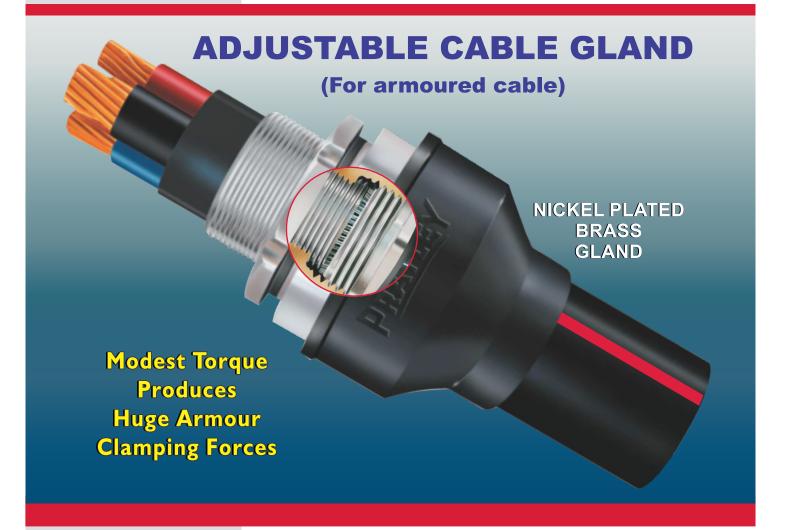




Sales Leaflet No. 001 June 2023

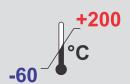
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SANS 1213 Ed.3

Approved to SANS 60529 & IP68 if fitted with nipple gasket, inner seal & shroud



# FEATURES & BENEFITS

- ➤ Uniquely adjustable it fits any size armouring!
- ➤ Adjustability renders it "the world's easiest gland to fit"
- ➤ Unique "gearbox" action ensures unprecedented clamping force - even when just hand tightened
- ➤ Tough self-centering loose cone ensures the very best armour grip possible
- ➤ Impact Category 8 (20J) Suitable for mining
- ➤ Completely re-usable
- ➤ Unique shroud: seals the gland and self-dries the cable.
- ➤ Accessories render it IP68
- Supplied complete with locknut.

STATEMENT The performance of our products must exceed all others on the world market"

Sales Leaflet **No. 001** June 2023

# THE MOST SUPERBLY ENGINEERED CABLE GLAND SYSTEM EVER!

## **BRASS NIPPLE**

This loose, high-tensile brass nipple allows very generous tightening without fear of the gland snapping off. By replacing the nipple with an extended length nipple, a range of thicker gland plates can be accommodated. By adding Pg. or Imperial thread adaptor nipples, connection to non-standard equipment is easily made. (Pratley Size O Special Thread Glands are also available.

See "Special Thread Glands" table in Accessories overleaf)

WHERE I AND REAL WHERE

## **LOCKNUT**

Supplied complete with locknut.
These are made of nickel-plated brass.
Gland sizes 7 - 8 are supplied
with castellated locknuts for ease
of tightening.

## **DIFFERENTIAL NUT**

Unique to the Pratley Adjustable Cable Gland, this ingenious device ensures unprecedented clamping force for aggressive armour anchoring. Using two slightly different coarse pitch threads it achieves the mechanical advantage of an ultra-fine pitch thread. It's like a truck changing into low gear to provide lots of traction. Even when the gland is hand tightened, the armour will be gripped! The differential nut is also self-locking. It locks the gland in the adjusted position even under extreme conditions of vibration. A truly ingenious solution to effective armour clamping

## **CONE NUT**

This generously proportioned nut remains stationary whilst the differential nut is tightened. This ensures that the armour wire will not be "dragged around" or displaced during tightening.

# **CONE BUSH**

Unlike ordinary glands with fixed or captive cones, the Pratley Adjustable Cable Gland employs a technically superior loose cone bush. This allows it to be made from a different material; a special tough and distortion resistant brass. The loose cone bush also automatically self-centers under the armouring. This ensures the very best grip possible on each individual armour wire. Furthermore, the loose cone allows visual verification that all armour wires are properly in position prior to tightening. You can be sure that no armour wire is out of place or will accidentally penetrate the bedding.

# **UNIQUE WATERPROOFING SHROUD**

The waterproofing shroud seals onto the cable sheath and the differential nut for absolute protection. It acts as a one-way valve to "self-dry" or breathe out residual moisture, and ensures the total exclusion of moisture and corrosive atmospheres.

Made from specially formulated ultra violet and chemical resistant rubber (UV-C).

A Hydrocarbon resistant version (H-C) can also be made on request.

\*A long shroud (not shown) is also available, which seals against the apparatus for absolute protection.

# IT'S LIKE HAVING A BUILT-IN GEARBOX!



When a 10 tonne truck applies low gear ratio, it can climb a mountain. When a Pratley

Adjustable Cable Gland applies differential thread action it can crush an armour wire. The unique differential nut in a Pratley Adjustable Cable Gland utilizes the difference in pitch between the conduit thread of the nipple and the specially engineered thread of the cone nut. These threads are relatively coarse and, unlike delicate fine threads, are robust and easy to engage. Fine threads can however achieve higher clamping forces.

Ingeniously, the Pratley differential nut tightens according to the pitch of the cone nut and simultaneously loosens according to the slightly different pitch of the nipple. The net result is two coarse threads working together to achieve an effective ultra-fine pitch thread. Consequently only modest torque produces immense clamping forces.

It's just like having a built-in gearbox!

**Note:** The specification for PVC cables (SANS 1507) does not specify maximum dimensions. This chart is based on expected maximum dimensions over bedding supplied by cable manufacturers.

No guarantee can be given that the selected gland will fit the specified cable.

<sup>\*</sup>In particular, cables sizes marked with an asterisk should always be checked.

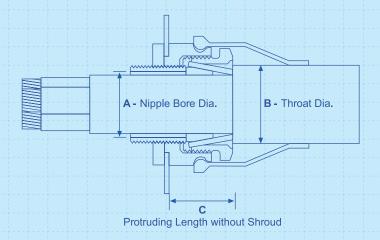
ΑI			CABLE G	
Cable Sizes	Number of Cores	Gland Size	Max. Bedding Dia. mm	Catalogue No.
	2, 3, 4, 5	0	12.6	01001
	7	1	15.7	02002
1.5 mm²	12	2	20.4	02003
	19, 27	3	26.3	02004
	37	4	34.7	02005
	2, 3	0	12.6	01001
	4*	0 or 1	12.6/15.7	01001/02002
	5, 7	1	15.7	02002
2.5 mm²	12	2	20.4	02003
	19	3	26.3	02004
	27	3 or 4	26.3/34.7	02004/02005
	37	4	34.7	02005
	2*	0 or 1	12.6/15.7	01001/02002
	3, 4, 5	1	15.7	02002
	7	2	20.4	02003
4 mm²	12	3	26.3	02004
	19*	3 or 4	26.3/34.7	02004/02005
	27	4	34.7	02005
	37*	4 or 5	34.7/43.3	02005/02006
	2, 3	1	15.7	02002
6 mm²	4, 5, 7	2	20.4	02003
	2*	1 or 2	15.7/20.4	02002/02003
10 mm²	3, 4	2	20.4	02003
	2, 3	2	20.4	02003
16 mm²	4*	2 or 3	20.4/26.3	02003/02004
	2*	2 or 3	20.4/26.3	02003/02004
25 mm²	3, 4	3	26.3	02004
	2, 3	3	26.3	02004
35 mm²	4*	3 or 4	26.3/34.7	02004/02005
	2	3	26.3	02004
50 mm²	3, 4	4	34.7	02005
	2*	3 or 4	26.3/34.7	02004/02005
70 mm²	3	4	34.7	02005
70 111111	4*	4 or 5	34.7/43.3	02005/02006
	2	4	34.7	02005
95 mm²	3*	4 or 5	34.7/43.3	02005/02006
33 111111	4	5	43.3	02006
	2	4	34.7	02005
120 mm²	3	5	43.3	02006
120 111111	4*	5 or 6	43.3/55.8	02006/02007
	2, 3	5	43.3	02006
150 mm²	4	6	55.8	02007
	2	5	43.3	02006
185 mm²	3, 4	6	55.8	02007
	2, 3	6	55.8	02007
240 mm²	4	7	67.5	02007
$\vdash$	2	6	55.8	02008
2002	3*	6 or 7	55.8/67.5	02007/02008
300 mm	4	7	67.5	02007/02008
$\vdash$		8	73.8	02008
Larger	check bedding diameter	9	80.1	02009
Larger	on all cables	10	92.8	02010
$\Box$		10	92.0	U2011

# **IP68**



If in doubt, measure the cable bedding diameter and check it against the gland nipple bore in "Dimensions of Pratley Adjustable Glands" chart, above right.

# **DIMENSIONS & SPECIFICATIONS**



		DIMEN	SIONS (	OF PRAT	LEY ADJUSTA	BLE GLA	NDS	
Size No.	Catalogue No.		Nipple Bore Dia.	Nipple Thread	Hole Diameter * Gland will fit	Hex Sizes A/F	Overall Diameter	Protruding Length
		Α	В		mm	Diff. Nut	Without Shroud C	
0	01001	12.7	14.7	M20	20	23.0	30.0	19.0
1	02002	15.9	18.7	M20	20 & 25	27.9	33.0	24.0
2	02003	20.6	24.4	M25	25 & 32	35.0	42.0	28.0
3	02004	26.5	30.0	M32	32 & 40	42.0	49.0	30.0
4	02005	34.9	39.5	M40	40 & 50	55.0	64.0	34.0
5	02006	43.5	49.0	M50	50 & 63	70.0	81.0	43.0
6	02007	56.0	62.2	M63	63 & 78	83.0	98.0	49.0
7	02008	67.7	74.0	M75	78 & 84	95.0	110.0	62.0
8	02009	74.0	81.0	M82	84 & 103	100.0	116.0	62.0
9	02010	80.3	92.0	N/A	3xM8 PCD 114	N/A	132.0	45.0
10	02011	93.0	105.0	N/A	3xM8 PCD 126	N/A	147.0	45.0

# **SPECIFICATION GUIDE**

# The Cable Gland must:

- Comply with SANS 1213 for mechanical cable glands.
- Be fully adjustable so that each size can accommodate any size of armour wire
- · Incorporate a differential thread action.
- Be manufactured from Brass and be nickel-plated.
- Have a loose nipple and a loose cone bush.
- · Be able to be fitted with either short or long weatherproofing shrouds.
- Be supplied complete with nickel-plated brass locknuts.

Larger sizes must be supplied with castellated locknuts.

# **PACKAGING DATA**

Gland Size	Glands per Pack	Packs per Carton	Carton Dimensions	Weight (kg) per Pack	Volume (m³) per Pack
0	10	N/A	170 x 130 x 155	6.02	0.00034
1	10	N/A	170 x 145 x 160	8.56	0.00042
2	10	N/A	210 x 175 x 200	15.32	0.00073
3	5	N/A	215 x 45 x 50	1.06	0.00050
4	5	N/A	275 x 70 x 45	2.04	0.00086
5	2	N/A	145 x 80 x 55	1.76	0.00064
6	2	N/A	170 x 95 x 60	2.42	0.00097
7	1	N/A	107 x 100 x 75	2.06	0.00080
8	1	N/A	120 x 102 x 75	2.08	0.00092
9	1	N/A	135 x 135 x 90	2.20	0.00200
10	1	N/A	160 x 160 x 100	2.36	0.00260

All dimensions in mm unless otherwise stated No. 0 Gland is non-adjustable.

\* Each gland size (excluding No. 0) will fit 2 sizes of knockout hole due to a specially machined spigot on the differential nut.

# IT'S NOT JUST A GLAND... IT'S A COMPLETE SYSTEM! ACCESSORIES

#### **TOUGH BLACK PLASTIC GASKETS**

These tough black plastic gaskets incorporate a special face 'feather' for perfect sealing.



	PRATLEY TOUGH PLASTIC GASKETS													
Size	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm	3"	16 mm		Pg. 13.5		25 mm	Pg. 21	Pg. 29
Cat. No.	39001	39002	39003	39004	39005	39006	39007	39008	39009	39010	39011	39012	39013	39014
Usual Pack Qty.	100	100	100	100	100	100	100	100	100	100	100	100	100	100

#### **INNER SEAL KIT**

Ensures that the cable bedding is inner sealed.

NOTE: Please specify 'For Glands' and use the Catalogue No. when ordering.





Stretch-on Rubber Sealing Bush

PRATLEY INNER SEAL KITS											
Size 0 1 2 3 4 5 6 7 8											
Catalogue No.	05022	05023	05025	05026	05027	05028	05029	05030	05031		
Usual Pack Qty.	10	10	10	10	10	10	10	10	10		

#### WATERPROOFING SHROUDS

- · Halogen free
- Elasticity retention
- Excellent chemical • Exceptional UV resistance

resistance

By effectively outer sealing the gland, Pratley shrouds prevent the ingress of moisture and consequent corrosion

of armour wires. This ensures a permanent earth path and improved safety! Their totally unique design also self-dries the cable via a one-way vapour release valve action.

Short shrouds - For indoor and out door installations

- Ideal for more corrosive environments. For adjustable glands only. Long shrouds Special shrouds - Hydrocarbon resistant (H-C). Available as a "special" only (not UV resistant).

P	PRATLEY WATERPROOFING SHROUDS											
Size	0	1	2	3	4	5	6	7	8			
Cat. No. (Standard)	03010	03011	03012	03013	03014	03015	03016	03017	03017			
Usual Pack Qty.	20	20	20	20	20	20	10	10	10			
Cat. No. (Long)	N/A	59011	59012	59013	59014	59015	59016	59017	59018			
Usual Pack Qty.	N/A	20	20	20	10	10	10	10	10			

Approved to **SANS 60529** IP68 if fitted with nipple gasket, inner seal & shroud







Inner Seal Kit



## SIZE 0 **SPECIAL THREADS GLANDS**

Special Thread Glands are not supplied with locknuts.



	SPECIAL THREAD GLANDS										
Gland Size	Type / Thread	Catalogue No.	Usual Pack Qty.								
0	Pg. 13.5	06018	10								
0	Pg. 16	06016	10								
0	½" NPT	06017	10								

#### **EXTENDED LENGTH NIPPLES**

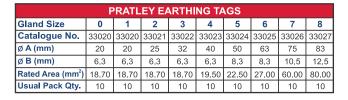
These nipples replace the standard nipple when required with exceptionally thick gland plates.

PRATLE	PRATLEY EXTENDED NIPPLES											
Size	1	2	3	4	5							
Catalogue No.	79031	79032	79033	79034	79035							
Thread Dia. (mm)	20	25	32	40	50							
Length (mm)	31.0	35.0	39.0	45.0	52.5							
Usual Pack Qty.	25	25	10	10	2							



# **EARTHING TAGS**

Used for external earthing. They can also be used stacked, in combination, to increase the rated area.



## **NICKEL-PLATED BRASS LOCKNUTS**

All Pratley Adjustable Cable Glands (and the No. 0) are supplied complete with locknuts

- Sizes 0-6 supplied standard with nickel-plated brass locknuts.
- For ease of fitting, larger sizes (7 & 8) are castellated.
- Unplated brass locknuts are available on request.



Castellated Locknut Sizes 7 & 8

	PRATLEY LOCKNUTS												
Size	00	0	1	2	3	4	5	6	7	8			
Thread	16mm	20mm	20mm	25mm	32mm	40mm	50mm	63mm	75mm	82mm			
Nickel Plated Brass Cat. No.	02879	02880	02880	02882	02883	02884	02885	02886	02118	02119			











