

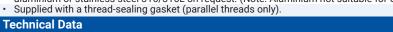
A2FX-R

Ex db I/IIC, Ex eb I/IIC, Ex ta IIIC, Ex nR IIC

DOUBLE COMPRESSION GLAND for Single or Multi-Core Unarmoured Cable

Features and Benefits

- Passes the IECEx / ATEX / UKEX 100% pull test, so no additional cable clamping is required. For indoor, outdoor, Group I, II, III, Zone 1, 2, 20, 21 and 22 hazardous areas.
- Fitted with two specially formulated elastomeric displacement seals for dual redundancy and superior cable retention, explosion protection and IP rating.
- Precision manufactured from high-quality brass (Marine Grade Electroless Nickel Plated™) available in aluminium or stainless steel 316/316L on request. (Note: Aluminium not suitable for Group I applications).





Gland Material: Brass (Marine Grade Electroless Nickel Plated™), Aluminium or Stainless Steel 316/316L

Seal Material: Standard Thermoset Elastomer or Extreme Temperature Seals

Sealing Gasket Material: Sealing Area: HDPE, Nylon 66 or PTFE Outer Sheath (may be used on cables with inner and outer sheaths)

Adaptor, Reducer, Earth Tag, Locknut, Serrated Washer and Shroud The installer should ensure that the materials are suitable for the installation Optional Accessories:

Standards and Certifications

IECEx/INMETRO: Ex db eb I Mb, Ex db eb IIC Gb, Ex nR IIC Gc, Ex ta IIIC Da ATEX/UKEX: (a) I M2 (a) II 2/3G 1D, Ex db eb I Mb, Ex db eb IIC Gb, Ex nR IIC Gc, Ex ta IIIC Da **Equipment Protection Levels:**

TR CU: ☐ 1Ex d IIC Gb X / PB Ex d I Mb X / 1Ex e IIC Gb X / PΠ Ex e I Mc X /

2Ex nR IIC Gc X / Ex tb IIIC Db X

CCC: Ex db IIC Gb, Ex eb IIC Gb, Ex ta IIIC Da Continuous Operating Temp:

Standard Seals: -60°C to +95°/100°C (HDPE / Nylon Sealing Gasket) Extreme Temp. Seals: -60°C to +160°C (PTFE Sealing Gasket)

Conformance: Standard: Certificate

IEC/BS EN IEC/BS EN 62444 CML 14CA364 **IECE**x IEC 60079 Part 0, 1, 7, 15, 31 IECEx TSA 23.0026

EN 60079 Part 0, 1, 7, 13, 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 CML 20ATEX1026 CML 22ATEX4116 CML 21UKEX1013 UKFX CML 22UKEX4117 INMETRO (Brazil)

TR CU (Russia)

CCC/CNEx (Chinese) GB/T3836.1, 2, 3, 31-2021

SANS/IEC 60079 Part 0, 1, 7, 15, 31 MASC S/20-9022X

IP66/68 850m - Parallel IEC 60529 IP65 - Tapered IEC 60529

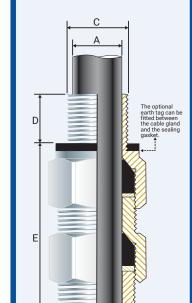
Deluge Protection Corrosion Protection ASTM B117-11, BS FN ISO 3231 Marine ABS

IEC 60079 Part 0, 1, 7, 15, 31, IEC 60529 IEC 60079 Part 0, 1, 7, IEC 60529 DNV



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.





| Product Code | Gland Size Reference | Metric Entry Thread | | NPT Entry Thread | | Cable Detail | | Max | Hexagonal Detail | | Installation |
|-----------------|----------------------------|---------------------|------------|------------------|------------|--------------|------------|---------------|------------------|---------------|--------------------|
| | | ,C, | Min 'D' | C, | Min 'D' | Min 'B' | Max 'B' | Length 'E' | Max 'Flats' | Max 'Crns' | Torque Value Nm |
| 057700-16S | 00-16S | M16x1.5 | 15 | - | - | 1.0 | 4.0 | 46.0 | 24.0 | 27.0 | 32.5 |
| 057700-16 | 00-16ss | M16x1.5 | 15 | - | - | 3.0 | 8.5 | 46.0 | 24.0 | 27.0 | 32.5 |
| 057700 | 00-20ss | M20x1.5 | 15 | 1/2/3/4 | 15 | 3.0 | 8.5 | 46.0 | 24.0 | 27.0 | 32.5 |
| 0577-0-16 | 0-16s | M20x1.5 | 15 | - | - | 7.0 | 12.0 | 46.0 | 24.0 | 27.0 | 32.5 |
| 0577-0 | 0-20s | M20x1.5 | 15 | 1/2/3/4 | 15 | 7.0 | 12.0 | 46.0 | 24.0 | 27.0 | 32.5 |
| 057701 | 1-20 | M20x1.5 | 15 | 3/4/1/2 | 15 | 11.0 | 14.0 | 54.0 | 27.0 | 30.0 | 32.5 |
| 057722 | 2s-25s | M25x1.5 | 15 | 3/4/1 | 15/19 | 11.5 | 17.5 | 54.0 | 35.0 | 39.0 | 47.5 |
| 057702 | 2-25 | M25x1.5 | 15 | 3/4/1 | 15/19 | 15.0 | 20.0 | 54.0 | 35.0 | 39.0 | 47.5 |
| 057733 | 3s-32s | M32x1.5 | 15 | 1/11/4 | 19 | 16.0 | 22.0 | 58.0 | 42.0 | 47.0 | 55.0 |
| 057703 | 3-32 | M32x1.5 | 15 | 1/11/4 | 19 | 20.0 | 26.5 | 58.0 | 42.0 | 47.0 | 55.0 |
| 057744 | 4s-40s | M40x1.5 | 15 | 11/4/11/2 | 19/21 | 22.0 | 31.5 | 66.0 | 52.0 | 59.0 | 65.0 |
| 057704 | 4-40 | M40x1.5 | 15 | 11/4/11/2 | 19/21 | 26.0 | 34.0 | 66.0 | 52.0 | 59.0 | 65.0 |
| 057755 | 5s-50s | M50x1.5 | 15 | 1½/2 | 21 | 29.0 | 38.0 | 82.0 | 65.0 | 73.0 | 82.5 |
| 057705 | 5-50 | M50x1.5 | 15 | 1½/2 | 21 | 34.0 | 44.5 | 82.0 | 65.0 | 73.0 | 82.5 |
| 057766 | 6s-63s | M63x1.5 | 15 | 2/21/2 | 21/30 | 38.0 | 50.0 | 92.0 | 80.0 | 90.0 | 97.5 |
| 057706 | 6-63 | M63x1.5 | 15 | 2/21/2 | 21/30 | 44.5 | 56.5 | 92.0 | 80.0 | 90.0 | 97.5 |
| 057777 | 7s-75s | M75x1.5 | 15 | 2½/3 | 30/32 | 50.0 | 62.0 | 94.0 | 96.0 | 108.0 | 115.5 |
| 057707 | 7-75 | M75x1.5 | 15 | 21/2/3 | 30/32 | 56.0 | 67.5 | 94.0 | 96.0 | 108.0 | 115.5 |
| 057708 | 8-80 | M80x2.0 | 20 | 3 | 32 | 54.0 | 69.0 | 116.0 | 96.0 | 108.0 | 120.0 |
| 057799 | 9s-90s | M90x2.0 | 20 | 3/31/2 | 32/33 | 60.0 | 75.0 | 119.0 | 111.0 | 125.0 | 120.0 |
| 057709 | 9-90 | M90x2.0 | 20 | 3/31/2 | 32/33 | 73.0 | 81.5 | 119.0 | 111.0 | 125.0 | 120.0 |
| 057710 | 10-100 | M100x2.0 | 20 | 3½/4 | 33/34 | 81.0 | 92.0 | 119.0 | 125.0 | 141.0 | 120.0 |
| 057711 | 11-110 | M110x2.0 | 20 | 4 | 34 | 91.0 | 101.0 | 128.0 | 135.0 | 152.0 | 175.0 |
| 057712 | 12-120 | M120x2.0 | 20 | - | - | 101.0 | 109.0 | 135.0 | 140.0 | 158.0 | 175.0 |
| 057713 | 13-130 | M130x2.0 | 20 | - | - | 109.0 | 116.0 | 135.0 | 146.0 | 164.0 | 175.0 |

All dimensions except NPT are in mm. Intermediate thread sizes are available on request. NPT threads should be tightened 'wrench tight'

PATENTED

FITTING INSTRUCTIONS

Metric Illustration



A2FX-R DOUBLE COMPRESSION 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 $6.3~\mu m$.
- 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 (parallel threads) or by fully tightening into a threaded entry (tapered threads). Note that for tapered threads the IP rating can be improved to IP68 with the use of a suitable thread sealant.
 MUST HAVE THREADED ENTRIES

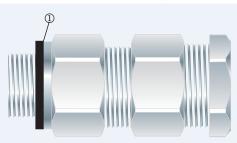
- The same thread size as the cable gland. (Thread adapters should be used to correct
- any mismatch). With a thread tolerance of metric class '6H' or equivalent.
- Where the thread length is a minimum of 10mm for Ex d applications or 3mm for all other applications

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.)

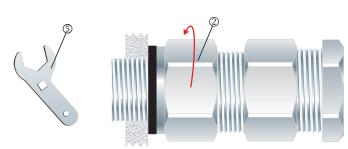


For accurate sizing, use a CCG Dimension Tape (A) on the outer cable sheath.

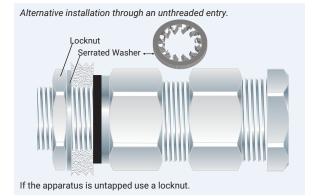


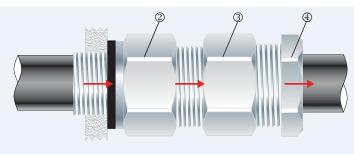
2. To maintain IP66/68, ensure the gasket ① is in place.

If the gland has NPT entry threads fitted to a threaded entry then IP68 (2m) can be achieved by applying one of the following tested and approved grease types to the thread:-Renolit Lubrene CA700 or LX220 EP2, Renolit LC-WP2 or Moly LX2, or Dow Corning 4 Electrical Compound.

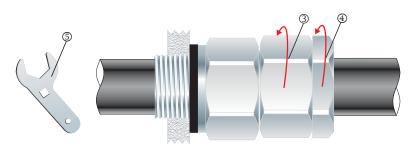


Screw the gland unit into the apparatus. Tighten the inner $\ensuremath{\mathbb{Q}}$ to the installation torque using a CCG Spanner 5.





4. Pass the outer nut 4, body 3 and inner 2 (gland assembly) over the cable.



5. Tighten the body ③ to the installation torque using a CCG Spanner ⑤ to produce a seal and grip on the cable. Tighten the outer nut ④ to produce an additional seal and grip on the cable.