



1 **EC TYPE-EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: **Sira 10ATEX1172X** Issue: **2**

4 Equipment: **PXFC and PXFC-LTPB Barrier Gland for Flexible Conduit**

5 Applicant: **CMP Products Limited**

6 Address: **Glasshouse Street  
St Peters  
Newcastle upon Tyne  
NE6 1BS  
UK**

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2009      EN 60079-1:2007      EN 60079-7:2007      IEC 60079-31:2008

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EC type-examination certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



II 2GD  
Ex d IIC Gb / Ex e IIC Gb  
Ex ta IIIC Da IP6X

or



I M2  
Ex d I Mb / Ex e I Mb

Project Number 26206

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D R Stubbings BA MIET  
Certification Manager



## SCHEDULE

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#### 13 DESCRIPTION OF EQUIPMENT

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 enclosures.

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.

#### 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:
  - 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
  - BSPTBS 21:1985 standard threads only as clause 5.4, gauging to clause 5.2 system A
  - ISOISO 7/1:1982, gauging to ISO 7/2 clause 6.3 for external threads
  - NPTANSI/ASME B1.20.1-1983 gauging to clause 8.1 for external threads
  - NPSMANSI/ASME B1.20.1-1983 gauging to clause 9 for external threads

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.
- 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

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## SCHEDULE

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

**Variation 1** - This variation introduced the following changes:

- The PXFC was approved to be used for group I applications, the marking at section 12 was amended accordingly and a Special condition for Safe Use was introduced.

**Variation 2** - This variation introduced the following changes:

- The introduction of a new model, PXFC-LTPB type flexible conduit cable gland. The description above is amended to include this option.
- Special Conditions for Safe Use for the group I application were introduced.

## 14 DESCRIPTIVE DOCUMENTS

### 14.1 Drawings

Refer to Certificate Annexe.

### 14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment
0	02 August 2010	R22566A/00	The release of the prime certificate.
1	19 October 2011	R26206A/00	The introduction of Variation 1.
2	17 February 2012	R26729A/01	The introduction of Variation 2.

## 15 SPECIAL CONDITIONS FOR SAFE USE (denoted by X after the certificate number)

- 15.1 The cable gland ranges shall only be used where the temperature, at the point of entry, is in the following ranges:

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.

- 15.2 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.
- 15.3 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.
- 15.4 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.
- 15.5 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.

## 16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

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SCHEDULE

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Issue 2

17 CONDITIONS OF CERTIFICATION

- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.
- 17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.
- 17.3 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.
- 17.4 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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# Certificate Annexe

Certificate Number: Sira 10ATEX1172X  
Equipment: PXFC and PXFC-LTPB Barrier Gland for Flexible Conduit  
Applicant: CMP Products Limited

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## Issue 0

Drawing No.	Sheets	Rev.	Date (Sira Stamp)	Title
GA207	1 of 1	00	02 Aug 10	PXFC GA Drawing
SCH0245	1 of 1	00	30 Jun 10	PX & PXSS2K Entry Item Details

## Issue 1

Drawing No.	Sheets	Rev.	Date (Sira Stamp)	Title
GA207	1 of 1	01	13 Oct 11	PXFC GA Drawing

## Issue 2

Drawing	Sheets	Rev.	Date (Sira Stamp)	Title
GA207	1 of 1	02	06 Jan 2012	PXFC GA DRAWING

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