





(Pty) Ltd: 2015/021934/07

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

IA CERTIFICATE	MASC MS/19-9011X	Issue	0						
Issue Date	10 March 2021	Expiry Date	10 March 2031						
Applicant	Pratley Manufacturing (Pty) Limited								
	14 Jackson Street, Factoria, Krugersdorp, 1745, Gauteng, South Africa								
Manufacturer	Pratley Manufacturing (Pty) Limited								
	14 Jackson Street, Factoria, Krugersdorp, 1745, Gauteng, South Africa								
Description (See "Annex	(A" below)								
Equipment	Flameproof Cable Glands for	Туре	See description						
	unarmoured, armoured and								
	braided cable.								
	Applicant / Manufacturer Pratley Manufacturing (Pty) Limited								
	Type See description								
MARKINA	Ex Marking	Ex db I Mb, Ex db IIC Gb, Ex eb I Mb, Ex eb IIC Gb,							
MARKING:		Ex nR IIC Gc, Ex ta IIIC Da.							
Must be additionally applied to the equipment		IP66/68							
applied to the equipment	IA Number	MASC MS/19-9011X							
	Serial Number	See "Annex A" below							
	Rating	N/A							
WARNING(S)	N/A								
Compliance									

Compliance:

The equipment as described above and in report ZA/ICS/ExTR19.0017/00 has been allocated the rating Explosion Protected Ex db I Mb, Ex db II C Gb, Ex eb I Mb, Ex eb II C Gb, Ex nR IIC Gc, Ex ta IIIC Da, IP66/68 utilizing the SANS/IEC Standards:

- SANS (IEC) 60079-0:2019 General requirements
- SANS (IEC) 60079-1:2015 Equipment protection by flameproof enclosures "d"
- SANS (IEC) 60079-7:2019 Equipment protection by increased safety "e"
- SANS (IEC) 60079-31:2014 Equipment dust ignition protection by enclosure "t"
- IEC 60079-15:2015 Equipment protection by type of protection "n"

NB: This certificate only covers the standard(s) as indicated above. It is up to the manufacturer and end user to determine whether other standards are applicable for compliance to the site requirements, as well as compliance to the relevant legislation and/or regulations.

Special conditions of safe use X:

• See "Annex A" below

Conditions of manufacture:

• See "Annex A" below

(WISMORD **Terine Orsmond TECHNICAL OFFICER**

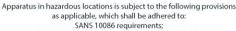
Regardt Zeelie **TECHNICAL SPECIALIST**

This certificate only covers the sample submitted and does not cover production units.

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)

Page 1 of 2





Any conditions mentioned in the above certificate; Any relevant requirements of the MHS Act and code of practice enforced in terms of regulations 21.17.2 of the minerals 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).

This certificate may only be reproduced in full. This certificate is not transferable and remains the property of the issuing body





IA CERTIFICATE: MASC MS/19-9011X Equipment: Flameproof Cable Glands for unarmoured, armoured and braided cable.

Expiry date: 09 March 2031

Page 2 of 2

ANNEX A

Description

The Flameproof Cable Gland range is manufactured from brass, 304 or 316 stainless steel. The cable glands utilize cylindrical threaded joints and are intended to terminate unarmoured, armoured or braided cables of circular type into an enclosure without compromising the explosion protection provided by the enclosure in accordance with relevant codes of practice. Sealing is achieved by an elastomeric sealing ring which seals against the cable inside the gland. Retention is achieved by the same method as sealing, in the case of the glands for unarmoured cable, and by means of a metallic cone arrangement, in the case of the glands for armoured and braided cables. Protection concepts include; flameproof, increased safety and restricted breathing, for groups I and IIC, along with dust protection for Group IIIC. The cable gland range has an ingress protection rating of IP66 and IP68 with the degree of protection IPX8 corresponding to an immersion of 350 meters under water.

The rated service temperature of the glands is -35°C to 120°C.

Gland selection and sizing for unarmoured cables:

Table 1											
Gland size	Cable Diameter "D"		Entry "C" Thread		Nipple Length "A"		Install Torque	"B" Max Protrusion Length	"B" Max Protrusion Length	"AC" Max Diameter	
3120	Min	Min Max Metric NPT Metric NPT		NPT	(Nm) T1	(Nut type)	(Hosetail type)				
00xs	3.0	6.0	M16	-	15.0	-	15	33	-	25	
00	4.5	8.5	M16	-	15.0	-	15	33	-	25	
0xs	3.0	6.0	M20	-	15.0	-	15	33	-	25	
0s	4.5	8.5	M20	1/2"	15.0	19.9	15	33	63	29	
0	8.5	12.6	M20	1/2"	15.0	19.9	20	33	63	29	
1	12.6	14.7	M20	½" ¾"	15.0	19.9 20.2	25	36	66	32	
2	14.7	20.4	M25	¾" 1"	15.0	20.2 25.0	35	37	67	38	
3	20.4	26.3	M32	1" 1¼"	15.0	25.0 25.6	55	40	85	48	
4	26.3	34.7	M40	1¼" 1½"	15.0	25.6 26.0	75	46	91	62	
5	34.7	43.3	M50	2"	15.0	26.9	90	57	103	79	
6S	43.3	49.3	M63	2½"	15.0	39.9	130	63	108	92	
6L	49.3	55.8	M63	2½"	15.0	39.9	130	63	108	92	
7S	55.8	61.7	M75	2½"	15.0	39.9	130	69	-	93	
7L	61.7	67.5	M75	2½"	15.0	39.9	130	69	-	93	
8	67.5	73.8	M82	3"	15.0	41.5	145	71	-	101	

Gland selection and sizing for armoured and braided cables:

Table 1			GLAND SIZE									
Table I			0s	0	1	2	3	4	5	6s	6L	
	С	Entry	Metric	M20	M20	M20	M25	M32	M40	M50	M63	M63
z		Thread	NPT	1/2"	1/2"	1/2" 3/4"	3/4" 1"	1" 11/4"	1¼"1½"	2"	2½"	2½"
CTION	Α	Thread	Metric	15.0	15.0	15.0 15.0	15.0 15.0	15.0 15.0	15.0 15.0	15.0	15.0	15.0
IŠO	\Box	Length	NPT	19.9	19.9	19.9 20.2	20.2 25.0	25.0 25.6	25.6 26.0	26.9	39.9	39.9
AEI	(D1)) Bedding Diameter	Min	6.5	8.5	12.6	14.7	20.4	26.3	34.7	43.3	49.3
₽ ₹			Max	8.5	12.6	14.7	20.4	26.3	34.7	43.3	49.3	55.8
S	(D2)	Outer Sheath Diameter	Min	10.3	12.6	16.0	21.5	25.0	32.5	42.0	52.5	52.5
	L		Max	14.0	18.6	22.1	27.2	33.2	43.2	53.2	67.0	67.0
AND	(D3)	Armour	Min	0.9	0.9	0.9	1.25	1.6	1.6	2.0	2.5	2.5
밀		Wire Size	Max	1.25	1.25	1.25	1.6	2.0	2.0	2.5	3.0	3.0
ان	(D4)	Braid Thickness	Min	N/A	0.3	0.3	0.3	0.4	0.6	0.8	0.8	0.8
			Max	N/A	1.0	1.2	1.2	1.5	1.6	1.7	1.7	1.7
B Ma	B Max Protrusion Length			64.0	64.0	72.0	80.0	90.0	103.0	123.0	151.0	151.0
AC Ma	AC Max Diameter			31.0	31.0	34.0	40.0	51.0	63.0	79.0	102.0	102.0
T1 Install Torque (Seal)(Nm)			15.0	20.0	25.0	35.0	55.0	75.0	90.0	115.0	115.0	
T2 Install Torque (Armour)(Nm)			13.0	15.0	20.0	25.0	35.0	50.0	65.0	75.0	75.0	
L1 Bedding Trim Length (min)			33.0	33.0	35.0	37.0	40.0	43.0	48.0	52.0	52.0	
L2 Armour/Braid Trim Length (max)			23.0	23.0	26.0	27.0	30.0	32.0	42.0	46.0	46.0	

Standard	See "certificate" above					
compliance						
Warnings	See "certificate" above					
Conditions of C	Conditions of Certification					
Special	 The cable glands shall only be used where the temperature, at the point of entry, is between -35°C and 120°C. 					
Conditions of	The appropriate ingress protection level / restricted breathing and / or flameproof characteristics must be achieved and					
safe use (X)	maintained at the interface of the gland with the enclosure.					
Conditions of	• None					
manufacture						

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

While every endeayour is made to ensure that a test / assessment / inspection is representative and accurately performed, and that a report / certificate is accurate in the quoted results and conclusions drawn from the test / assessment / inspection, MASC or its directors/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 / certificate issued pursuant to a test / assessment / inspection.

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).

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

e-mail: info@masc-ex.co.za