



# Mining And Surface Certification (Pty) Ltd

2015/021934/07



**Certificate Number:** MASC MS/16-1806U

**Issue:** 27 September 2016

**Expire:** 27 September 2026

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## IA – CERTIFICATE

(Review required by MASC as per ARP 0108)

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

Ex – Type Examination

Certificate number: MASC MS/16-1806U  
Equipment: 90° Fixed & Swivel Adaptors  
Serial No: (See “Conditions of Certification”)

Requested by: CCG Cable Terminations Pty Ltd  
Address: 33-37 Forge Road,  
Spartan Industrial Area,  
Kempton Park, 1619  
South Africa

Manufacturer: CCG Cable Terminations Pty Ltd  
Address: 33-37 Forge Road,  
Spartan Industrial Area,  
Kempton Park, 1619  
South Africa

### DESCRIPTION OF EQUIPMENT (According to CML Certificate):

The 90° Fixed & Swivel Adaptors are manufactured from brass with a male threaded portion at one end and a female at the other.

They are intended for use where space is limited and there may not be room to fit a gland and cable in the conventional manner. They are intended for fitting to a threaded or plain hole (Ex eb applications only) when they are secured using a locknut. The swivel adaptor allows repositioning to align the cable in the desired direction when the adapter is fully tightened.

The fixed adapters are available with metric, NPT, BSPP or BSPT male and female threads with the female threads the same size as, or any size smaller than, the male thread.

The swivel adaptors are available with metric or BSPP male threads and either metric, NPT, BSPP or BSPT female threads the same size as, or any size smaller than, the male thread

### MARKING:

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

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**90° Fixed & Swivel Adaptors**

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IA No: MASC MS/16-1806U

**COMPLIANCE:**

The equipment as described above and in MASC letter 16-1806 is hereby certified "Explosion Protected" Ex db IIC Gb, Ex eb IIC Gb, Ex db I Mb, Ex eb I Mb or Ex tb IIIC Db 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:**

- i) SANS (IEC) 60079-0 : 2012 "Explosive atmospheres – Part 0: Equipment — General requirements"
- ii) SANS (IEC) 60079-1 : 2015 "Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures 'd'"
- iii) SANS (IEC) 60079-31 : 2014 "Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosures 't'"
- iv) SANS (IEC) 60079-7 : 2015 "Explosive atmospheres – Part 7: Equipment protection by increased safety 'e'"

Location	Gb and Db Mb	Surface Mining
Hazard Frequency	---	Intermittent as could occur under normal operating conditions in hazardous area
Environment	Group I Group IIC Group IIIC	Methane and Coal dust Propane to Hydrogen / Acetylene Dust (Metallic & non-metallic)
Service Temperature		See "Schedule of limitations"

***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.

**CONDITIONS OF MANUFACTURE:**

- None

**SCHEDULE OF LIMITATIONS (U):**

- i. All Adaptors are rated IP65 for any sealing arrangement. Fit the supplied sealing washer if an IP rating of IP66/67/68 is required.
- ii. The service temperature range -20°C to +95°C shall not be exceeded when the HDPE sealing ring is fitted. The service temperature range -60°C to +160°C shall not be exceeded when the PTFE sealing ring is fitted.
- iii. The Adaptors shall not be used in conjunction with a blanking device. In addition, only one Adapter shall be installed in any one cable entry.

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**CONDITIONS OF CERTIFICATION:**

1. This Certificate covers all units sold from the date of this approval and covered by a valid QAR and/or South African Markscheme / Batch testing.
2. The apparatus must be additionally marked with the MASC marking details above.
3. 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.
4. The equipment does not need to be re-tested when used on the conditions and with such restrictions as prescribed by CML and in this approval.
5. The CML certification must remain valid.
6. The extent of the requirements in the ARP 0108 (or regulations) and SANS 10108 on the certification of the equipment must remain unchanged.
7. The Ex quality assurance notification/report for the equipment must remain valid.



**Roelof Viljoen**  
**TECHNICAL SPECIALIST**

**Mining And Surface Certification**

*This document is issued based on Mining And Surface Certification's Standard Contract terms and conditions available on request.*

*While every endeavour is made to ensure that a test / assessment is representative and accurately performed, and that a report is accurate in the quoted results and conclusions drawn from the test / assessment, MASC or its members/employees shall in no way be liable for any error made in carrying out the test / assessment or for any erroneous statement, whether in fact or in opinion, contained in a report issued pursuant to a test / assessment.*

*MASC takes no responsibility for any non-conformances, exclusions or any results / assessments not in compliance with the standards. 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 routine tests have been successfully completed and the product complies with the documentation and standard(s).*

*This document is only for use and application in South Africa. It is issued based on National interpretations and accepted practises.*

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