



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX CML 18.0179X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 2 [Issue 1 \(2020-04-20\)](#)
[Issue 0 \(2019-03-26\)](#)
Date of Issue: 2023-12-22
Applicant: **CMP Products Ltd**
Unit 36 Nelson Way, Nelson Park East, Cramlington, Northumberland, NE23 1WH
United Kingdom
Equipment: **Cable Gland Types A****
Optional accessory:
Type of Protection: **Flameproof "db", Increased Safety "eb", Equipment by type of protection "nR", Dust Ignition "ta"**
Marking: Ex db IIC Gb
Ex eb IIC Gb
Ex nR IIC Gc
Ex ta IIIC Da
Ta= -60°C to +130°C (standard seal) / -20°C to +200°C (high temperature seal)

Approved for issue on behalf of the IECEx
Certification Body:

L A Brisk

Position:

Assistant Certification Manager

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

Eurofins E&E CML Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom





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Manufacturer: **CMP Products Ltd**
Unit 36 Nelson Way, Nelson Park East, Cramlington, Northumberland, NE23 1WH
United Kingdom

Manufacturing locations: **CMP Products Ltd**
Unit 36 Nelson Way, Nelson Park East,
Cramlington, Northumberland, NE23
1WH
United Kingdom

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-1:2014](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-15:2017](#) Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:5.0

[IEC 60079-31:2022](#) Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
Edition:3.0

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[GB/CML/ExTR19.0052/00](#)
[GB/CML/ExTR23.0266/00](#)

[GB/CML/ExTR19.0239/00](#)

[GB/CML/ExTR20.0100/00](#)

Quality Assessment Report:

[GB/CML/QAR19.0001/06](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

This certificate covers the following ranges:

- A2F Range
- A2E Range
- A2FRC Range
- A2F-FC Range
- A2F-HC Range
- A2F-FF Range
- A2E-FF Range

Refer to Annex for full descriptions.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to Annex for specific conditions of use.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above) **Issue 1**

This issue introduced the following changes:

1. The introduction of a universal certificate schedule drawing detailing critical parts.
2. The removal of Group I marking and the associated Condition of Manufacture and Specific Condition of Use.
3. The introduction of the A2FRC-FF model.

Issue 2

This issue introduced the following changes:

1. To update sizes 16, and 20s16 to include a new seal option.
2. To update IEC 60079-31 to the latest edition.

Annex:

[Certificate Annex - IECEx CML 18.0179X Iss 2.pdf](#)

Annexe to: IECEx CML 18.0179X Issue 2
Apparatus: Cable Gland Types A**
Applicant: CMP Products Ltd



Description

A2F Range

The A2F Range of Cable Glands are metallic and are intended to terminate circular braided or unarmoured cables into a threaded entry point within enclosures without compromising the explosion protection provided by the enclosures in accordance with relevant codes of practice. They consist of a male-threaded front entry component and a seal actuation nut. The front entry component, fitted with an elastomeric displacement sealing ring, and nylon 6 stepped skid washer, is intended to screw into an entry point of its associated enclosure. The seal actuation nut threads into the front entry component thereby effecting flameproof and environmental sealing onto the cable outer sheath.

A2E Range

The A2E Range of Cable Glands are identical to the A2F Range, except the entry thread engagement lengths are minimised.

A2FRC Range

The A2FRC Range of Cable Glands are intended to terminate circular braided or unarmoured cables into enclosures without compromising the explosion protection provided by the enclosures in accordance with relevant codes of practice. They consist of a male-threaded front entry component, a seal actuation nut and either an outer captivated or running coupling. The front entry component, fitted with an elastomeric displacement sealing ring, is intended to screw into an entry point of its associated enclosure. The seal actuation nut threads into the front entry component thereby effecting flameproof and environmental sealing onto the cable outer sheath. The outer running coupling is retained in the seal actuation nut using the carbon steel 'C' clip, or a similar arrangement to allow free running thread connection to conduit.

A2F-FC Range

The A2F-FC Range of Cable Glands are intended to terminate circular braided or unarmoured cables into enclosures without compromising the explosion protection provided by the enclosures in accordance with relevant codes of practice. They also provide an anchor for a flexible metallic conduit which can protect the cable from damage. They consist of a male-threaded front entry component, a seal actuation nut and a conduit anchor element that screws into the inside of the conduit. The front entry component, fitted with an elastomeric displacement sealing ring, is intended to screw into an entry point of its associated enclosure. The seal actuation nut threads into the front entry component thereby effecting flameproof and environmental sealing onto the cable outer sheath. The conduit anchor is secured between the seal actuation nut and seal to form a skid washer.

A2F-HC Range

The A2F-HC Range of Cable Glands are intended to terminate circular braided or unarmoured cables into enclosures without compromising the explosion protection provided by the enclosures in accordance with the relevant codes of practice. They also provide an anchor for a flexible hose which can protect the cable from damage. They consist of a male-threaded front entry component, a seal actuation nut with a hose anchor to which a hose can be attached using a jubilee clip or similar. The front entry component, fitted with an elastomeric displacement sealing ring and skid washer, is intended to screw into an entry point of its associated enclosure. The seal actuation nut threads into the front entry component thereby effecting flameproof and environmental sealing onto the cable outer sheath.



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A2F-FF Range

The A2F-FF Range of Cable Glands are intended to terminate flat braided or unarmoured cables into a threaded entry point within enclosures without compromising the explosion protection provided by the enclosures in accordance with relevant codes of practice. They consist of a male-threaded front entry component and a seal actuation nut. The front entry component fitted with an elastomeric displacement sealing ring, and nylon 6 stepped skid washer, is intended to screw into an entry point of its associated enclosure. The seal actuation nut threads into the front entry component thereby effecting flameproof and environmental sealing onto the cable outer sheath.

A2E-FF Range

The A2E-FF Range of Cable Glands are identical to the A2F-FF Range, except the entry thread engagement lengths are minimised.

A2FRC-FF

The A2FRC-FF Range of Cable Glands are identical to the A2FRC Range, except the the seal is intended for use with flat cable.

Design options

The front entry component may be manufactured with a profiled groove to captivate an O-ring seal which locates on the mating face with the associated enclosure. This option having the gland type designation prefixed with the letter R, e.g. 25RA2F.

Materials of manufacture:

The Cable Glands Type A** are manufactured in brass, aluminium, mild steel and stainless steel. All brass manufactured parts can be optionally nickel plated. All mild steel manufactured parts can be optionally zinc plated.

Examples of alternative entry component threadforms:

ET (Conduit)
PG
BSPP
BSPT
ISO
NPT
NPSM

Metric entry threads of all model series to be manufactured with a pitch between 0.7 mm and 2.0 mm, with 1.5 mm as standard.

Alternative material of manufacture of the skid washer to be the same as the gland material.

Alternative 'C' clip plate finish (where applicable):

- Stainless steel
- Phosphor bronze
- Beryllium copper



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CML



The option to fit a flat blanking disc between the seal and the skid washer to maintain a minimum IP66 ingress protection. The disc to be marked 'Ex eb only' to indicate that the gland is not suitable for use in flameproof applications when it is fitted.

Type designation:

The gland and seal sizes are determined by the entry thread and cable range take sizes:

Gland Size	Entry Thread	Cable Sheath Ø (mm)	
		Min.	Max
16s*	M16x1.5	2.0	7.4
16	M16x1.5	3.2	8.7
20s/16s*	M20x1.5	2.0	7.4
20s/16	M20x1.5	3.2	8.7
20s	M20x1.5	6.1	11.7
20	M20x1.5	6.5	14.0
25	M25x1.5	11.1	20.0
32	M32x1.5	17.0	26.3
40	M40x1.5	23.5	32.2
50s	M50x1.5	31.0	38.2
50	M50x1.5	35.6	44.1
63s	M63x 1.5	41.5	50.0
63	M63x1.5	47.2	56.0
75s	M75x1.5	54.0	62.0
75	M75x1.5	61.1	68.0
90	M90x2.0	66.6	80.0
100	M100x2.0	76.0	91.0
115	M115x2.0	86.0	98.0
130	M130x2.0	97.0	115.0

* Only available in standard seal material

A2E-FF, A2F-FF and A2FRC-FF in these sizes only

Gland Size	Entry Thread	Cable Sheath Ø (mm)	
		Min.	Max.
20s	M20x1.5	4.0 x 6.2	6.8 x 11.7
20	M20x1.5	5.7 x 8.0	8.7 x 13.5

Notes:

- IECEx SIR 13.0023X is superseded by this certificate.
- The product covered by Issue 0 of this certificate remains identical to that previously covered by IECEx SIR 13.0023X.
- Where IECEx SIR 13.0023X is specified in other product certification, or other technical specifications, this certificate reference for the product shall be used in its place; updating of the other product certificate or technical specification is not required.



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Conditions of Manufacture

None

Specific Conditions of Use

The following conditions relate to safe installation and/or use of the equipment.

- i. When the cable glands are supplied with an entry thread that is one size up from the nominal gland size, designated with the letter 'B' after the gland size, e.g. 32B****, they shall not be used with any adaptor device.
- ii. The cable glands shall only be used where the temperature, at the point of entry, is in the following ranges:

Outer sheath seal material	Temperature range	Colour I.D.
EPDM 70 (5079B115)	-60°C to +130°C	Black
FKM (9079B0662)	-20°C to +200°C	Red (muddy brown)

- iii. For flameproof applications, cable gland types CA2F, CA2F-RC, CA2F-FC, CA2F-HC and CA2F-FF are to be installed in associated flameproof equipment having a minimum wall thickness as follows:
 - 10.5 mm minimum for cable gland having entry thread sizes M16x1.5 to M75x1.5
 - 12.5 mm minimum for cable gland having entry thread sizes M90x2.0 to M115x2.0

Components used which are covered by Ex Certificates issued to older editions of Standards

None



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