

# Ex Corrosion Guard®

# 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. Factory fitted captive elastomeric seals for Built-in Safety™ .
- Two-part handling, freely rotating captive cone and inspectible cone ring provides an armour clamp and earth bond on steel wire and aluminium armour.
- Corrosion Guard® 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™).
- Supplied with a thread sealing gasket.



Ex Corrosion Guard®

Gland Material: Brass (Marine Grade Electroless Nickel Plated™) Corrosion Guard Material: Glass Reinforced Polyester Compound / PBT

Seal Material: Standard Thermoset Elastomer Sealing Gasket Material: HDPE, Nylon 66 or PTFE Cable Type: Steel Wire, Aluminium Armour

**Armour Clamping:** Captive Rotating Cone and Inspectible Cone Ring Sealing Area: Inner Sheath, Outer Sheath and total enclosure of gland **Optional Accessories:** Adaptor, Reducer, Locknut and Serrated Washer

Note: The installer should ensure that the materials are suitable for the installation

environment.

#### **Standards and Certifications**

IECEX/INMETRO: Ex db IIC Gb, Ex eb IIC Gb, Ex nR IIC Gc, Ex ta IIIC Da **Equipment Protection Levels:** 

ATEX/UKEX: (a) II 2/3G 1D, Ex db IIC Gb, Ex eb IIC Gb, Ex ta IIIC Da, Ex nR IIC Gc **Continuous Operating Temp:** Standard Seals: -60°C to +95°C /100°C (HDPE/ Nylon Sealing Gasket)

Extreme Temp. Seals: -60°C to +120°C (PTFE Sealing Gasket)

Conformance:

IEC/BS EN IEC/BS EN 62444 **IECE**x IEC 60079 Part 0, 1, 7, 15, 31 EN 60079 Part 0, 1, 7, 31 EN 60079 Part 0, 15 **UKEX** BS EN 60079 Part 0, 1, 7, 31 BS EN 60079 Part 0, 15

ABNT NBR IEC 60079 Part 0, 1, 7, 15, 31 FOCT 31610-0, 15, FOCT IEC 60079-1 INMETRO (Brazil) TR CU (Russia) ГОСТ Р МЭК 60079-7, 31

SANS/IEC 60079 Part 0, 1, 7, 15, 31 IP66/68 100m - Parallel IEC 60529 IP68 - Tapered and approved grease IEC 60529

**Deluge Protection** DTS-01 Corrosion Protection ASTM B117-11, BS EN ISO 3231 IEC 60079 Part 0, 1, 7, 15, 31, IEC 60529 Marine ABS DNV-GL IEC 60079 Part 0, 1, 7, IEC 60529 **EMC** Compatible EN 55011, + A1, EN 55022

Certificate: CML 14CA364

IECEx CML 18.0018X CML 16ATEX1001X CML 16ATEX4002X CML 21UKEX1011X CML 21UKEX4006X TÜV 15.0483X

EA9C RU C-ZA.HA91.B.00245/21

MASC MS/22-9001X CML 15Y728 IECEx CML 18.0018X CML 14CA370-2 EXOVA N968667

ABS 20-1952706-1-PDA DNV-GL TAE0000010 SGS EMC305079/1



The cable glands shall only be used where the temperature, at the point of entry, is between -60°C to +95°C (standard seals & HDPE sealing gaskets), -60°C to +100°C (standard seal and nylon sealing gasket) or -60°C to +120°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 d integrity when used with substantially

round, compact and filled cable. If not a CCG VORTEx® barrier gland should be used

Touric	i, compact ai	iu illieu cable	. II HOL a	CCG VOIN	TEX Daille	or granta si	ould be us	cu.						
Product	Gland	Metric Entry Thread		Cable Detail				Max	Armour Dia		Max	Hexagonal Detail		Install.
Code	Size Reference	,C,	Min 'D'	Min 'A'	Max 'A'	Min 'B'	Max 'B'	Length 'E'	Min 'F'	Max 'F'	Dia 'G'	Max 'Flats'	Max 'Crns'	Torque Value Nm
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	M32x1.5	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	M32x1.5	15	19.0	26.5	26.5	33.5	67.0	0.20	2.00	53.0	42.0	47.0	42.0
054744	4s-40s	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	5s-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

All dimensions are in mm. Intermediate thread sizes are available on request.

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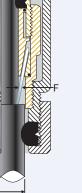












PATENTED

# FITTING INSTRUCTIONS

# **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
- Have a sealing area around the cable gland entry point with a surface roughness
   Ra 6.3 µm.
- Have entries that are perpendicular to the enclosure face in the area where the cable gland will seal to within 2.5°.
- 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 '6H' or equivalent.
- Where the thread length is a minimum of 10mm for Ex d applications or 3mm 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 +0.7mm.
   (e.g. the clearance hole for an M20 thread will have a diameter between 20.1mm and 20.7mm).
- Through material that is between 1mm and 12mm thick. (Thicker materials can be accommodated using glands with extended entry threads).

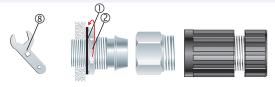


1. For accurate sizing, use a CCG Dimension Tape (1) on the inner and outer cable sheath.



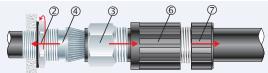
Gland Size	Armour Length	Gland Size	Armour Length	Gland Size	Armour Length	Gland Size	Armour Length
00-16ss	20.0	2-25	25.0	5s-50s	35.0	7-75	50.0
00-20ss	20.0	3s-32s	30.0	5-50	35.0	8-80	50.0
0-20s	20.0	3-32	30.0	6s-63s	45.0	9s-90s	50.0
1-20	25.0	4s-40s	30.0	6-63	45.0	9-90	50.0
2s-25s	25.0	4-40	30.0	7s-75s	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.

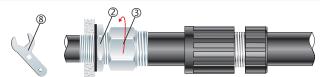


3. To maintain IP66/68, ensure gasket ① is in place. Screw the inner ② into apparatus. Tighten the inner ② to installation torque using a CCG Spanner ⑧.

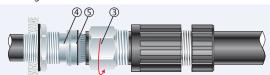




Pass the corrosion guard outer nut ②, corrosion guard body ⑥ and the gland body ③ over the cable. Pass the cable end through the inner ② and splay
the armour wires over the cone ④.



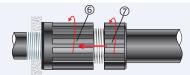
5. Screw the gland body ③ onto the inner ② and tighten the gland body ③ using a CCG Spanner ® to lock the armour between the cone ④ and the cone ring ⑤.



6. Unscrew the body ③. Check that the armour has locked between the cone ④ and the cone ring ⑤. (O-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 ® with ¾ turn to lock the armour between the cone ④ and the cone ring ⑤.



8. Slide the corrosion guard body © and the corrosion guard outer nut ② over the assembled gland then screw the corrosion guard body © onto the gland. **Hand tighten** the corrosion guard body © and the corrosion guard outer nut ⑦ to produce the required dust and waterproof seal IP66/68.

You Tube Instruction Video: http://youtu.be/HWTJRdh\_438