1 **EC TYPE-EXAMINATION CERTIFICATE**

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

3 Certificate Number: **Sira 02ATEX1003X** Issue: **5**

4 Equipment: **Type 737, 747, 757, 767, 797 and MA/TF Ranges of Adapters, Reducers and Stopping Plugs**

5 Applicant: **CMP Products Ltd**

6 Address: Glasshouse Street
St Peters
Newcastle upon Tyne
NE6 1BE

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 60079-0:2006 EN 60079-1:2004 EN 60079-7:2007
EN 50281-1-1:1998

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:

	Ex	I M2	and / or	Ex	II 2 GD
Metallic Variants Only NOT Aluminium		Ex d			Ex d
		Ex e			Ex e
		Ex d/Ex e			Ex d/Ex e
For other materials see variations marking		Ex d I			Ex d IIC
		Ex e I			Ex e II
		Ex d I/Ex e I			Ex d IIC/Ex e II

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13 **DESCRIPTION OF EQUIPMENT**

The **737 Metallic Range of Adaptors and Reducers** comprise a hollow hexagonal body of which a portion has an external male thread and an internal female thread. The body may also be fitted with an 'O' ring seal.

The **747 Metallic Range of Stopping Plugs** comprise a cylindrical body with an external male thread along its length with the exception of a portion at one end. Each has a socket head recess to allow fitting and removal. The Stopping Plugs are available in two forms designated as either non-tamperproof or tamperproof by the manufacturer. When fitted into an enclosure, the socket head recess of the non-tamperproof version is accessible from the outside, whilst the socket head recess of the tamperproof version is only accessible from the inside.

The **757 Metallic Range of Stopping Plugs** comprise a cylindrical body with an external male thread along its length with the exception of a hexagonal head at one end. The body may also be fitted with an 'O' ring seal.

The **767 Metallic Range of Stopping Plugs** comprise a cylindrical body with an external male thread along its length with the exception of a lipped portion to one end. The face of the lipped portion contains a socket head recess to allow fitting and removal. The body may also be fitted with an 'O' ring seal.

Typical sizes:

Adaptors	
Female Threadform	Male Threadform
M20 x 1.5	M16 x 1.5
M25 x 1.5	M20 x 1.5
M32 x 1.5	M25 x 1.5
M40 x 1.5	M32 x 1.5
M50 x 1.5	M40 x 1.5
M63 x 1.5	M50 x 1.5
M75 x 1.5	M63 x 1.5
M90 x 2.0	M75 x 1.5
M100 x 2.0	M90 x 2.0

Reducers	
Female Threadform	Male Threadform
M16 x 1.5	M20 x 1.5
M20 x 1.5	M25 x 1.5
M25 x 1.5	M32 x 1.5
M32 x 1.5	M40 x 1.5
M40 x 1.5	M50 x 1.5
M50 x 1.5	M63 x 1.5
M63 x 1.5	M75 x 1.5
M75 x 1.5	M90 x 2.0
M90 x 2.0	M100 x 2.0

Stopping Plugs
Threadform
M16 x 1.5
M20 x 1.5
M25 x 1.5
M32 x 1.5
M40 x 1.5
M50 x 1.5
M63 x 1.5
M75 x 1.5
M90 x 2.0
M100 x 2.0

Alternative threadforms:

ET Conduit BS 31:1940 (1979)
PG DIN 40430:1971
BSPP BS 2779:1973
BSPT BS 21:1985
ISO ISO 7/1:1982
NPT ANSI/ASME B1.20.1-1983
NPT USAS B2.1.20.1-1968
NPSM ANSI/ASME B1.20.1-1983
BSW BS 84:1956

Alternative materials of manufacture:

Brass - BS EN 12164:1998/BS1400
Aluminium BS EN 755 Part 6:1996/BS EN 1706 (not group I)
Mild Steel BS 970
Stainless Steel BS EN 10088 Part 3:1995

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SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE **Sira 02ATEX1003X**
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Variation 1 - This Variation recognised the following changes:

i. The addition of the following type of flanged adaptors that are intended to be used in Group I applications only:

MA/TF Thread to Spigot Flanged Adaptor

The MA/TF ranges of flanged adaptors are metallic, elliptical in shape and are bored out to allow for cable cores to pass through. One end of the adaptor is threaded with a metric male thread of medium fit (6g) thread compliant with the requirements of EN 50018:2000 Clause 5.3. At the opposite end, the bore is enlarged to allow for a suitably certified non-threaded cable entry to be inserted. The threaded side of the MA/TF adaptors may have one thread size smaller than the equivalent non-threaded spigot entry.

Alternative materials of manufacture:

Brass BS EN 12164:1998/BS1400
Mild steel BS 970
Stainless steel BS EN 10088 Part 3:1995

Variation 2 -This Variation recognised the following change:

i. The introduction of the **Type 797 Range of Adaptors** with entry thread form sizes between M16 x 1.5 and M100 x 2.0, intended for mounting to a threaded entry point on either flameproof or increased safety enclosures. They are metallic and are used to convert an existing cable entry aperture to the opposite male or female thread form. They comprise a hollow body partly threaded from both sides with either male threads or female threads at each end. Additionally, they may be used to convert an existing cable entry aperture to a different thread form and/or size. Thread combinations are such that a maximum of one 'standard' size difference is maintained. The male to male threaded adaptors may also be fitted with optional O-ring seals.

The coding being: Ⓔx II 2 G D and either: Ex d IIC, Ex e II or Ex d IIC/Ex e II.
and/or
Ⓔx I M2 and either: Ex d I, Ex e I or Ex d I/Ex e I

Alternative threadforms:

Alternative nearest equivalent male and female thread forms to the metric sizes listed above may be utilised from the following types listed

ET Conduit - BS 31:1940 (1979)
PG - DIN 40430:1971
BSPP - BS 2779:1973
BSPT - BS 21:1985
ISO - ISO 7/1:1982
NPT - ANSI/ASME B1.20.1-1983
NPT - USAS B2.1.20.1-1968
NPSM - ANSI/ASME B1.20.1-1983
BSW - BS 84:1956

Alternative materials of manufacture:

Brass BS EN 12164:1998/BS1400
Aluminium BS EN 755 Part 6:1996/BS EN 1706 (not Group I)
Mild Steel BS EN 10088 Part 3:1995
Stainless Steel BS EN 10088 Part 3:1995

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Variation 3 - This Variation recognised the following changes:

i. The range of products covered by this certificate comply with the requirements of the EN 60079 series standards, the original standards EN 50014:1997, EN 50018:2000 and EN 50019: were removed from page 1 and replaced with the equivalent EN 60079 series standards, the codings on Page 1 and Variation 2 were updated accordingly.

ii. A nylon version of the Type 747 Range of Stopping Plugs with entry thread form sizes from M20 to M75 x 1.5mm pitch inclusive and M90 x 2mm pitch, used for the closure of unused cable entry holes in an associated increased safety enclosure.

The coding being: II 2G Ex e II.

A nylon version of the Type 757 Range of Stopping Plugs with entry thread form sizes from M20 to M75 x 1.5mm pitch inclusive and M90 x 2mm pitch, used for the closure of unused cable entry holes in an associated increased safety enclosure.

The coding being: II 2GD Ex e II.

A nylon version of the Type 767 Range of Stopping Plugs with entry thread form sizes from M20 to M75 x 1.5mm pitch inclusive and M90 x 2mm pitch, used for the closure of unused cable entry holes in an associated increased safety enclosure.

The coding being: II 2GD Ex e II.

Alternative threadforms for the Types 747, 757 & 767 Stopping Plugs:

Alternative nearest equivalent male thread forms to the metric sizes listed above, which do not result in a weaker construction for the device, may be utilised from the following types listed;

ET Conduit - BS 31:1940 (1979)	BSPT - BS 21:1985
PG - DIN 40430:1971	NPT - ANSI/ASME B1.20.1-1983
BSPP - BS 2779:1973	NPSM - ANSI/ASME B1.20.1-1983

vii. A nylon version of the of Type 737 Range of Adaptors and Reducers with ISO female thread options, used to convert an existing cable entry aperture to another thread size/threadform in an increased safety enclosure.

The coding being: II 2GD Ex e II.

The table below shows the available threadform sizes for the Type 737 Range of Adaptors and Reducers

Available sizes			
Adaptors		Reducers	
Female Threadform	Male Threadform	Female Threadform	Male Threadform
M25 x 1.5	M20 x 1.5	M16 x 1.5	M20 x 1.5
M32 x 1.5	M25 x 1.5	M20 x 1.5	M25 x 1.5
M40 x 1.5	M32 x 1.5	M25 x 1.5	M32 x 1.5
M50 x 1.5	M40 x 1.5	M32 x 1.5	M40 x 1.5
M63 x 1.5	M50 x 1.5	M40 x 1.5	M50 x 1.5
M75 x 1.5	M63 x 1.5	M50 x 1.5	M63 x 1.5
M90 x 2.0	M75 x 1.5	M63 x 1.5	M75 x 1.5
		M75 x 1.5	M90 x 2.0

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Alternative threadforms for the Type 737 Range of Adaptors and Reducers:
Alternative nearest equivalent male thread forms to the metric sizes listed above may be utilised from the following types listed

ET Conduit - BS 31:1940 (1979)	BSPT - BS 21:1985
PG - DIN 40430:1971	NPT - ANSI/ASME B1.20.1-1983
BSPP - BS 2779:1973	NPSM - ANSI/ASME B1.20.1-1983

Variation 4 - This Variation recognised the following changes to the 737 and 797 ranges:

i. Intermediate sizes of threads within the range above providing the same or greater wall thickness eg. M80.

Variation 5 - This variation introduced the following change:

i. The 737 and 797 Type Adaptors and Reducers were allowed to step a maximum of two 'standard' threadform sizes, the relevant table in the Description of Component was amended to recognise this change.
ii. The Description of Component was amended to clarify the metallic materials used in the construction of the products.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	21 Feb 2002	R51A8453A	The release of prime certificate.
1	02 April 2003	R52A9492A	The introduction of Variation 1
2	21 Jan 2005	R51A10546A	The introduction of Variation 2
3	27 April 2007	R51A15056B R51A13867A	This Issue covers the following changes: • All previously issued certification was rationalised into a single certificate, Issue 3, Issues 0 and 2 referenced above are only intended to reflect the history of the previous certification and have not been issued as documents in this format. • The introduction of Variation 3 and the suffix X on the certificate number.
4	20 November 2008	R59M19012A	The introduction of Variation 4.
5	14 April 2011	R23994A/00	The introduction of Variation 5.

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Issue 5

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

15.1 The following conditions are applicable to non-metallic adapters, reducers and stopping plugs

- Types 737, 747, 757 & 767 non-metallic Adaptors, Reducers & Stopping Plugs shall not be used in enclosures where the temperature, at the point of mounting, is outside the range of -20°C to +60°C.
- To prevent undue protrusion, it is recommended that only one adaptor or reducer be fitted to each cable entry.
- Any cable gland used with the adaptors and reducers shall be non-metallic and of the A2 type.
- Refer to the manufacturer's instructions for the action necessary regarding electrostatic risk.

15.2 The interfaces between the male thread of the adaptor/reducer and an associated enclosure and between the female thread of the adaptor/reducer and the cable entry device cannot be defined. Therefore it is the installer's responsibility to ensure that the appropriate ingress protection level is maintained at these interfaces.

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.

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.

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Certificate Annexe

Certificate Number: **Sira 02ATEX1003X**

Equipment: **Type 737, 747, 757, 767, 797 and MA/TF Ranges of Adapters, Reducers and Stopping Plugs**

Applicant: **CMP Products Ltd**

sira CERTIFICATION

Issue 0

Drawing	Sheet	Rev.	Date	Description
GA 077	1 of 1	01	11 Dec 01	ATEX Adapters, Reducers and Stopping Plugs
SCH 0070	1 of 1	01	14 May 99	Adapter/Reducer Cross-Reference Chart

Issue 1

Drawing	Sheet	Rev.	Date	Description
GA120	1 of 1	01	29 Aug 02	ATEX Threaded Flanged Adaptor & Non-Threaded Blank & Adaptor Flanges

Issue 2

Drawing	Sheet	Rev.	Date	Description
GA134	1 of 1	1	04 Jul 03	Type 797 metallic adaptors

Issue 3

Drawing	Sheet	Rev.	Date.	Description
GA133	1 of 1	02	09 Mar 07	Type 747, 757 & 767 Nylon Stopping Plugs and Type 737 Nylon Adaptors & Reducers
SCH0254	1 of 1	00	12 Mar 07	Thread Chamfer and Undercut Details
SCH0255	1 of 1	00	12 Mar 07	O-Ring Groove Details
SCH0070	1 of 1	02	25 Apr 07	Adaptors/Reducers Cross Reference Chart

Issue 4

Drawing	Sheet	Rev.	Date	Description
GA077	1 of 1	02	10 Oct 08	Adaptors, reducers and stopping plugs

Issue 5

Drawing	Sheet	Rev.	Date	Description
GA307	1 of 1	00	28 Jan 11	Type 737 and Type 797 Adaptors (Optional sizes)

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