	PHOLARS COPU	OLARS BEPLOLARS	BPIOLARS BPIOLARS	GPLOIARS	EPLOIA	s Optoines Optoines Op	PLOLARS	BTIONES				
MOH			LABS			7 Spanner I	Rd / PO E Olifants	Box 467 sfontein 1665				
STHOLASS	Rea	Explosion Prevention Prevention 1999/027771/0	ion Services (Pty) Ltd			Tel: +27 (11) 316 4601 Fax: +27 (11) 316 5670 E-mail: <u>admin-mgr@explolabs.co.za</u>						
MOLAS	GOVERNMENT APPROVED TEST LABORATORY IN TERMS OF ARP 0108: "REGULATORY REQUIREMENTS FOR EXPLOSION PROTECTED APPARATUS"											
ð												
STHOLAS						*Expiry date:	19 Ma 26 Ja Page	n 2024				
8	Issue: 2											
MOINT	Certificate I Equipment:	Number:	S-XPL/21.0008 X Cable Gland	,				NOLINE				
2	Model / Typ	be:	A** CMP Products L	A** CMP Products Limited								
<u>S</u>	дрисан.		Glasshouse Stre	Glasshouse Street								
P			St Peters	St Peters								
3			Newcastle Upon	Newcastle Upon Tyne								
Old			NE6 1BS	NE6 1BS								
P	United Kingdom											
	Manufactur	er:	CMP Products L	CMP Products Limited								
	Senai No.		numbers covered	numbers covered by a valid report or acceptable product certification mark.								
FIOLUS -	Supplied by CMP Products Limited											
	Identified by Inspection Authority number S-XPL/21.0008 X											
OL	And as desc	ribed in the Ex	plolabs file number	XPL/21804/	21.0008	is hereby <u>certified "Expl</u>	losion P	rotected				
.	(Refer to clause 1, for Ex Rating)", having been examined and inspected in accordance with the relevant requirements of South African Standards.											
	SANS 6007	0-0: 2019 Ed 6										
	SANS 60079-0: 2019 Ed 6 Explosive atmospheres Part 0: Equipment — General requirements											
9 91	SANS 60079	9-1: 2015 Ed 5	Explosive atmo	spheres Pa	art 1:	Equipment protection b	y flame	eproof 💈				
NO	IEC 60079-1: 2014 Ed 7 enclosures "d"											
	SANS 60079	9-7: 2023 Ed 4.	1 Explosive atmos	pheres Par	t 7: Equ	ipment protection by inc	reased s	safety 🧃				
8	IEC 60079-7: 2017 Ed 5.1 "e"											
	SANS 60079	SANS 60079-15: 2022 Ed 5 Explosive atmospheres Part 15: Equipment protection by type of protection										
R	IEC 60079-1	5: 2017 EC 5	II B Explosive atmos	II Evolopius atmospheres Part 21, Equipment dust isolities protection by								
Explosive atmospheres Part 31: Equipment dust ignition protection by												
ø	Risk of ignition provided:											
SMOMS	Protection afforded	Equipment Protection Level (EPL) Group	Performa protec	ance of tion		Conditions of operation	T cla Max S Tem	ss or burface p (°C)				
S		÷	Suitable for norma	al operation a	nd	Equipment remains						
	High	Gb Group II	occurring disturban where faults are no acco	ces or equipr prmally taken unt	nent into	Equipment remains functioning in zones 1 and 2	Not Ap	plicable				
MOIN	Enhanced	Gc Group II	Suitable for nor	mal operatior	1	Equipment remains functioning in zone 2	Not Ap	plicable				

DOCUMENT No: XPL0213 RELEASE DATE: 29/05/2018 ABTIOLARS ABTIOLARS ABTIOLARS ABTIOLARS ABTIOLARS ABTIOLARS ABTIOLARS ABTIOLARS ABTIOLARS ABTIOLARS

Two independent means of protection

or safe even when two faults occur

independently of each other

Da

Group III

Very high

Equipment remains

functioning in zones 20,

21 and 22

REV : 7

Not Applicable

BRIOLIN BRIOLIN

ANNEX TO CERTIFICATE NO S-XPL/21.0008 X

PAGE 2 OF 5

GENERAL The marking of the Cable Gland shall include the following: Ex db IIC Gb Ex nR IIC Gc Ex ta IIIC Da Ta= -60°C to +130°C (standard seal) / -20°C to +200°C (high temperature seal)

This certificate covers the following ranges: A2F Range A2E Range A2FRC Range A2F-FC Range A2F-HC Range A2F-FF Range A2E-FF Range

A2F Range

1.

LOLADS

EPICIALS

The A2F Range of Cable Glands are metallic and are intended to terminate circular braided or unarmoured cables into a threaded entry point within enclosures without compromising the explosion protection provided by the enclosures in accordance with relevant codes of practice. They consist of a male-threaded front entry component and a seal actuation nut. The front entry component, fitted with an elastomeric displacement sealing ring, and nylon 6 stepped skid washer, is intended to screw into an entry point of its associated enclosure. The seal actuation nut threads into the front entry component thereby effecting flameproof and environmental sealing onto the cable outer sheath.

A2E Range

The A2E Range of Cable Glands are identical to the A2F Range, except the entry thread engagement lengths are minimised.

A2FRC Range

he A2FRC Range of Cable Glands are intended to terminate circular braided or unarmoured cables into enclosures without compromising the explosion protection provided by the enclosures in accordance with relevant codes of practice. They consist of a male-threaded front entry component, a seal actuation nut and either an outer captivated or running coupling. The front entry component, fitted with an elastomeric displacement sealing ring, is intended to screw into an entry point of its associated enclosure. The seal actuation nut threads into the front entry component thereby effecting flameproof and environmental sealing onto the cable outer sheath. The outer running coupling is retained in the seal actuation nut using the carbon steel 'C' clip, or a similar arrangement to allow free running thread connection to conduit.

A2F-FC Range

The A2F-FC Range of Cable Glands are intended to terminate circular braided or unarmoured cables into enclosures without compromising the explosion protection provided by the enclosures in accordance with relevant codes of practice. They also provide an anchor for a flexible metallic conduit which can protect the cable from damage. They consist of a male-threaded front entry component, a seal actuation nut and a conduit anchor element that screws into the inside of the conduit. The front entry component, fitted with an elastomeric displacement sealing ring, is intended to screw into an entry point of its associated enclosure. The seal actuation nut threads into the front entry component thereby effecting flameproof and environmental sealing onto the cable outer sheath. The conduit anchor is secured between the seal actuation nut and seal to form a skid washer

ANNEX TO CERTIFICATE NO S-XPL/21.0008 X

A2F-HC Range

The A2F-HC Range of Cable Glands are intended to terminate circular braided or unarmoured cables into enclosures without compromising the explosion protection provided by the enclosures in accordance with the relevant codes of practice. They also provide an anchor for a flexible hose which can protect the cable from damage. They consist of a male-threaded front entry component, a seal actuation nut with a hose anchor to which a hose can be attached using a jubilee clip or similar. The front entry component, fitted with an elastomeric displacement sealing ring and skid washer, is intended to screw into an entry point of its associated enclosure. The seal actuation nut threads into the front entry component thereby effecting flameproof and environmental sealing onto the cable outer sheath.

PAGE 3 OF 5

A2F-FF Range

The A2F-FF Range of Cable Glands are intended to terminate flat braided or unarmoured cables into a threaded entry point within enclosures without compromising the explosion protection provided by the enclosures in accordance with relevant codes of practice. They consist of a male-threaded front entry component and a seal actuation nut. The front entry component fitted with an elastomeric displacement sealing ling, and nylon 6 stepped skid washer, is intended to screw into an entry point of its associated enclosure. The seal actuation nut threads into the front entry component thereby effecting flameproof and environmental sealing onto the cable outer sheath.

A2E-FF Range

The A2E-FF Range of Cable Glands are identical to the A2F-FF Range, except the entry thread engagement lengths are minimised.

A2FRC-FF

The A2FRC-FF Range of Cable Glands are identical to the A2FRC Range, except the seal is intended for use with flat cable.

Design options

The front entry component may be manufactured with a profiled groove to captivate an O-ring seal which locates on the mating face with the associated enclosure. This option having the gland type designation prefixed with the letter R, e.g. 25RA2F.

Materials of manufacture:

The Cable Glands Type A^{**} are manufactured in brass, aluminium, mild steel and stainless steel. All brass manufactured parts can be optionally nickel plated. All mild steel manufactured parts can be optionally zinc plated.

Examples of alternative entry component thread forms:

ET (Conduit) PG BSPP BSPT ISO NPT NPSM

Metric entry threads of all model series to be manufactured with a pitch between 0.7mm and 2.0mm, with 1.5mm as standard.

Alternative material of manufacture of the skid washer to be the same as the gland material.

DOCUMENT No: XPL0213 RELEASE DATE: 29/05/2018

PERIONIS PERIONIS PERIONIS PERIONIS PERIONIS PERIONIS PERIONIS PERIONIS PERIONIS PERIONIS

BYTOMIS BYTOMIS

ANNEX TO CERTIFICATE NO S-XPL/21.0008 X

Alternative 'C' clip plate finish (where applicable):

•Stainless steel •Phosphor bronze

•Beryllium copper

The option to fit a flat blanking disc between the seal and the skid washer to maintain a minimum IP66 ingress protection. The disc to be marked 'Ex eb only' to indicate that the gland is not suitable for use in flameproof applications when it is fitted.

PAGE 4 OF 5

Type designation:

The gland and seal sizes are determined by the entry thread and cable range take sizes

Gland Size	Entry Thread	Cable sheath $oldsymbol{arsigma}$			
		Min.	Max.		
16s*	M16 x1.5	2.0	7.4		
16	M16 x1.5	3.2	8.7		
20s/16s*	M20 x1.5	2.0	7.4		
20s/16	M20 x1.5	3.2	8.7		
20s	M20 x1.5	6.1	11.7		
20	M20 x1.5	6.5	14.0		
25	M25 x1.5	11.1	20.0		
32	M32 x1.5	17.0	26.3		
40	M40 x1.5	23.5	32.2		
50s	M50 x1.5	31.0	38.2		
50	M50 x1.5	35.6	44.1		
63s	M63 x1.5	41.5	50.0		
63	M63 x1.5	47.2	56.0		
75s	M75 x1.5	54.0	62.0		
75	M75 x1.5	61.1	68.0		
90	M90 x2.0	66.6	80.0		
100	M100 x 2.0	76.0	91.0		
115	M115 x 2.0	86.0	98.0		
130	M130 x 2.0	97.0	115.0		
Only available in standard seal material					

* Only available in standard seal material

A2E-FF,A2F-FFand A2FRC-FF in these sizes only

Gland	Entry	Cable sheath range ${\it extsf{ ilde Q}}$ (mm)			
size	thread	Min.	Max.		
20s	M20 x1.5	4.0 x 6.2	6.8 x 11.7		
20	M20 x1.5	5.7 x 8.0	8.7 x 13.5		

Notes:

•IECEx SIR 13.0023X is superseded by this certificate.

•The product covered by Issue 0 of this certificate remains identical to that previously covered by IECEx SIR 13.0023X.

•Where IECEx SIR 13.0023X is specified in other product certification, or other technical specifications, this certificate reference for the product shall be used in its place; updating of the other product certificate or technical specification is not required.

Based on the following documentation: IECEx CML 18.0179X. Issue 2.

INSTALLATION INSTRUCTIONS

It is the manufacturer's responsibility to supply installation instructions with each unit offered for sale as required by IEC/SANS 60079-0 Clause 30.

ABPLOIARS ABPLOIARS ABPLOIARS ABPLOIARS ABPLOIARS ABPLOIARS ABPLOIARS ABPLOIARS ABPLOIARS A

PIOLARS (EPIOLARS (EPIOLARS (EPIOLARS (EPIOLARS (EPIOLARS (EPIOLARS (EPIOLARS ANNEX TO CERTIFICATE NO S-XPL/21.0008 X PAGE 5 OF 5 3. SPECIAL CONDITIONS FOR SAFE USE (denoted by "X" after certificate number) The following conditions relate to safe installation and/or use of the equipment i. When the cable glands are supplied with an entry thread that is one size up from the nominal gland size, designated with the letter 'B' after the gland size, e.g.32B****, they shall not be used with any adaptor device. ii. The cable glands shall only be used where the temperature, at the point of entry, is in the following ranges: Outer sheath seal material Color I.D Temperature range EPDM 70 (5079B115) -60°C to +130°C Black FKM (9079B0662) -20°C to +200°C Red (muddybrown) iii. For flameproof applications, cable gland typesCA2F, CA2F-RC, CA2F-FC, CA2F-HC and CA2F-FF are to be installed in associated Ex db equipment having a minimum wall thickness as follows: 10.5mm minimum for cable gland having entry thread sizes M16x1.5 to M75x1.5 12.5mm minimum for cable gland having entry thread sizes M90x2.0 to M115x2.0 CONDITIONS OF CERTIFICATION All production units must be covered by a QAN (Quality Assurance Notification), Product Mark Scheme or batch evaluation. 5. MARKING The following (or similar) information have to be clearly and permanently marked on all units: : CMP Products Limited Supplier : CMP Products Limited Manufacturer Equipment : Cable Gland Model/Type : A** Serial No. · ___ Ex Rating : Ex db IIC Gb Ex eb IIC Gb Ex nR IIC Gc Ex ta IIIC Da Ta= -60°C to +130°C (standard seal) / -20°C to +200°C (high temperature seal) IA Certificate No : S-XPL/21.0008 X This certification indicates compliance with R10.1 of the Mines Health and Safety Act and/or EMR 9(2) of the Occupational Health and Safety Act, provided that the apparatus is used as relevant in accordance with SANS 10086 and IEC/SANS 61241-14 requirements as applicable; 🥰 i) Any conditions mentioned in the above report; Any relevant requirements and codes of practice enforced in terms of the Mine Health and Safety Act or Occupational Health and Safety Act; iii) and iv) Any restrictions and conditions enforced by the Chief Inspector of Mines or the Principal Inspector or the Chief Inspector: Occupational Health and Safety. 碀 v) A revision certificate replaces all previous version of the certificate. - Only covers equipment Imported between the "Issued" and "Expire" dates. vii) If and when your QAN (Quality Assurance Notification) Certificate for your equipment manufacturer expires during the valid period of the IA Certification (issued for your equipment) and a new certificate is not submitted the existing IA Certification will then be cancelled. It is thus the client's responsibility to always submit the updated and valid QAN certificate(s) to Explolabs (Pty) Ltd **Responsible Testing Officer: D** Maree **Testing Officer** EXPLOLABS EXPLOSION PREVENTION SERVICES This report/certificate shall not be reproduced except in full without the written approval of the company Explolabs (Pty) Ltd shall not be liable for 🛵 any losses or damages sustained on account of any failure or omission to properly perform our duties in terms of any contract undertaken by us. This disclaimer is immutable and automatically incorporated in any contract undertaken by us; notwithstanding anything to the contrary, save for the express written waiver of our managing director. By marking the equipment in accordance with the documentation/standard, the manufacturer attests on his own responsibility that the equipment has been constructed in accordance with the applicable requirements of the relevant standards and that the routine verifications and tests have been successfully completed and that the product complies with the documentation and standard(s). The contents of electronic reports/certificates cannot be guaranteed. Original certification documents will be kept on file at Explolabs (Pty) Ltd DOCUMENT No: XPL0213 RELEASE DATE PETPLOLARS PETPLOLARS PETPLOLARS **EXPLOIABS**

EXPLOIABS EXPLOIABS