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### **GOVERNMENT APPROVED TEST LABORATORY**

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

# IA CERTIFICATE

14 Aug 2018 Date Issued: \*Expirv date: 14 Aug 2028

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Issue: 0

Ex - Type Examination Certificate

MS-XPL/18.0668 X Certificate Number:

Equipment: **Glands** 

**Enviro Compression Glands** Model / Type: Applicant: Pratley Manufacturing (Pty) Ltd

PO Box 3055 Kenmare 1745

Pratley Manufacturing (Pty) Ltd Manufacturer:

Serial No: All serial numbers of equipment covered by a valid report or acceptable

product certification mark.

The unit(s) as described in Explolabs File Number XPL/19675/18.0668 is hereby certified "Explosion 🚕 Protected" Ex d I/IIC Mb/Gb, Ex e I/IIC Mb/Gb, Ex nR IIC Gc, Ex ta IIIC Da, IP68 (2m cont.), having been tested, examined and inspected in accordance with the relevant requirements of South African Standards:

SANS 60079-0: 2012 Ed 5

Explosive atmospheres Part 0: Equipment — General requirements IEC 60079-0: 2011 Ed 6

Explosive atmospheres Part 1: Equipment protection by flameproof SANS 60079-1: 2015 Ed 5

IEC 60079-1: 2014 Ed 7 enclosures "d"

SANS 60079-7: 2007 Ed 3 Explosive atmospheres Part 7: Equipment protection by increased safety

IEC 60079-7: 2006 Ed 4

SANS 60079-15: 2010 Ed 4 Explosive atmospheres Part 15: Equipment protection by type of protection

IEC 60079-15: 2010 Ed 4

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)	
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		
High	Mb Group I	Suitable for normal operation and severe operating conditions	Equipment de-energized when explosive atmosphere present	Nana anasitia d	
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	None specified	
Enhanced	Gc Group II	Suitable for normal operation	Equipment remains functioning in zone 2		





The South African National Accreditation System (SANAS) is a member of the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA). This Arrangement allows for the mutual recognition of technical test and calibration data by the member accreditation bodies worldwide.

### ANNEX TO CERTIFICATE NO MS-XPL/18.0668 X

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#### 1. **DESCRIPTION OF EQUIPMENT**

The Pratley Enviro Compression Gland range (sizes 00, 0s, 0, 1, 2, 3, 4, 5, 6 and 7) is manufactured with a Polyamide 66 plastic body that is moulded around a threaded brass or 316/304 stainless steel body insert. All glands in the range use a Pratley 9578 elastomeric sealing rings along with a Polyamide 66 compression nut to secure the cable while also providing protection against the ingress of dust and water into the enclosure. A nylon BASF A3K gasket is secured on the thread of the glands to provide protection at the interface between the enclosure and the gland. See Table 1 for cable gland size specifications:

Table 1										
	Cable Size (mm)		Thread				Install	Maximum		
Size			Thread Type		Thread Length (mm)		Torque	Protrusion		
	Min	Max	Metric	NPT	Metric	NPT	(N/m)	Lenght (mm)		
00	3	8.5	M16	-	15.0	-	15	46		
0s	3	8.5	M20	½" NPT	15.0	19.3	15	46		
0	8	12.6	M20	1⁄4" NPT	15.0	19.3	19	51		
1	11.5	15.7	M20	3/4" NPT	15.0	24.6	24	51		
2	15.7	20.4	M25	1" NPT	15.0	30.8	50	59		
3	20.4	26.3	M32	-	15.0	-	70	66		
4	26.3	34.7	M40	-	18.0	-	70	66		
5	34.7	43.3	M50	-	19.0	-	120	102		
6	43.3	55.9	M63	-	19.0	-	140	112		
7	55.9	67.5	M75	-	25.0	-	150	132		



# **SPECIAL CONDITIONS FOR SAFE USE** (denoted by X after certificate number)

The maximum temperature at location of installation must be in the range of -20°C to 95°C. A nylon BASF A3K gasket should always be fitted to the glands, to maintain the IP rating.

## **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.

The following should be clearly stated in the manufacturer's instruction leaflet and general arrangement drawing:

- WARNING: Static hazard only wipe with damp cloth.
- For group I, install in areas with low chance of mechanical impact.

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#### 4. CONDITIONS OF CERTIFICATION

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

#### **MARKING** 5.

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

: Pratley Manufacturing (Pty) Ltd : Pratley Manufacturing (Pty) Ltd Manufacturer

Equipment : Glands

Model/Type : Enviro Compression Glands

Serial No.

: Ex d I/IIC Mb/Gb, Ex e I/IIC Mb/Gb, Ex nR IIC Gc, Ex ta IIIC Da, IP68 (2m cont.) Ex Rating

IA Certificate No : MS-XPL/18.0668 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;

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:**

Reviewed by:

N. Retief **Testing Officer**  D. Maree **Senior Testing Officer** 

#### **EXPLOLABS EXPLOSION PREVENTION SERVICES**

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