





# Mining And Surface Certification (Pty) Ltd

2015/021934/07

THIS CERTIFICATE IS ISSUED AS AN I.A. CERTIFICATE IN TERMS OF THE MINE HEALTH AND SAFETY ACT, ACT NO 29 OF 1996 (AND REGULATIONS), THE OCCUPATIONAL HEALTH AND SAFETY ACT (ACT 85 OF 1993) AND REGULATION 17 OF THE ELECTRICAL MACHINERY REGULATIONS

<b>IA CERTIFICATE</b>	MASC S/20-9022	<b>Issue</b>	1
<b>Issue Date</b>	01 June 2022	<b>Expiry Date</b>	21 September 2030
<b>Applicant</b>	CCG Cable Terminations (Pty) Ltd 33-37 Forge Road, Spartan Industrial Area, Kempton Park, 1619, South Africa		
<b>Manufacturer</b>	CCG Cable Terminations (Pty) Ltd 33-37 Forge Road, Spartan Industrial Area, Kempton Park, 1619, South Africa		
<b>Description</b>	Non-Armoured Cable Gland Series A2F, A2F-R, A2F-H, A2F-H-R, A2FX, A2FX-R, A2FX-H, A2FX-H-R, A2F-FHC, A2F-HTF.		
<b>Equipment</b>	Non-Armoured Cable Gland Series	<b>Type</b>	A2F, A2F-R, A2F-H, A2F-H-R, A2FX, A2FX-R, A2FX-H, A2FX-H-R, A2F-FHC, A2F-HTF
<b>MARKING:</b> <i>Marking to be added to equipment as per schedule on the right.</i>	<b>Applicant / Manufacturer Type</b> <b>Ex Marking</b> <b>IA Number</b> <b>Serial Number</b> <b>Rating</b>	CCG Cable Terminations (Pty) Ltd See schedule below Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da / Ex nR IIC Gc MASC S/20-9022 N/A As per description below	
<b>WARNING(S)</b>	As per conditions below		
<b>Compliance:</b>	<p>The equipment as described above and in report MASC 20-9022, ZA/ICS/ExTR22.0006/00 and IECEx CML 20.0011 has been allocated the rating <u>Explosion Protected as above</u> utilizing the SANS/IEC Standards:</p> <ul style="list-style-type: none"> <li>SANS (IEC) 60079-0: 2019 (2017) Electrical equipment for explosive gas atmospheres Part 0: General Equipment</li> <li>SANS (IEC) 60079-1: 2015 (2014) Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures “d”</li> <li>SANS (IEC) 60079-7: 2019 (2017) Explosive atmospheres – Part 7: Equipment protection by increased safety “e”</li> <li>IEC 60079-15: 2017 Explosive atmospheres – Part 15: Equipment protection by type of protection “n”</li> <li>SANS (IEC) 60079-31:2014 (2013) Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure “t”</li> <li>SANS/IEC 60529: 2013 “Degrees of protection provided by enclosures (IP Code)”</li> </ul> <p><i>Note: This certificate covers only the listed standards and does not imply compliance to any other standard, related or inferred. It is up to the manufacturer to ensure that the product complies to all relevant standards for the application.</i></p>		
<b>Special conditions of safe use X:</b>	<ul style="list-style-type: none"> <li>None</li> </ul>		
<b>Conditions of manufacture:</b>	<ul style="list-style-type: none"> <li>See “Annex A” below</li> </ul>		
 <b>Terine Orsmond</b> <b>PROJECT MANAGER</b>		 <b>Regardt Zeelie</b> <b>TECHNICAL SPECIALIST</b>	
<p><b>This certificate only covers the sample submitted and does not cover production units.</b></p> <p>According to the relevant requirements of the MHS Act and the OHS Act, production units of explosion protected equipment are required to comply with third party quality assurance (an approved mark scheme or batch testing by an accredited test laboratory).</p>			

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Apparatus in hazardous locations is subject to the following provisions as applicable, which shall be adhered to:

SANS 10086 requirements;

Any conditions mentioned in the above certificate;

Any relevant requirements of the MHS Act;

Any restrictions and conditions enforced by the chief inspector of mines, principal inspector (Group I equipment) or chief inspector of factories (Group II equipment).

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Mining And Surface Certification (Pty) Ltd  
Unit 5 Lelyta Park, 45 Jurg Avenue, Hennopspark, Ext 87  
Centurion 0157



**IA CERTIFICATE: MASC S/20-9022**  
**Equipment: A2F Range of Glands**  
**(Rev 2 – Expiry date 21 September 2030)**

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**ANNEX A**

<b>Description</b>	<p>Non-Armoured Cable Gland Series A2F, A2F-R, A2F-H, A2F-H-R comprising an entry item with thread sizes M16 to M130 (1/2" to 4" NPT), a seal, skid ring and a compression nut.</p> <p>Non-Armoured Cable Gland A2F-FHC has an additional swivel connector for attaching rigid or flexible conduits.</p> <p>Non-Armoured Cable Gland A2F-HTF comprising an entry item with thread sizes M20 to M25 (1/2" to 1" NPT), a seal suitable for use with heat trace cables, a skid ring and a compression nut</p> <p>Non-Armoured Cable Gland Series A2FX, A2FX-R, A2FX-H and A2FX-H-R comprising an entry item with thread sizes M16 to M130 (1/2" to 4" NPT), a body, two seals, skid rings and a compression nut.</p> <p><u>Notes</u></p> <ol style="list-style-type: none"> <li>1. Cable glands with parallel entry threads are IP66/68 when fitted with the supplied sealing gasket. NPT threads are at least IP65 as standard, but IP68 (2m) can be achieved if one of the following grease types is applied to the NPT thread before fitting:- Renolit Lubrene CA 700, Renolit LC-WP2, Renolit Lubrene LX 220 EP2, Renolit Moly LX 2 or Dow Corning 4 Electrical Compound.</li> <li>2. Intermediate metric thread sizes are permitted.</li> <li>3. The outer seal nut of any of the glands in this certificate (other than those with '-H' or '-FHC' in their name) can optionally have an additional female thread to allow the connection of a flexible conduit. '-FC' is added to the cable gland name to indicate this variant.</li> <li>4. RE-FLEx sealing cord can be used as an alternative to a standard sealing gasket to achieve IP66/68. It is intended as a retro-fit solution and must be installed according to the fitting instructions supplied with it.</li> </ol> <p><u>Materials of Manufacture</u></p> <ul style="list-style-type: none"> <li>• Brass (CZ121), Bronze (PB2), Stainless Steel (316), Aluminium (6063), Mild steel (EN8)</li> <li>• HDPE (D7255/HL), PTFE (CCG PTFE-001), Nylon (6)</li> <li>• EPDM (64 Shore), Silicone (CCG G/65-1C or CCG G/65-1R)</li> <li>• Temperature Limitations, at the point of entry</li> <li>• EPDM seals &amp; HDPE gaskets/skid rings: (-60°C and +95°C)</li> <li>• EPDM seals &amp; Nylon gaskets/skid rings: (-60°C and +100°C)</li> <li>• Silicone seals &amp; PTFE gaskets/skid rings: (-60°C and +160°C)</li> </ul> <p><u>Temperature Limitations, at the point of entry</u></p> <ul style="list-style-type: none"> <li>• EPDM seals &amp; HDPE gaskets/skid rings: (-60°C and +95°C)</li> <li>• EPDM seals &amp; Nylon gaskets/skid rings: (-60°C and +100°C)</li> <li>• Silicone seals &amp; PTFE gaskets/skid rings: (-60°C and +160°C)</li> </ul> <p><u>Components covered by Ex Certificates issued to older editions of Standards</u></p> <p>None</p>
<b>Details of change</b>	<p><u>Revision 1:</u> The A2F-HTF and A2F-HTF-FC glands are added to the range to accommodate flat cables. In addition, the A2F gland has an additional seal to accommodate a smaller cable as per the instructions of the glands.</p> <p><u>Revision 2:</u> Update to correspond to IECEx CML 20.0011 Issue 2.</p>
<b>Standard compliance</b>	See "certificate" above
<b>Warnings</b>	See "certificate" above
<b>Conditions of Certification</b>	<p>According to the relevant requirements of the MHS Act and the OHS Act, production units of explosion protected equipment are required to comply with third party quality assurance (an approved mark scheme or batch testing by an accredited test laboratory.) and be identifiable and traceable.</p>
<b>Special Conditions of safe use (X)</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<b>Conditions of manufacture</b>	The following conditions are required of the manufacturing process for compliance with the certification.

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**IA CERTIFICATE: MASC S/20-9022**  
**Equipment: A2F Range of Glands**  
**(Rev 2 – Expiry date 21 September 2030)**

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	<ul style="list-style-type: none"><li>i. Where the product incorporates certified parts or safety critical components, the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.</li><li>ii. 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, allowable number of cores, cable size range and constructional parts utilised (other than the entry thread component) shall not differ from that of the standard size used.</li><li>iii. When manufactured from aluminium, the cable glands shall not be marked for Group I applications.</li><li>iv. 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.</li></ul>
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MASC takes no responsibility for any non-conformances, exclusions or any results / assessments / inspections not in compliance with the standards. By marking the equipment in accordance with the documentation / standard, the manufacturer / applicant attests on his own responsibility that the equipment / installation has been designed and constructed in accordance with the applicable requirements of the relevant standards and documentation, that the routine verifications / routine tests have been correctly completed and the equipment / installation complies with the documentation and standard(s).

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