

## **IECEx Certificate** of Conformity

### INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification Scheme for Explosive Atmospheres**

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

Certificate No.:

IECEx SIR 10.0094X

issue No.:2

Certificate history:

Issue No. 2 (2012-2-22) Issue No. 1 (2011-10-

26) Issue No. 0 (2010-8-2)

Status:

Current

Date of Issue:

2012-02-22

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Applicant:

**CMP Products Limited** 

Glasshouse Street

St Peters

Newcastle upon Tyne

NE6 1BS

United Kingdom

Electrical Apparatus:

PXFC and PXFC-LTPB Barrier Glands for Flexible Conduit

Optional accessory:

Type of Protection:

Flameproof, Increased Safety and Dust

Marking:

Ex d IIC Gb Ex e IIC Gb

Ex ta IIIC Da IP6X

Ex d I Mb Ex e I Mb

Approved for issue on behalf of the IECEx

Certification Body:

D R Stubbings BA MIET

Position:

Deputy Certification Manager

Signature:

(for printed version)

Date:

2012-02-22

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 the Official IECEx Website.

Certificate issued by:

SIRA Certification Service Rake Lane **Eccleston** Chester CH4 9JN **United Kingdom** 





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Manufacturer:

**CMP Products Limited** 

Glasshouse Street St Peters Newcastle upon Tyne NE6 1BS

**United Kingdom** 

#### Manufacturing location(s):

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 electrical apparatus 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: 2007-10

Explosive atmospheres - Part 0:Equipment - General requirements

Edition: 5

IEC 60079-1: 2007-04

Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition: 6

IEC 60079-31: 2008

Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure 't'

Edition: 1

IEC 60079-7: 2006-07

Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

Edition: 4

This Certificate does not indicate compliance with electrical 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 Report:

GB/SIR/ExTR10.0182/00

GB/SIR/ExTR11.0268/00

GB/SIR/ExTR12.0040/00

Quality Assessment Report:

GB/SIR/QAR07.0009/02



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#### Schedule

#### **FOUIPMENT:**

Equipment and systems covered by this certificate are as follows:

The PXFC (also known as the Flexicon EXD) range of barrier cable glands is intended to terminate circular braided, unarmoured cables or individual cores into enclosures without compromising the explosion protection provided by

The PXFC ranges of cable glands consist of a male-threaded front entry component, fitted with a compound tube such that a spigot/combination joint is formed, which is intended to screw into an entry point of its associated enclosure in accordance with relevant codes of practice. The compound tube is filled with a sealing compound that effects a flameproof seal around the cable cores passing through it. The front entry component to main body mating thread may be fitted with an optional 'O' ring seal to provide increased ingress protection. Clamping of the flexible conduit is effected by a combination of the front entry component assembly and a rear seal washer, olive and conduit nut. The olive is compressed onto the conduit when the body component and conduit nut are tightened and affects environmental sealing onto the conduit outer sheath.

For Design Options refer to EQUIPMENT (continued)

#### CONDITIONS OF CERTIFICATION: YES as shown below:

- The cable gland ranges shall only be used where the temperature, at the point of entry, is in the following
  - Type PXFC ranges of cable glands: -60°C to +85°C EP2122 compound filled. Type PXFC ranges of cable glands: -60°C to +85°C RapidEx resin filled.
- The PXFC cable entries are only suitable for fixed installations. When assembled for fitting to flexible conduit, the conduit shall be effectively clamped to prevent twisting and pulling.
- 3 The entry component threads may need additional sealing to maintain the ingress protection rating as applicable to the associated equipment in which it will be attached.
- 4 The PXFC range of cable glands with entry threads smaller than a M25 (or equivalent) size shall not be used for Group I, Category M2 applications where there is a 'high' risk of mechanical damage.
- 5 The PXFC cable glands are designed for use in group I applications where the installed cable is compliant with the requirements of the local code of practice and the conduit provides additional mechanical protection only.



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#### EQUIPMENT(continued):

#### Design options

\* Alternative materials of manufacture:

Brass to BS2874:1986 Grade CuZn39Pb (CW614N)

Mild steel to BS970 Pt1:1991 Grade 220M07Pb

Stainless steel to BS970 Pt1:1991 Grades 316S11, 316S13, 316S31 or 316S33

Aluminium alloy to BS1474:1987 Grade 6082 or BS1490 Grade LM25 TF (Not Group I)

\* Alternative entry component thread forms (the cable gland entry threads are to maintain compliance with the requirements of IEC 60079-1:2007 Clause 5.3 Tables 3 and 4 and clause C.2.2 as applicable):

Metric ISO 965-1; ISO965-3 medium fit (6g) for external threads

ET(Conduit) BS 31:1940 (1979), Table A; PG DIN 40430:1971

BSPP BS 2779:1973 class A full form for external threads

BSPT BS 21:1985 standard threads only as clause 5.4, gauging to clause 5.2 system A

ISO ISO 7/1:1982, gauging to ISO 7/2 clause 6.3 for external threads

NPT ANSI/ASME B1.20.1-1983 gauging to clause 8.1 for external threads

NPSM ANSI/ASME B1.20.1-1983 gauging to clause 9 for external threads

The option to manufacture glands with entry threads that are one size up from the nominal quoted gland size.

Gland size	Entry thread	Max no. of cores	Max dia. over cores (mm)
20/16	M20 x 1.5	34	12.6
20	M20 x 1.5	34	12.6
25	M25 x 1.5	80	17.5
32	M32 x 1.5	115	23.6
40	M40 x 1.5	185	30.0
50	M50 x 1.5	343	41.0
63	M63 x 1.5	585	53.7

\* The PXFC-LTPB range of barrier cable glands is intended for anchoring flexible braided conduit and terminating braided or unarmoured cable

#### Conditions of manufacture

The Manufacturer shall comply with the following:

- When glands are manufactured with an entry thread that is one size up from nominal quoted gland size, these thread entries shall not be any larger than the largest thread size within that range.
- When glands are manufactured with an entry thread that is one size up from nominal quoted gland size, the thread entry size will be marked on the gland.



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### DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

•	The PXFC was approved to be used for group I applications, the marking was amended accordingly and a condition of certification was introduced.		
Issue 2	2 - this Issue introduced the following changes:		
1	The introduction of a new model, PXFC-LTPB type flexible conduit cable gland. The description above is amended to include this option.		
2	Condition of Certification 5 included to clarify the installation requirements for Group I.		