

Rea No: 1999/027771/07

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GOVERNMENT APPROVED TEST LABORATORY

IN TERMS OF ARP 0108: "REGULATORY REQUIREMENTS FOR EXPLOSION PROTECTED APPARATUS"

IA CERTIFICATE

Date Issued: 26 Jan 2021 26 Jan 2024 *Expiry date:

Page 1 of 3 Issue: 0

Ex – Type Examination Certificate

Certificate Number: MS-XPL/21.0005 U Equipment: **Right-Angled Adaptors**

Model / Type: **Type 787**

CMP Products Limited Applicant:

Glasshouse Street

St Peters

Newcastle Upon Tyne

NE6 1BS

United Kingdom

Manufacturer: **CMP Products Limited**

Serial No: All serial numbers imported between issued- and expire date and all serial

numbers covered by a valid report or acceptable product certification mark.

Supplied by

CMP Products Limited

Identified by Inspection Authority number

MS-XPL/21.0005 U

And as described in the Explolabs file number XPL/21804/21.0005 is hereby certified "Explosion Protected 1880" (Refer to clause 1, for Ex Rating)", having been examined and inspected in accordance with the relevant requirements of South African Standards.

SANS 60079-0: 2019 Ed 6

Explosive atmospheres Part 0: Equipment — General requirements IEC 60079-0: 2017 Ed 7

SANS 60079-1: 2015 Ed 5

Explosive atmospheres Part 1: Equipment protection by flameproof enclosures "d" IEC 60079-1: 2014 Ed 7

SANS 60079-7: 2019 Ed 4

Explosive atmospheres Part 7: Equipment protection by increased safety "e" IEC 60079-7: 2015 Ed 5

SANS 60079-31: 2014 Ed 2

Explosive atmospheres Part 31: Equipment dust ignition protection by enclosure "t" IEC 60079-31: 2013 Ed 2

Risk of ignition provided: Protection afforded Equipment Protection Level (EPL) Group		Performance of protection	Conditions of operation	T class or Max Surface Temp (°C)	
High	Mb Group I	Suitable for normal operation and severe operating conditions	Equipment de-energized when explosive atmosphere present	150°C	
High	Gb Group II	Suitable for normal operation and frequently occurring disturbances or equipment where faults are normally taken into account	Equipment remains functioning in zones 1 and 2	150°C	
Very high	Da Group III	Two independent means of protection or safe even when two faults occur independently of each other	Equipment remains functioning in zones 20, 21 and 22	150°C	

DOCUMENT No: XPL0213 RELEASE DATE: 29/05/2018 REV:7

ANNEX TO CERTIFICATE NO MS-XPL/21.0005 U

GENERAL

The marking of the Right-Angled Adaptors shall include the following:

Ex db I Mb

Ex eb I Mb

Ex db IIC Gb

Ex eb IIC Gb

Ex ta IIIC Da

The Type 787 Range of Right-Angled Adaptors has a male thread at one end and a female thread at 90° to the male thread. They are intended to provide cable entry options where space is limited or to avoid cable damage. Additionally, they may be used to convert an existing cable entry aperture to a different thread form and/or size. Male thread forms are between M20x1.5 and M100x2.0 and combinations such that a maximum of one 'standard' size difference is maintained. The male thread may be fitted with an optional O-ring seal. The type 787 range has been tested and assessed to achieve a minimum IP rating of IP64 by Sira. IP ratings exceeding IP64 have not been endorsed by CML but may be marked on the adaptors.

Design Options

Materials of manufacture:

The standard material supplied is:

The standard material supplied is:						
Brass	BS EN 12164:2011/ BS EN 12168:2011 Grade CuZn39Pb3 (CW614N) All brass					
	manufactured component parts can be optionally nickel plated to a maximum of					
	0.008mm					
Cast Brass	Not inferior to gb/t 5231-2012 hpb58-3 / astm38000 jis c3604 All brass manufactured component parts can be optionally nickel plated to a maximum of 0.008mm					

Alternate materials are:

7 Monato materialo di G.					
Stainless steel	BS EN 10088-3:2014 Grades 316S11, 316S13, 316S31, 316S33, 316L				
Mild steel	BS EN 10277-2:2008 Grades 220M07, 230M07 (EN1A) / 220M07Pb, 230M07Pb (EN1APb)				
Aluminum	BS EN 573-3:2013 / BS EN 755-1-3:2008 Grade 6082 T6, 6262 T6 / BS EN 1676:2010 Grade LM25 TF Not for use with Group I mining Aluminium will contain less than 6% magnesium				

The materials are manufactured in the following methods

	Male x Female metric thread size									
	M20xM16	M25xM20	M32xM25	M40xM32	M50xM40	M63xM50	M75xM63	M80xM75	M90xM80	M100xM90
Brass	M/C	M/C	M/C	M/C	M/C	М	М	М	М	М
Aluminium	М	М	М	М	М	М	М	М	М	М
Mild Steel	M/C	M/C	M/C	M/C	M/C	M	М	M	М	М
St. Steel	M/C	M/C	M/C	M/C	M/C	М	М	М	М	М

M - Machined C - Cast

Alternative entry component thread forms:

7 illorrialivo oriliy component	tillodd formo.
Metric	ISO 965-1, ISO 965-3 medium fit (6g) for external threads
ET (Conduit)	BS31:1940 (1979), Table A
PG	DIN 40430:1971
BSPP	BS2779:1986 class A full form for external threads
BSPT	BS21:1985 standard threads only as clause 5.4, gauging to
	clause 5.2 system A
ISO	ISO 7/1:1994, gauging to ISO 7/2 clause 6.3 for external
	threads
NPT	ANSI/ASME B1.20.1-2013 gauging to clause 3.2 for external
	threads
NPT	USAS B2.1-1968, Gauging to clause 36 for external threads
	and clause 37 for internal threads
NPSM	ANSI/ASME B1.20.1-2013 gauging to clause 6.4 for external
	threads

Based on the following documentation: IECEx CML 18.0176U. Issue 0.

	DOCUMENT	T No: XPL0213	RELEAS	RELEASE DATE: 29/05/2018			
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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.

SPECIAL CONDITIONS FOR SAFE USE (denoted by "X" after certificate number) None.

SCHEDULE OF LIMITATIONS (denoted by "U" after certificate number)

The following conditions relate to safe installation and/or use of the equipment.

i. The following thread forms and sizes of the machined versions of the Type 787 right-angle adaptors shall not be subjected to installation torques above the values in the table below. No limitations apply to the cast versions of the Type 787 right-angle adaptors.

Male Threads	Nm Male Threads		Nm
M25	53	M25	40
M32	53	M32	40
M40	53	M50	80
M90	166	M75	115
M100	166	M90	115

CONDITIONS OF CERTIFICATION

All production units must be covered by a QAN (Quality Assurance Notification), Product Mark Scheme or batch evaluation.

MARKING

iii)

iv)

The following (or similar) information have to be clearly and permanently marked on all units:

Supplier : CMP Products Limited Manufacturer : CMP Products Limited Equipment : Right-Angled Adaptors

Model/Type : Type 787

Serial No.

Ex Rating : Ex db I Mb

Ex eb I Mb Ex db IIC Gb Ex eb IIC Gb Ex ta IIIC Da

: MS-XPL/21.0005 U IA Certificate No

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;
- 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;
 - Any restrictions and conditions enforced by the Chief Inspector of Mines or the Principal Inspector or the Chief Inspector: Occupational Health and Safety.
- A revision certificate replaces all previous version of the certificate.
 - Only covers equipment Imported between the "Issued" and "Expire" dates.
 - 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:

M Lategan **Testing Officer**

EXPLOLABS EXPLOSION PREVENTION SERVICES

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