Issue Date: 30 January 2018
Expiry Date: 30 January 2021

IA Certificate Number: **MASC MS/18-0204X**
Our ref: 18-0204

IA – CERTIFICATE

(IN TERMS OF REGULATION 21.17.2 OF THE MINERALS ACT (INCORPORATION THE MINE HEALTH AND SAFETY ACT) AND REGULATION 9 (1) OF THE ELECTRICAL MACHINERY REGULATIONS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT)

Cable Glands series KBA..(Orion), KBU..(Crater), KBAT..(Taurus), KBALT..(Orion-LT) and MKBU..(M-Crater)

This document is based on and must be read in conjunction with certificate CESI 13 ATEX 033 X.
Further to your request, we have evaluated the supplied documentation.

The following is applicable:

Description	**Detail**
Requested By :	Powermite 92 Main Reef Rd, Technikon, Roodepoort
Equipment :	Cable Glands series
Manufacturer :	Bimed Teknik Aletler Sanayl Ve Ticaret A.S. S.S Bakir ve Pirinç Sanayl Sitesi Leylak Caddesl no:16 TR-34524 Beylikdüzü – Istanbul (Turkey)
Model(s) / Type(s) :	KBA..(Orion), KBU..(Crater), KBAT..(Taurus), KBALT..(Orion-LT) and MKBU..(M-Crater)
Rating :	Ex I M2 Ex db I Mb and Ex eb I Mb (KBA.. and KBA..LT.. Standard, MKBU.. only) IP66/68 Or Ex II 2 GD Ex db IIC Gb and Ex eb IIC Gb and Ex tb IIIC Db IP66/68
Certification body :	CESI S.p.A
Type Certificate No :	CESI 13 ATEX 033 X
Variations/Issue/Amendment :	3
Assessment Report No :	EX-B7005140
Quality Assurance report (QAR) / Notification (QAN) :	"It is a requirement under ATEX that all equipment for category 1 and 2 areas must have 3rd party quality assurance from a notified body. This is accepted to cover the equipment's quality requirements."

/. Standards …

Standards:	- EN 60079-0	(2014)	"General requirements"
	- EN 60079-1	(2014)	"Equipment protection by flameproof enclosures 'd'"
	- EN 60079-7	(2015)	"Equipment protection by increased safety 'e'"
	- EN 60079-31	(2014)	"Equipment dust ignition protection by enclosures 't'

COMPLIANCE:

The equipment as described below is hereby certified "Explosion Protected" See "Description" and is suitable for use in hazardous locations as stated below and as tested, assessed and inspected in accordance with the relevant requirements of SANS / IEC Standards:

The evaluation was conducted according to the requirements of:

- **SANS (IEC) 60079-0 : 2011 "Explosive atmospheres – Part 0: General requirements"**
- **SANS (IEC) 60079-1 : 2014 "Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures 'd'"**
- **SANS (IEC) 60079-7 : 2007 "Explosive atmospheres – Part 7: Equipment protection by increased safety 'e'"**
- **SANS (IEC) 60079-31 : 2014 "Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosures 't'"**

Location	Zone 1, 2	Gas Surface/Mining (Underground)
	Zone 21, 22	Dust
Hazard Frequency	---	Intermittent as could occur under normal operating conditions in hazardous area
Environment	Group I	Methane/Coal dust
	Group IIC	Propane to Hydrogen/Acetylene
	Group IIIC	Conductive dust
Service/Ambient Temperature	See description	(As applicable)

The use of apparatus in hazardous locations is subject to the following provisions as applicable, which shall be adhered to:

i. SANS 10086 requirements;
ii. Any conditions mentioned in the above document;
iii. Codes of Practice enforced in terms of Regulations 21.17.2 of Minerals Act, by Chief Inspector of Mines;
iv. Any restrictions and conditions enforced by Chief Inspectors of Mines, Principal Inspector (Group I equipment) of Chief Inspector of Factories (Group II equipment);
v. Any relevant requirements of the MHS Act or the OHS Act.

DESCRIPTION OF EQUIPMENT (According to CESI Certificate):

The cable glands series KBU.. (commercial gland family named CRATER), KBA.. (commercial gland family named ORION) and KBAT.. (commercial gland family named TAURUS) are suitable for inserting circular cables into Ex d enclosures having threaded entries and Ex e or Ex tb enclosures having either threaded or plane entries. Attachment of the glands to an enclosure is by means of the male threaded portion on the male body. An elastomeric inner sealing ring is used in each gland type to facilitate sealing between the cable and gland body and to clamp the cable to prevent pulling or twisting forces being transmitted to the conductor connections. Ingress protection of IP66/68 (50 m for 30 min.) is maintained when the glands are installed in accordance with the manufacturer's instructions.

/. The types …

The types KBU.. and MKBU.. glands are designed for non-armoured cables and are comprised of a male body, inner sealing ring, pressure ring and cap. When the cap is screwed onto the male body, the pressure ring comprises the lower sealing ring onto the outer sheath of the cable and realizes the clamping.

The types KBA.. KBA..LT.. and the type KBAT.. cable glands are suitable for steel wire armour cables. They are comprised of a male body, lower sealing ring, grounding cone, swivel braid retainer, middle body, upper sealing ring and cap. When the middle body is screwed onto the male body the cable wire armour is clamped between the swivel braid retainer and the grounding cone and the lower sealing ring is compressed onto the inner sheath of the cable. Sealing of the cable outer sheath is facilitated by the upper sealing ring which is compressed onto the outer sheath when the cap is screwed onto the middle body.

For universal types KBAU.. and KBAU..LT.. cable glands the armour reduction ring is used. With this additional ring, they can be used for shielded cables. When the armour reduction ring is taken out, then they can be used for armoured cables. While offshore types KBAO.. and KBAO..LT.. cable glands instead of the grounding cone, shielding cone is used and they are used for shielded cables.

The cable glands KBA.. Standard type (from M20x1.5 up to M90x1.5 sizes and with the exclusion of aluminium alloy). KBA..LT.. Standard type (from M20x1.5 up to M130x2 sizes) and MKBU.. type (M16x1.5 sizes excluded) only are for Group I (mines) executions. While all the cable glands types KBA.., KBU.., KBAT.. and KBA..TL are for Group IIC and Group IIIC. The cable glands should be also used for intrinsically safe circuits Ex I and should have a part painted in light blue.

The KBA.. cable glands series standards threads types are NPT ANSI/ASME B1.20.1 from ¼'' up to 3½'' and cylindrical ISO Metric 965/1 and ISO965/3 from M12x1.5 up to M110x1.5. The KBU.. and MKBU.. cable gland series standard threads types are NPT ANSI/ASME B1.20.1 from 3/8'' up to 3'' and cylindrical ISO metric 965/1 and ISO 965/3 from M16x1.5 up to M90x1.5.

For KBA..LT.. cable glands series standards threads types cylindrical ISO metric 965/1 and ISO965/3 from M20x1.5 up to M130 x 2 and tapered threads NPT ANSI/ASME B1.20.1 from ½'' up to 5'', while for KBAO..LT.. cable glands series standard threads types are cylindrical ISO metric 965/1 and ISO 965/3 from M20x1.5 up to M32x1.5 and tapered threads type NPT ANSI/ASME B1.20.1 from ½'' up to 1''. For KBAT.. cable glands series standard threads types are cylindrical ISO metric 965/1 and ISO 965/3 from M16x1.5 up to M63x1.5 and tapered threads type NPT ANSI/ASME B1.20.1 from 3/8'' up to 2''.

Alternative available cylindrical threads are GAS ISO 228/1, NPSM ANSI/ASME B1.20.1 and type PG DIN 40430. Thread type PG DIN 40430 can be used for ''Ex eb'' executions only.

To guarantee the IP 66/68 degree of protection the cable glands series KBU.., MKBU.., KBA..,KBAT.. and KBA..LT.. with cylindrical threads have a sealing edge machined for fitting an O-ring, alternatively it is available a flat washer, while for all other threads the IP 66/68 degree of protection is achieved with sealant put at least on two complete threads engaged of the threaded coupling.

The cable glands are generally made in Brass (CuZn39Pb3 EN 12164). The following alternative materials can be supplied on demand:

- Nickel-plated Brass type CuZn39Pb3 EN 12164.
- Stainless steel type AISI316; AISI304; AISI303.
- Galvanized carbon steel type FE36; FE37; UNI 10233/4.
- Aluminium alloy EN AW-6026 EN573-3 (KBA.. type and sizes from M20x1.5 up to M90x1.5 only).

/. Ambient …

Ambient temperature ranges:

Models with sealing rings made of Chloroprene:	-40ºC ÷ +100ºC for types KBA.., KBU,,; -40ºC ÷ +80ºC for type MKBU..; -40ºC ÷ +80ºC for type KBAT..; -40ºC ÷ +80ºC for type KBA..LT..;
Models with sealing rings made of Silicon:	-60ºC ÷ +130ºC for types KBA.., KBU..; -60ºC ÷ +80ºC for type MKBU..; -60ºC ÷ +100ºC for type KBAT; -60ºC ÷ +80ºC for type KBA..LT..
KBA.. models are made of Aluminium alloy:	up to +80ºC.
Types for Group I (mines) execution:	up to +80ºC.
Models supplied with Fiber flat washer:	-50ºC ÷ +80ºC for all types.
Models made of Galvanised carbon steel:	limited up to -20ºC.

The cable gland types, installation Group, manufacturer materials and ambient temperature ranges are reported in the table below:

Type	Exec.	Materials	Seals	Ambient Temperature
KBA..	Group I	Brass, Nickel plated brass, Stainless steel	Chloroprene	-40ºC ÷ +80ºC
			Silicon	-60ºC ÷ +80ºC
		Galvanised steel	All seals	-20ºC ÷ +80ºC
	Group IIC Group IIIC	Brass, Nickel plated brass, Stainless steel	Chloroprene	-40ºC ÷ +100ºC
			Silicon	-60ºC ÷ +130ºC
		Aluminium alloy	Chloroprene	-40ºC ÷ +80ºC
			Silicon	-60ºC ÷ +80ºC
		Galvanised steel	Chloroprene	-20ºC ÷ +100ºC
			Silicon	-20ºC ÷ +130ºC
KBU..	Group IIC Group IIIC	Brass, Nickel plated brass, Stainless steel	Chloroprene	-40ºC ÷ +80ºC
			Silicon	-60ºC ÷ +80ºC
		Galvanised steel	All seals	-20ºC ÷ +80ºC
MKBU..	Group I Group IIC Group IIIC	Brass, Nickel plated brass, Stainless steel	Chloroprene	-40ºC ÷ +80ºC
			Silicon	-60ºC ÷ +80ºC
		Galvanised steel	All seals	-20ºC ÷ +80ºC
KBA..LT..	Group I Group IIC Group IIIC	Brass, Nickel plated brass, Stainless steel	Chloroprene	-40ºC ÷ +80ºC
			Silicon	-60ºC ÷ +80ºC
		Galvanised steel	All seals	-20ºC ÷ +80ºC
KBAT..	Group IIC Group IIIC	Brass, Nickel plated brass, Stainless steel	Chloroprene	-40ºC ÷ +80ºC
			Silicon	-60ºC ÷ +100ºC
		Galvanised steel	Chloroprene	-20ºC ÷ +80ºC
			Silicon	-20ºC ÷ +100ºC
Restricted use to the ambient temperature of -50ºC ÷ +80ºC for all types with Fiber flat washers				

/. Identification …

Mining And Surface Certification (Pty) Ltd Reg No: 2015/021934/07
Directors: Roelof Viljoen & Francoius du Toit
Unit #5, Lelyta Park, 45 Jurg Avenue, Hennopspark Ext 87, Centurion, 0157 ◊ P.O. Box 14344, Clubview, 0014
Tel: 012 653 2959 ◊ Fax: 086 605 8568
e-mail: **info@masc-ex.co.za**

Identification of cable glands KBA.., KBAT.., KBU.. and MKBU.. types:

Code that identifies the type:
- KBA: cable gland for armoured or shielded cable
- KBAT: cable gland for armoured or shielded cable
- MKBU: cable gland for non-armoured cable
- KBU: cable gland for non-armoured cable

Code that identifies the cable type *(KBA.. type only):*
- Blank: standard *(for armoured cables only)*
- U: universal *(for armoured or shielded cables)*
- O: offshore *(for shielded cables only)*

Size *(see Table 1, 2, 3 and 4)*

Type of thread:
- N: NPT ANSI/ASME B1.20.1
- S: NSPM ANSI/ASME B1.20.1
- P: PG DIN 40430 *(assessed for Ex eb protection mode only)*
- M: ISO 261 pitch 1.5
- C: GAS ISO 228-1

Thread size *(see Table 1, 2, 3 and 4)*

Manufacturing material:
- A: Aluminium alloy *(KBA.. type, M25 up to M75 sizes only)*
- B: brass
- BN: nickel-plated brass
- X: stainless steel
- Z: galvanised carbon steel

Seals material:
- C: Chloroprene (Neoprene)
- S: Silicon rubber

Flat washer:
- Blank: none (tapered threads only)
- WC: with flat washer in Chloroprene (Neoprene)
- WS: with flat washer in Silicon rubber
- WF: with flat washer in Fiber

Types and thread sizes of cable glands are listed on the following Tables 1, 2, 3 and 4.

/. Table 1 …

Table 1:

KBA.. (Orion)					
Cable gland		**Thread size**		**Cable Dia. ranges (mm)**	
Type	**Size**	**NPT**	**ISO pitch 1.5**	**Inner sheath**	**Armour sheath**
KBA	0S..	1/4”	M 12	2-4	3-5.5
KBA	SL..	1/4”	M 12	3-7.5	6-12
KBA	01S..	3/8”	M 16	3-8.5	6-12
KBA	01..	3/8”	M 16	6-12	8.5-16
KBA	1S..	1/2"	M 20	3-8.5	6-12
KBA	1..	1/2"	M 20	6-12	8.5-16
KBA	1L..	1/2”	M 20	8.5-14.5	12-20
KBA	2XS..	3/4"	M 25	3-8.5	6-12
KBA	2S..	3/4"	M 25	6-12	8.5-16
KBA	2..	3/4"	M 25	8.5-16	12-21
KBA	2L..	3/4"	M 25	12-20	16-26
KBA	3XS..	1”	M 32	6-12	8.5-16
KBA	3S..	1“	M 32	12-20	16-26
KBA	3..	1”	M 32	15-26	20-33
KBA	4XS..	1 ¼”	M 40	12-20	16-26
KBA	4S..	1 ¼”	M 40	15-26	20-33
KBA	4..	1 ¼”	M 40	20-32	29-41
KBA	5XS..	1 ½”	M 50	15-26	20-33
KBA	5X..	1 ½”	M 50	20-32	29-41
KBA	5S..	1 ½”	M 50	22-35	33-48
KBA	5..	1 ½”	M 50	27-41	36-52
KBA	6XS..	2”	M 63	22-35	33-48
KBA	6X..	2”	M 63	27-41	36-52
KBA	6S..	2”	M 63	35-45	43-57
KBA	6..	2”	M 63	40-52	47-60
KBA	6L..	2”	M 63	45-56	54-70
KBA	7XS..	2 ½”	M 75	35-45	43-57
KBA	7S..	2 ½”	M 75	40-52	47-60
KBA	7..	2 ½”	M 75	45-60	54-70
KBA	8XS..	3”	M 90	40-52	47-60
KBA	8S..	3”	M 90	45-60	54-70
KBA	8..	3”	M 90	60-72	63-80
KBA	9S..	3 ½”	-	45-60	54-70
KBA	9..	3 ½”	-	60-72	63-80
KBA	10S..	-	M 110	45-60	54-70
KBA	10..	-	M 110	60-72	63-80

Note: Aluminium alloy available from M25x1.5 (1/2”NPT) up to M75x1.5 (2 ½”NPT) sizes only.

/. Table 2 …

Table 2:

KBAT.. (Taurus)					
Cable gland		**Thread size**		**Cable Dia. ranges (mm)**	
Type	**Size**	**NPT**	**ISO pitch 1.5**	**Inner sheath**	**Armour sheath**
KBAT	01L..	3/8”	M 16	6-11	8-15
KBAT	1..	1/2"	M 20	6-11	8-15
KBAT	1L..	1/2"	M 20	10-15.5	13.5-21
KBAT	2S..	3/4"	M 25	6-11	8-15
KBAT	2..	3/4"	M 25	10-15.5	13.5-21
KBAT	2L..	3/4"	M 25	13.5-20.5	18-27
KBAT	3..	1”	M 32	13.5-20.5	18-27
KBAT	3..	1”	M 32	18-27	23-33
KBAT	4..	1 ¼”	M 40	23-33	29-41
KBAT	5..	1 ½”	M 50	29-41	35-48
KBAT	6..	2”	M 63	35-48	42-56

Table 3:

KBU.. (Crater)				
Cable gland		**Thread size**		**Cable Dia. ranges (mm)**
Type	**Size**	**NPT**	**ISO pitch 1.5**	
KBU	01..	3/8”	M 16	3-8.5
KBU	01L..	3/8”	M 16	6-12
KBU	1..	1/2"	M 20	6-12
KBU	1L..	1/2"	M 20	12-14.5
KBU	2S..	3/4"	M 25	6-12
KBU	2..	3/4"	M 25	12-16
KBU	2L..	3/4"	M 25	12-20
KBU	3S..	1”	M 32	12-20
KBU	3..	1”	M 32	15-26
KBU	4S..	1 ¼”	M 40	15-26
KBU	4..	1 ¼”	M 40	20-32
KBU	5S..	1 ½”	M 50	22-35
KBU	5..	1 ½”	M 50	27-41
KBU	6S..	2”	M 63	35-45
KBU	6..	2”	M 63	40-52
KBU	7S..	2 ½”	M 75	40-52
KBU	7..	2 ½”	M 75	45-60
KBU	8S..	3”	M 90	45-60
KBU	8..	3”	M 90	60-72

/. Table 4 …

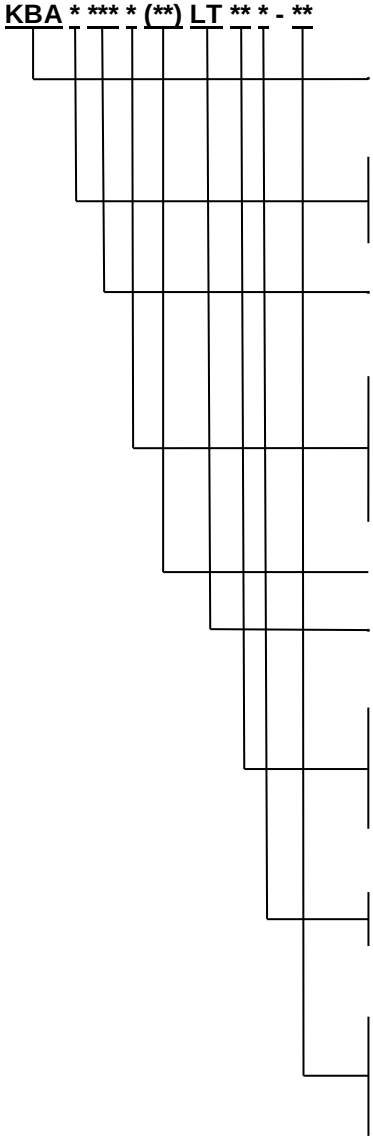
Table 4:

MKBU.. (M-Crater)				
Cable gland		**Thread size**		**Cable Dia.**
Type	**Size**	**NPT**	**ISO pitch 1.5**	**ranges (mm)**
MKBU	01M2..	3/8”	M 16	3-8.5
MKBU	01LM1..	3/8”	M 16	6-9
MKBU	01LM2..	3/8”	M 16	9-12
MKBU	1M1..	1/2"	M 20	6-9
MKBU	1M2..	1/2"	M 20	9-12
MKBU	1LM1..	1/2"	M 20	8.5-11.5
MKBU	1LM2..	1/2"	M 20	11.5-14.5
MKBU	2SM1..	3/4"	M 25	6-9
MKBU	2SM2..	3/4"	M 25	9-12
MKBU	2M1..	3/4"	M 25	8.5-12.5
MKBU	2M2..	3/4"	M 25	12.5-16
MKBU	2LM1..	3/4"	M 25	12-16
MKBU	2LM2..	3/4"	M 25	16-20
MKBU	3SM1..	1”	M 32	12-16
MKBU	3SM2..	1”	M 32	16-20
MKBU	3M1..	1”	M 32	15-20
MKBU	3M2..	1”	M 32	20-26
MKBU	4SM1..	1 ¼”	M 40	15-20
MKBU	4SM2..	1 ¼”	M 40	20-26
MKBU	4M1..	1 ¼”	M 40	20-26
MKBU	4M2..	1 ¼”	M 40	26-32
MKBU	5SM1..	1 ½”	M 50	22-28
MKBU	5SM2..	1 ½”	M 50	28-35
MKBU	5M1..	1 ½”	M 50	27-35
MKBU	5M2..	1 ½”	M 50	34-41
MKBU	6SM1..	2”	M 63	35-40
MKBU	6SM2..	2”	M 63	40-45
MKBU	6M1..	2”	M 63	40-46
MKBU	6M2..	2”	M 63	46-52
MKBU	7SM1..	2 ½”	M 75	40-46
MKBU	7SM2..	2 ½”	M 75	46-52
MKBU	7M1..	2 ½”	M 75	45-52
MKBU	7M2..	2 ½”	M 75	52-60
MKBU	8SM1..	3”	M 90	45-52
MKBU	8SM2..	3”	M 90	52-60
MKBU	8M1..	3”	M 90	60-66
MKBU	8M2..	3”	M 90	66-72

/. Identification …

Identification of cable glands KBA..LT.. types:

KBA * * * (**) LT ** * - ****



Code that identifies cable glands for armoured of shielded cable

Code that identifies the cable type:
- Blank: standard *(for armoured cables only)*
- U: universal *(for armoured or shielded cables)*
- O: offshore *for shielded cables only)*

Size *(see Table 5 and 6)*

Type of thread:
- N: NPT ANSI/ASME B1.20.1
- S: NSPM ANSI/ASME B1.20.1
- P: PG DIN 40430 *(assessed for Ex eb protection mode only)*
- M: ISO 261 pitch 1.5 (pitch 2.0 for sizes M90 up to M130)
- C: Gas ISO 228-1

Thread size *(see Table 5 and 6)*

Orion-LT (Lower temperature) cable gland series

Manufacturing material:
- B: brass
- BN: nickel-plated brass
- X: stainless steel
- Z: galvanised carbon steel

Seals material:
- C: Chloroprene (Neoprene)
- S: Silicon rubber

Flat washer:
- Blank: none (tapered threads only)
- WC: with flat washer in Chloroprene (Neoprene)
- WS: with flat washer in Silicon rubber
- WF: with flat washer in Fiber

/. Table 5 …

Table 5:

KBA..LT.. and KBAU..LT.. (Orion LT)						
Cable gland		**Thread size**			**Cable Dia. ranges (mm)**	
Type	**Size**	**NPT**	**ISO pitch 1.5**	**ISO pitch 2.0**	**Inner sheath**	**Armour sheath**
KBA..LT	1	1/2"	M 20	-	8.5-14.5	12-20
KBA..LT	2X	3/4"	M 25	-	8.5-14.5	12-20
KBA..LT	2	3/4"	M 25	-	8.5-16	12-21
KBA..LT	3X	1”	M 32	-	8.5-16	12-21
KBA..LT	9	3” ½	-	M 90	70-82	78-90
KBA..LT	10S	4”	-	M 100	80-92	88-100
KBA..LT	10	4”	-	M 110	90-101	98-110
KBA..LT	11S	5”	-	M 130	100-115	109-123

Table 6:

KBAO..LT (Orion LT)					
Cable gland		**Thread size**		**Cable Dia. ranges (mm)**	
Type	**Size**	**NPT**	**ISO pitch 1.5**	**Inner sheath**	**Armour sheath**
KBAO..LT	1	1/2"	M 20	8.5-14.5	12-20
KBAO..LT	2X	3/4"	M 25	8.5-14.5	12-20
KBAO..LT	2	3/4"	M 25	8.5-16	12-21
KBAO..LT	3X	1”	M 32	8.5-16	12-21

MARKING:

CESI marking remains applicable. The following MASC Certificate number (IA number) must be additionally applied to the equipment.

IA No: MASC MS/18-0204X

CONDITIONS OF MANUFACTURE:

- None

SPECIAL CONDITIONS OF USE (X):

- The coupling of the cable glands with the enclosures shall be made as indicated by the manufacturer in the documents annexed to the original ATEX certificate in order to respect the type of protection of the electrical apparatus on which the cable glands are mounted.
- The cable glands shall be mounted at the electrical apparatus in such a way that accidental rotation and loosening will be prevented.
- The **KBA.., KBA..LT..** and **MKBU..** cable glands types have to be protected from hydraulic fluids, oils and greases when applied for Group I (mines) applications.
- The **KBA..** cable glands types from M20x1.5 up to M90x1.5 sizes are admitted for Group I applications only.
- The **MKBU..** cable glands types M16x1.5 sizes are not admitted for Group I applications.

/. The KBA…

- The **KBA.. (Standard)** cable glands types form M20x1.5 up to M90x1.5 sizes and **KBA..LT.. (Standard)** cable glands types all sizes only are admitted for Group I applications.
- The **KBAT..** cable glands type are only suitable for fixed installations. The cables must be effectively clamped to prevent pulling and twisting.
- The cable glands shall be installed in such a wat that the temperature at the mounting point will remain within the service temperature ranges accordingly to the marking.
- The degree of protection IP 66/68 according to the EN 60529 standard will be guaranteed for the cable glands if the holes into which cable glands are mounted are suitably sealed. To this scope the correct positioning of the gaskets (for cylindrical threads) or the application of sealant on the threads (for tapered threads), shall be done as indicated in the manufacturer instruction.

CONDITIONS OF CERTIFICATION:

1. This IA Certificate covers all units sold from the date of this document to 30 January 2021.
2. As per ARP 0108 a three yearly review is required on this IA Certificate.
3. The apparatus must be additionally marked with the MASC marking details above.
4. This approval only covers the equipment as certified above and does not include any scheduled additions or variations / amendments / new issues to the certificate(s), made after the above date.
5. The equipment does not need to be re-tested when used on the conditions and with such restrictions as prescribed by CESI and in this approval.
6. The CESI certification must remain valid.
7. The extent of the requirements in the ARP 0108 (or regulations) and SANS 10108 on the certification of the equipment must remain unchanged.
8. The Ex quality assurance notification/report for the equipment must remain valid.

CONCLUSION:

From the above and the selective examination of the documentation, nothing contrary to the requirements of the applicable standards was found, provided that the equipment / component is used as described in the above document / certificate and according to the MASC conditions below. A MASC IA certificate is issued based on the work done by CESI.

The routine tests for production units according to the CESI Certificate must be complied with (if applicable).

Yours faithfully

G Schepers
TECHNICAL SPECIALIST

F du Toit
TECHNICAL SPECIALIST