## Ex CORROSION GUARD ${ }^{\circledR}$

## Ex db IIC, Ex eb IIC, Ex ta IIIC, Ex nR IIC

## CABLE GLAND for Steel Wire and Aluminium Armoured Cable

## Features and Benefits

- For highly corrosive, wet locations, Group II, III, Zone 1, 2, 20, 21 and 22 hazardous areas.

Freely rotating captive cone and inspectible cone ring provides an armour clamp and earth bond on steel wire armour and aluminium armour. Two-part handling, freely rotating captive cone and inspectible cone ring provides an armour clamp and earth bond on steel wire armour.

- Corrosion Guard ${ }^{\circledR}$ screws onto the gland body and seals over the outer sheath of the cable giving an IP68 and deluge proof seal protecting the armour and metal parts of the gland.
- Precision manufactured from high-quality brass (Marine Grade Electroless Nickel Plated ${ }^{\text {™ }}$ )
- Supplied with a thread sealing-gasket (parallel threads only)


## Technical Data

Type:
Gland Material:
Corrosion Guard Material
Seal Material:
Sealing Gasket Material:
Cable Type:
Armour Clamping:
Sealing Area:
Optional Accessories:
Note:

Ex Corrosion Guard ${ }^{\text {® }}$
Brass (Marine Grade Electroless Nickel Plated ${ }^{\text {™ }}$ )
Glass Reinforced Polyester Compound / PBT
Standard Thermoset Elastomer
HDPE, Nylon 66 or PTFE
Steel Wire Armour, Aluminium Armour
Captive Rotating Cone and Inspectible Cone Ring Inner Sheath, Outer Sheath and total enclosure of gland Adaptor, Reducer, Locknut and Serrated Washer
The installer should ensure that the materials are suitable for the installation environment.

## Standards and Certifications

Equipment Protection Levels:
IECEx/INMETRO: Ex db IIC Gb, Ex eb IIC Gb, Ex nR IIC Gc, Ex ta IIIC Da ATEX/UKEX: $E_{x}$ II 2/3G 1D, Ex db IIC Gb, Ex eb IIC Gb, Ex ta IIIC Da, Ex nR IIC Gc TR CU: Ex 1 Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex tb IIIC Db X Standard Seals: $-60^{\circ} \mathrm{C}$ to $+95^{\circ} \mathrm{C} / 100^{\circ} \mathrm{C}$ (HDPE/ Nylon Sealing Gasket) Extreme Temp. Seals: $-60^{\circ} \mathrm{C}$ to $+120^{\circ} \mathrm{C}$ (PTFE Sealing Gasket) Standard:
IEC/BS EN 62444
IEC 60079 Part 0, 1, 7, 15, 31
EN 60079 Part 0, 1, 7, 31
EN 60079 Part 0, 15
BS EN 60079 Part 0, 1, 7, 31
BS EN 60079 Part 0, 15
ABNT NBR IEC 60079 Part 0, 1, 7, 15, 31 ГОСТ 31610-0, 15, ГОСТ IEC 60079-1 ГОСТ Р МЭК 60079-7, 31
SANS/IEC 60079 Part 0, 1, 7, 15, 31
P66/68 100m - Parallel

## IEC 60529

IEC 60529
Peluge Protection
Dapered and approved grease IEC 605
DTS-01
Corrosion Protection
Marine ABS
DNV
EMC Compatible

Certificate:
CML 14CA364
IECEX CML 18.0018X
CML 16ATEX1001X
CML 16ATEX4002X
CML 21UKEX1011X
CML 21UKEX4006X
TÜV 15.0483X
EAЭC RU C-ZA.HA91.B.00245/21
MASC MS/22-9001X
CML 15 Y728
IECEX CML 18.0018X
CML 14CA370-2
EXOVA N968667
ABS 20-1952706-1-PDA
TAE0000010
SGS EMC305079/1

## 

Conditions for Safe Use - $\mathbf{X}$
The cable glands shall only be used where the temperature, at the point of entry, is between $-60^{\circ} \mathrm{C}$ to $+95^{\circ} \mathrm{C}$ (standard seals \& HDPE sealing gaskets), $-60^{\circ} \mathrm{C}$ to $+100^{\circ} \mathrm{C}$ (standard seal and nylon sealing gasket) or $-60^{\circ} \mathrm{C}$ to $+120^{\circ} \mathrm{C}$ (extreme temp. seal \& PTFE sealing gasket) depending on seal and gasket used.
Note: According to IEC 60079-14, 10.6.2: An Ex d gland will only maintain Ex dintegrity when used with substantially

| Product Code | Gland <br> Size <br> Reference | Metric Entry Thread |  | Cable Detail |  |  |  | Max Length 'E' | Armour Dia |  | Max <br> Dia 'G' | Hexagonal Detail |  | Install. <br> Torque Value Nm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 'C' | $\begin{gathered} \text { Min } \\ \text { ' } \end{gathered}$ | $\text { ' } \mathrm{M} \text { ' }$ | $\begin{aligned} & \text { Max } \\ & \text { ' }{ }^{\prime} \text { ' } \end{aligned}$ | $\underset{\text { ' }{ }^{\prime} \text { ' }}{ }$ | $\begin{gathered} \text { Max } \\ \text { 'B' } \end{gathered}$ |  | ${ }_{\text {Min }}{ }^{\prime} \mathrm{F}^{\prime}$ | $\operatorname{Max}$ 'F' |  | $\begin{aligned} & \text { Max } \\ & \text { 'Flats' } \end{aligned}$ | Max <br> 'Crns' |  |
| 054700-16 | 00-16ss | M16x1.5 | 15 | 3.0 | 8.5 | 8.0 | 13.5 | 46.0 | 0.20 | 0.90 | 33.0 | 24.0 | 27.0 | 21.0 |
| 054700 | 00-20ss | M20x1.5 | 15 | 3.0 | 8.5 | 8.0 | 13.5 | 46.0 | 0.20 | 0.90 | 33.0 | 24.0 | 27.0 | 21.0 |
| 0547-0 | 0-20s | M20x1.5 | 15 | 7.0 | 12.0 | 11.5 | 16.0 | 46.0 | 0.20 | 1.25 | 33.0 | 24.0 | 27.0 | 21.0 |
| 054701 | 1-20 | M20x1.5 | 15 | 9.0 | 15.0 | 14.5 | 20.5 | 51.0 | 0.20 | 1.25 | 36.0 | 27.0 | 30.0 | 21.0 |
| 054722 | 2s-25s | M25x1.5 | 15 | 11.0 | 17.5 | 16.0 | 24.5 | 58.0 | 0.20 | 1.60 | 46.0 | 35.0 | 39.0 | 30.0 |
| 054702 | 2-25 | M25x1.5 | 15 | 14.0 | 20.0 | 20.5 | 26.5 | 58.0 | 0.20 | 1.60 | 46.0 | 35.0 | 39.0 | 30.0 |
| 054733 | 3s-32s | M $32 \times 1.5$ | 15 | 15.0 | 22.0 | 23.0 | 30.5 | 67.0 | 0.20 | 2.00 | 53.0 | 42.0 | 47.0 | 42.0 |
| 054703 | 3-32 | M $32 \times 1.5$ | 15 | 19.0 | 26.5 | 26.5 | 33.5 | 67.0 | 0.20 | 2.00 | 53.0 | 42.0 | 47.0 | 42.0 |
| 054744 | $4 \mathrm{~s}-40 \mathrm{~s}$ | M40x1.5 | 15 | 22.0 | 31.5 | 30.0 | 39.5 | 74.0 | 0.30 | 2.00 | 68.0 | 52.0 | 59.0 | 52.0 |
| 054704 | 4-40 | M40x1.5 | 15 | 26.0 | 34.0 | 33.0 | 42.5 | 74.0 | 0.30 | 2.00 | 68.0 | 52.0 | 59.0 | 52.0 |
| 054755 | 5 s -50s | M50x1.5 | 15 | 29.0 | 38.0 | 34.0 | 47.5 | 89.0 | 0.40 | 2.50 | 84.0 | 65.0 | 73.0 | 57.0 |
| 054705 | 5-50 | M50x1.5 | 15 | 34.0 | 44.5 | 42.5 | 52.5 | 89.0 | 0.40 | 2.50 | 84.0 | 65.0 | 73.0 | 57.0 |
| 054766 | 6s-63s | M63x1.5 | 15 | 38.0 | 50.0 | 45.5 | 60.5 | 102.0 | 0.40 | 2.50 | 110.0 | 80.0 | 90.0 | 66.0 |
| 054706 | 6-63 | M63x1.5 | 15 | 44.0 | 56.5 | 52.5 | 65.5 | 102.0 | 0.40 | 2.50 | 110.0 | 80.0 | 90.0 | 66.0 |
| 054777 | 7s-75s | M75x1.5 | 15 | 50.0 | 62.0 | 57.0 | 72.5 | 106.0 | 0.40 | 3.15 | 124.0 | 96.0 | 108.0 | 72.0 |
| 054707 | 7-75 | M75x1.5 | 15 | 56.0 | 67.5 | 65.5 | 78.0 | 106.0 | 0.40 | 3.15 | 124.0 | 96.0 | 108.0 | 72.0 |
| 054708 | 8-80 | M80x2.0 | 20 | 59.0 | 69.0 | 65.0 | 77.5 | 117.0 | 2.50 | 3.15 | 124.0 | 96.0 | 108.0 | 80.0 |
| 054799 | 9s-90s | M90x2.0 | 20 | 66.0 | 75.0 | 73.0 | 86.5 | 117.0 | 3.00 | 3.50 | 124.0 | 111.0 | 125.0 | 89.0 |
| 054709 | 9-90 | M90x2.0 | 20 | 74.0 | 81.5 | 82.0 | 91.0 | 117.0 | 3.00 | 3.50 | 140.0 | 111.0 | 125.0 | 89.0 |
| 054710 | 10-100 | M100x2.0 | 20 | 81.0 | 91.0 | 90.0 | 100.0 | 117.0 | 3.00 | 3.50 | 140.0 | 125.0 | 141.0 | 98.0 |

[^0] Metric Illustration

## Ex Corrosion Guard Gland

## ENCLOSURES AND EQUIPMENT TO WHICH CABLE GLANDS ARE FITTED:-

- Must be made from materials which are compatible with the cable gland materials.
- Have a sealing area around the cable gland entry point with a surface roughness
< Ra $6.3 \mu \mathrm{~m}$.
- Have entries that are perpendicular to the enclosure face in the area where the cable gland will seal to within $2.5^{\circ}$.
Are sealed using the supplied sealing gasket .
MUST HAVE THREADED ENTRIES
The same thread size as the cable gland. (Thread adapters should be used to correct any mismatch).
- With a thread tolerance of metric class ' 6 H ' or equivalent.
- Where the thread length is a minimum of 10 mm for Ex d applications or 3 mm for all other applications
OR CLEARANCE HOLES (not Ex d)
- Where the hole size is the thread nominal size with a tolerance of +0.1 to +0.7 mm . (e.g. the clearance hole for an M20 thread will have a diameter between 20.1 mm and 20.7 mm ).

Through material that is between 1 mm and 12 mm thick. (Thicker materials can be accommodated using glands with extended entry threads).


1. For accurate sizing, use a CCG Dimension Tape © ${ }^{(A)}$ on the inner and outer cable sheath.


| Gland <br> Size | Armour <br> Length | Gland <br> Size | Armour <br> Length | Gland <br> Size | Armour <br> Length | Gland <br> Size | Armour <br> Length |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| $00-16 \mathrm{ss}$ | 20.0 | $2-25$ | 25.0 | $5 \mathrm{~s}-50 \mathrm{~s}$ | 35.0 | $7-75$ | 50.0 |
| $00-20 \mathrm{ss}$ | 20.0 | $3 \mathrm{~s}-32 \mathrm{~s}$ | 30.0 | $5-50$ | 35.0 | $8-80$ | 50.0 |
| $0-20 \mathrm{~s}$ | 20.0 | $3-32$ | 30.0 | $6 \mathrm{~s}-63 \mathrm{~s}$ | 45.0 | $9 \mathrm{~s}-90 \mathrm{~s}$ | 50.0 |
| $1-20$ | 25.0 | $4 \mathrm{~s}-40 \mathrm{~s}$ | 30.0 | $6-63$ | 45.0 | $9-90$ | 50.0 |
| $2 \mathrm{~s}-25 \mathrm{~s}$ | 25.0 | $4-40$ | 30.0 | $7 \mathrm{~s}-75 \mathrm{~s}$ | 50.0 | $10-100$ | 60.0 |

2. Cut back the cable outer sheath to expose the armour to a length as per the table above.


Alternative installation through an unthreaded entry.

3. To maintain IP66/68, ensure gasket (1) is in place. Screw the inner (2) into apparatus. Tighten the inner (2) to installation torque using a CCG Spanner (8).

If the apparatus is untapped use a locknut.

4. Pass the corrosion guard outer nut (7) , corrosion guard body (6) and the gland body (3) over the cable. Pass the cable end through the inner (2) and splay the armour wires over the cone (4).

5. Screw the gland body (3) onto the inner (2) and tighten the gland body (3) using a CCG Spanner (8) to lock the armour between the cone (4) and the cone ring (5).

6. Unscrew the body (3). Check that the armour has locked between the cone (4) and the cone ring (5). (0-Ring on the cone ring (5) is sacrificial).

7. Tighten the body (3) onto the inner (2) until hand tight, then tighten with a CCG Spanner (8) with $3 / 4$ turn to lock the armour between the cone (4) and the cone ring (5).

8. Slide the corrosion guard body (6) and the corrosion guard outer nut © over the assembled gland then screw the corrosion guard body (6) onto the gland. Hand tighten the corrosion guard body (6) and the corrosion guard outer nut (7) to produce the required dust and waterproof seal IP66/68.


[^0]:    All dimensions are in mm. Intermediate thread sizes are available on request.

