



## CABLE GLANDS

### Overview:

The SABS 1213 South African Standard for cable glands, defines a cable gland as: "a device that provides entry for a cable into and mechanically attaches the cable to the enclosure for an electrical apparatus at the point of entry of the cable conductors into the enclosure and that, when so designed, seals the opening of the enclosure."

Glands are manufactured from nickel plated brass. The electroplated nickel helps to increase the hardness of the gland and to improve wear resistance. The popular steel wire armour cable gland consists of four parts: The outer nut, the inner, the cable gland bush (with rotary cone) and the locknut as shown below :



The glands are also available with a loose cone :



The compression gland has an additional rubber seal to prevent any moisture etc. entering the gland and/or the enclosure:



### Cable gland selection chart:

Cable Size (mm <sup>2</sup> )	Recommended Gland Size for Cable Size/Number of Cores																
	Number of Cores																
	2	3	4	5	6	7	8	10	12	14	15	19	20	21	24	27	30
1.5	0	0	0	0/1	1	1	1	2	2	2	3	3	3	3	3	3	4
2.5	0	0	0/1	1	2	2	2	2	3	3	3	3	3	3	4	4	4
4	0/1	1	1	1/2	2	2	2	3	3	3	4	4	4	4	4	4/5	5
6	1	1	1/2	2	2	2											
10	1/2	2	2														
16	2	2	3														
25	2/3	2/3	3														
35	2/3	3	3/4														
50	3	3/4	4														
70	3/4	4	4/5														
95	4	4/5	5														
120	4	5	5														
150	4/5	5	5/6														
185	5	5/6	6														
240	6	6	6/7														
300	6	6	7														

Important:  
 Ensure when selecting cable glands that the product complies with and carries the SABS mark or RCC approval number.



### Options:

- BWR - Rotary cone glands (Sizes 0-7)
- BWL – Loose cone glands (Sizes 0-7)
- BWF – Fixed cone glands (Sizes 0-2)
- A2 compression glands (Sizes 0-7)
- Corrosion resistant glands
- Nylon compression glands (Figure 1)
- Glands for hazardous areas
- Flameproof glands
- High voltage glands



Figure. 1

### Selection Criteria:

- Environmental conditions (e.g. indoor / outdoor application, hazardous areas).
- Cable type and voltage rating (armoured or un-armoured, and nr. of cores).
- Actual cable diameter overall, and under armour.
- Size and type of armour.
- Accessories required (shroud/earth tag etc.).

### Applications:

1. Rotary loose and fixed cone glands: for indoor use with steel/aluminium wire armour cable.
2. Compression glands: for indoor/outdoor use with un-armoured cable.
3. Corrosion resistant glands: for use in highly corrosive or wet areas with steel wire armour cable.
4. Nylon compression glands: for indoor/outdoor use with un-armoured flexible cable.
5. Glands for hazardous areas: for indoor/outdoor use with armoured or un-armoured cable. Check the hazardous area classification.
6. Flameproof glands: for indoor/outdoor use with steel wire armour cable. Check the hazardous area classification and explosion protection rating.
7. High voltage glands: for PILC cable type armoured cable.

### Assessories:

The accessories available include PVC or rubber shrouds and slip-on earth tags. Also available are 4-way utility junction boxes (Size 1 & 2, IP68) that are able to accommodate size 1 or size 2 glands.



Utility Junction Box



Rubber Shroud



Earth Tag