EBUDC6M
M63x2.0	35-38	38-41	-	190	155	-	55	EBUDC6652M
M63x2.0	36-38	38-41	41-45	190	155	140	55	EBUDC62M
M63x1.5	42-48	48-52	-	130	145	-	100	EBUDC67M
M63x1.5	-	50-52	52-56	-	145	135	100	EBUDC675M
M63x2.0	42-48	48-52	-	130	145	-	100	EBUDC672M
M63x2.0	-	50-52	52-56	-	145	135	100	EBUDC6752M
M75x1.5	36-38	38-41	41-45	190	155	140	55	EBUDC75M
M75x2.0	36-38	38-41	41-45	190	155	140	55	EBUDC752M
M75x1.5	42-48	48-52	-	130	145	-	100	EBUDC77M
M75x2.0	42-48	48-52	-	130	145	-	100	EBUDC772M
M75x1.5	50-51	51-56	56-62	185	175	150	100	EBUDC72M
M75x2.0	50-51	51-56	56-62	185	175	150	100	EBUDC722M
M75x1.5	61-65	65-69	-	123	118	-	125	EBUDC78M
M75x2.0	61-65	65-69	-	123	118	-	125	EBUDC782M
M80x1.5	61-65	65-70	70-71	123	118	110	125	EBUDC8SM
M80x2.0	61 -65	65-70	70-71	123	118	110	125	EBUDC82M
M90x1.5	50-51	51-56	56-62	185	175	150	100	EBUDC85M
M90x2.0	50-51	51-56	56-62	185	175	150	100	EBUDC852M
M90x1.5	61 -65	65-70	70-75	123	118	110	125	EBUDC8M
M90x2.0	61-65	65-70	70-75	123	118	110	125	EBUDC82LM
M90x1.5	75-78	78-81	81-82	135	130	125	200	EBUDC810M
M90x2.0	75-78	78-81	81-82	135	130	125	200	EBUDC8102M
M100x1.5	61 -65	65-70	70-75	123	118	110	125	EBUDC10SM
M100x2.0	61-65	65-70	70-75	123	118	110	125	EBUDC1052M
M100x1.5	75-78	78-81	81-85	135	130	125	200	EBUDC10M
M100x2.0	75-78	78-81	81-85	135	130	125	200	EBUDC102M
M110x1.5	85-88	88-89	-	180	175	-	200	EBUDC11SM
M110x1.5	-	88-91	91-95	-	175	170	270	EBUDC11M
M110x2.0	85-88	88-89	-	180	175	-	200	EBUDC1152M
M110x2.0	-	88-91	91-95	-	175	170	270	EBUDC112M
M115x2.0	75-78	78-81	81-85	135	130	125	200	EBUDC1152SM
M115x2.0	85-88	88-89	-	180	175	-	200	EBUDC115SM
M115x2.0	-	88-91	91-95	-	175	170	270	EBUDC115XSM
M115x2.0	95-98	98-101	101-104	450	450	450	270	EBUDC115M

EBUDC from M16 to M115 and from 1/4" to 5"
Note: These torque values are recommended according to the tests performed in Bimed laboratory.

12 EU AND UK DECLARATION OF CONFORMITY


UK DECLARATION OF CONFORMITY

bimed

Bimed Teknik Aletler San. ve Tic. A.Ş.
Ömer Sunayi Bölgesi, Delikkkaya Mh. Yürbaşı Mehmet Hilmi Cd. No:28/1 Amasralıkty –
Istanbul-TURKEY Tel: +90 212 8757376 Fax: +90 212 8750823

declares that the products designed to be placed on the market for use in the explosive atmospheres described below;

Cable Gland Types: EBU, EBUDC, EBUS, EBUSC, EBDS, EBUN

are in conformity with the requirements of the following documents:

Cable Gland Types: EBU(sm), EBU(m/s), EBU(Sm/s), EBU(Qsm/s), EBUSC(sm), EBUS(sm/s), EBUN(sm/s), NBU

are in conformity with the requirements of the following documents:

UK Directive:

The designated standards applied:

Approved body CML 2388

Istanbul, 02.10.2023

General Manager
Yalçın Gökdeniz


EU DECLARATION OF CONFORMITY

bimed

Bimed Teknik Aletler San. ve Tic. A.Ş.
Ömer Sunayi Bölgesi, Delikkkaya Mh. Yürbaşı Mehmet Hilmi Cd. No:28/1 Amasralıkty –
Istanbul-TURKEY Tel: +90 212 8757376 Fax: +90 212 8750823

declares that the products designed to be placed on the market for use in the explosive atmospheres described below;

Cable Gland Types: EBU, EBUDC, EBUS, EBUSC, EBS, EBUA, EBUQ, EBUN, EBUS

are in conformity with the requirements of the following documents:

Cable Gland Types: EBU(sm), EBU(m/s), EBU(Sm/s), EBU(Qsm/s), EBUSC(sm), EBUS(sm/s), EBUN(sm/s), NBU

are in conformity with the requirements of the following documents:

EU Directive:

The harmonised standards applied:

Notified body CESI 0722

Istanbul, 06.03.2024

General Manager
Yalçın Gökdeniz