

# IECEx Certificate of Conformity

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:

IECEx MSC 20.0002

Page 1 of 4

Certificate history:

Status:

Current

Issue No: 0

Date of Issue:

2020-05-26

Applicant:

CCG Cable Termination (Pty) Ltd

33-37 Forge Road Spartan Industrial Area Kempton Park 1619 South Africa

Equipment:

Non-Armoured Cable Gland Series A2F, A2F-R, A2FX, A2FX-R, A2F-H, A2F-H-R, A2FX-H and A2FX-H-R

Optional accessory:

Refer to the Annex

Type of Protection:

Flameproof, increased safety, dust protected and restricted breathing.

Marking:

Ex db IIC Gb / Ex eb IIC Gb / Ex tb IIIC Db / Ex db I Mb / Ex eb I Mb / Ex nR IIC Gc

-60°C <Ts<100°C (-60°C <Ts<160°C when fitted with silicone seals and PTFE sealing gasket)

IP66/67/68 (parallel entry threads)

IP65 (NPT entry threads)

See description for specific marking

Approved for issue on behalf of the IECEx

Certification Body:

**Geoff Slater** 

Position:

**MSTC Manager** 

Signature:

(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.

2. This certificate is not transferable and remains the property of the issuing body.

3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

MSTC Mine Safety Technology Centre 8 Hartley Drive Thornton NSW 2322 PO Box 343 Australia





### **IECEx Certificate** of Conformity

**IECEX MSC 20.0002** Page 2 of 4 Certificate No.:

Date of issue: 2020-05-26 Issue No: 0

Manufacturer: CCG Cable Termination (Pty) Ltd

33-37 Forge Road Spartan Industrial Area Kempton Park 1619 **South Africa** 

Additional manufacturing locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

#### STANDARDS:

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:7.0

IEC 60079-15:2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition:4

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

IEC 60079-7:2017 Edition:5.1

This Certificate does not indicate compliance with safety and performance requirements

other than those expressly included in the Standards listed above.

GB/CML/ExTR20.0121/00

#### **TEST & ASSESSMENT REPORTS:**

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

AU/ITA/ExTR12.0022/00 AU/ITA/ExTR12.0022/01 AU/ITA/ExTR15.0051/00 GB/CML/ExTR20.0022/00

AU/MSC/ExTR20.0004/00 ZA/ICS/ExTR19.0004/03

**Quality Assessment Report:** 

ZA/ICS/QAR14.0001/05



# IECEx Certificate of Conformity

Certificate No.: IECEx MSC 20.0002 Page 3 of 4

Date of issue: 2020-05-26 Issue No: 0

#### **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The Non-Armoured Cable Gland Series A2F, A2F-H, A2F-H, A2F-H-R, A2FX, A2FX-R, A2FX-H and A2FX-H-R come in different sizes, threads, seals etc. and are covered by different Ex protections and are suited to different environmental conditions and service temperatures as per the tables and explanatory note provided in this certificate Annex.

SPECIFIC CONDITIONS OF USE: NO



# IECEx Certificate of Conformity

Certificate No.: IECEx MSC 20.0002 Page 4 of 4

Date of issue: 2020-05-26 Issue No: 0

#### **Equipment (continued):**

#### Conditions of manufacture:

- Cable glands with intermediate metric entry thread sizes shall be constructed by enlarging the entry thread size of the standard size
  product immediately below the intermediate thread size. The minimum entry wall thickness, cable size range and constructional parts
  utilised (other than the entry thread component) shall not differ from that of the standard size used.
- The products must be marked with their temperature range, the upper and lower ranges limited by the most onerous of the relevant non-metallic parts and, where applicable, the flameproof testing.
- · When manufactured from aluminium, the cable glands shall not be marked for Group I applications.

Refer to the attached Annex for further information.

#### Annex:

Annex of IECEx MSC20.0002-00.pdf



### IECEx Certificate of Conformity Annex

Annex for Certificate No.: IECEx MSC 20.0002 Issue No:00

#### **Description of Equipment**

#### **Cable Gland Ranges**

Marking	Sizes	Metric Thread type (M)	NPT thread Type	Sealing Gasket ##	Ex db IIC Gb	Ex eb IIC Gb	Ex db I Mb	Ex eb I Mb	Ex tb IIIC Db	Ex nR IIC Gc	IP 66/68	IP 65 NPT
A2F	00-13 (metric & NPT)	16 to 130	1/2" to 4"	SG	YES	YES	YES	YES	YES	YES	YES	YES
A2F–R	00-13 (metric & NPT)	16 to 130	1/2" to 4"	SG	YES	YES	YES	YES	YES	YES	YES	YES
A2F-H	00-13 (metric & NPT)	16 to 130	1/2" to 4"	SG	YES	YES	YES	YES	YES	YES	YES	YES
A2F-H-R	00-13 (metric & NPT)	16 to 130	1/2" to 4"	SG	YES	YES	YES	YES	YES	YES	YES	YES
A2FX	00-13 (metric & NPT)	16 to 130	1/2" to 4"	SG	YES	YES	YES	YES	YES	YES	YES	YES
A2FX-R	00-13 (metric & NPT)	16 to 130	1/2" to 4"	SG	YES	YES	YES	YES	YES	YES	YES	YES
A2FX-H	00-13 (metric & NPT)	16 to 130	1/2" to 4"	SG	YES	YES	YES	YES	YES	YES	YES	YES
A2FX-H-R	00-13 (metric & NPT)	16 to 130	1/2" to 4"	SG	YES	YES	YES	YES	YES	YES	YES	YES

#### Notes:

- Intermediate metric thread sizes are permitted.
- ## Not applicable to NPT thread. Applicable to all parallel thread (eg Metric and BSP parallel). Optional for Ex d application requiring IP66/68 rating.
- The A2FX-H and A2FX-H-R cable glands were previously identified as the A2F-H and A2F-H-R respectively and have been renamed. The product codes have been kept unchanged for commercial reasons. This does not adversely affect these glands' Ex protection.

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CP17 Page 1 of 3



## IECEx Certificate of Conformity Annex

Annex for Certificate No.: IECEx MSC 20.0002 Issue No:00

#### **Materials**

Description	Materials
Metallic Parts	BRASS (Nickel-plated) CZ121, Stainless steel 316, BRONZE PB2, MILD STEEL (EN8), Aluminium 6063 (not applicable for Group I)
Skid Ring	BRASS (Nickel-plated) CZ121, STAINLESS STEEL 316, BRONZE PB2, MILD STEEL (EN8), Aluminium 6063
	HDPE D7255/HL (-100°C to 120°C) or PTFE CCG-PTFE-001(-270°C to 260°C) or Nylon (-65°C to 120°C)
Outer/Inner Seal	EPDM (64 Shore) (-60°C to 120°C) or Silicone CCG G/65-1R (-70°C to 180°C) or Silicone CCG G/65-1C (-70°C to 180°C)
Sealing gasket	Nylon 66 (-65°C to 120°C) or PTFE CCG-PTFE-001 (-270°C to 260°C) or HDPE D7255/HL (-100°C to 120°C)

#### **Gland Range Construction**

Constructional parts	Inner	Body	Outer Seal	Outer nut / Hose Tail	Gripper-Seal	Skid Ring	Lock Nut	Sealing Gasket ##
A2F	A2F	N/A	N/A	A2F	A2	A2	Optional	SG
A2F-R	A2FX-R	N/A	N/A	A2FX-R	A2	A2	Optional	SG
A2F-H	A2F	N/A	N/A	A2F-H	A2	A2	Optional	SG
A2F-H-R	A2F-R	N/A	N/A	A2F-H-R	A2	A2	Optional	SG
A2FX	A2F	A2FX	A2	A2F	A2	A2	Optional	SG
A2FX-R	A2FX-R	A2FX-R	A2	A2FX-R	A2	A2	Optional	SG
A2FX-H	A2F	A2FX	A2	A2F-H	A2	A2	Optional	SG
A2FX-H-R	A2F-R	A2FX-R	A2	A2FH-R	A2	A2	Optional	SG

##: Not applicable to NPT thread. Applicable to all parallel thread (eg Metric and BSP parallel). Optional for Ex d application requiring IP66/68 rating.

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CP17 Page 2 of 3



## IECEx Certificate of Conformity Annex

Annex for Certificate No.: IECEx MSC 20.0002 Issue No:00

#### **Drawing list pertaining to this Certificate:**

Manufacturer's Documents								
Drawing/Document Number:	Page/s:	Title:	Revision Level:	Date: (yyyy-mm-dd)				
		A2F		(yyyy-iiiii-dd)				
0541 – MARK AU	1		6					
0541 - ASSY		No. "X" A2F Assembly	3	2020/04/21				
0541 - I	1	No. "X" A2F Inner		2020/01/28				
0541 - O	1	No. "X" A2F Outer	3	2020/01/28				
A2FX								
0542 - ASSY	1	No. "X" A2FX Gland	6 3	2020/04/21				
0542 - O	1	No. "X" A2FX Outer	3	2020/01/28				
A2F-H								
0449 - ASSY	1	No. "X" A2F-H Gland		2020/04/26				
0549 - HT	1	No. "X" A2F-H Outer Hose Tail	2	2020/01/28				
0540 400)/	1 4	A2FX-H		0000/04/04				
0549 - ASSY	1	No. "X" A2FX-H Gland	5	2020/04/24				
0577 D		A2FX-R		0000/04/00				
0577 - B	1	No. "X" A2FX – R Body	3	2020/01/28				
0577 - I - R	1	No. "X" A2FX – R Inner	4	2020/01/28				
0577 – MARK AU	1	No. "X" A2FX - R Marking	1	2020/04/21				
0577 - O -R	1	No. "X" A2FX - R Outer	3	2020/01/28				
0577- R - ASSY	1	No. "X" A2FX - R Assy	6	2020/04/21				
A2F-R								
0590 - R - ASSY	1	No. "X" A2F - R Assy	2	2020/04/21				
	T	A2FH-R		T				
0497 – H – R ASSY	1	No. "X" A2F-H-R Gland		2020/04/26				
0596 – HT - R	1	No. "X" A2FH – R Outer Hose Tail		2012/08/22				
A2FX-H–R								
0596 – H – R ASSY	1	No. "X" A2FX-H – R Gland	1	2020/04/24				
Seals								
0537 - GS	1	No. "X" A2 Gripper Seal	5	2015/09/10				
0537 - SR	1	No. "X" A2 Skid Ring	5	2015/09/10				
8055 - SG	1	No. "X" CCG Sealing Gasket		2012/09/14				

Reference Documents						
Drawing/Document Number:	Page/s:	Title:	Revision Level:	Date: (yyyy-mm-dd)		
Instructions	2	A2F Installation, operation, maintenance instructions				

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CP17 Page 3 of 3