



EC TYPE-EXAMINATION CERTIFICATE

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

Certificate Number: Sira 99ATEX1086X

Equipment: A1EX, A1EXP, A2EX & A2EXP Range of Cable Glands

Applicant: Pirelli Cables Ltd
(Using the registered trademark of BICON)

Address: Components Unit
Hall Lane
Prescot
Merseyside L34 5UR
UK

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

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 confidential report number R51X5880B.

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 50014:1997 (Amendments A1 – A2)

EN 50018:1994

EN 50019:1994

EN 50281-1-1 : 1998

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.

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.

The marking of the equipment shall include the following:



II 2 G D

EEx d IIC or EEx e II or EEx d IIC/EEx e II or EEx d e IIC

Reissued 22 January 2002

To permit report number R51X5880B to replace report number R51X5880A.

Project Number 51A7734
Date 11 August 1999
Re-issued 22 January 2002
C. Index 07

M D Shearman
Certification Manager

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Sira Certification Service

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SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

Sira 99ATEX1086X

13 DESCRIPTION OF EQUIPMENT

The A1EX, A1EXP, A2EX and A2EXP Range of Cable Glands are designed to allow the entry of circular un-armoured or braided cables into flameproof or increased safety enclosures without compromising the explosion protection provided by these enclosures, in accordance with relevant codes of practice.

The A1EX and A2EX types are a single sealed design and comprise:

- a brass gland body with an entry thread to tighten into an associated enclosure
- two skid washers made from either nylon 6 or fibre
- a compression (displacement) seal, the A1EX types utilise polychloroprene seals whereas the A2EX types use silicone
- a brass seal housing that screws onto the gland body and compresses the seal against the cable

The A1EXP and A2EXP types are a dual sealed design and comprise:

- a brass gland body with an entry thread to tighten into an associated enclosure
- four skid washers made from either nylon 6 or fibre
- two compression (displacement) seals, the A1EXP types utilise polychloroprene seals whereas the A2EXP types use silicone
- a brass gland barrel that screws onto the gland body and compresses the first seal against the cable
- a brass seal housing that screws onto the gland barrel and compresses the second seal against the cable

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

Gland Size	Entry Thread BS 3643:1981, (1988)	Cable size (mm) Max/Min
16	M16 x 1.5	3.5 / 8.5
20ss	M20 x 1.5	3.5 / 8.5
20s	M20 x 1.5	8.0 / 11.5
20	M20 x 1.5	8.0 / 16.0
25	M25 x 1.5	11.5 / 21.0
32	M32 x 1.5	18.5 / 27.5
40	M40 x 1.5	24.0 / 34.0
50	M50 x 1.5	31.0 / 41.0
63	M63 x 1.5	40.0 / 52.5
75s	M75 x 1.5	52.5 / 58.0
75	M75 x 1.5	54.5 / 65.5

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Design Options:

Alternative metallic materials of manufacture:

Brass to BS 2874:1986 grades CZ121 or CZ122 or better

Mild Steel to BS 970:Part 1:1991

Stainless Steel to BS 970:Part 4:1987

Aluminium to BS 1474:1987 or BS 1471:1972 grade 6082 T6 or better

All metallic materials may be surface coated to limit electrolytic reaction between dissimilar materials.

Alternative profiles:

Alternative profiles of construction of the seal housing, gland barrel and gland body components may be used; however, the minimum wall sections, the number of threads engaged and the thread engagement length are all maintained.

Alternative entry threads:

All entry threads that are within the dimensional parameters of the gland body and maintain compliance with the requirements of clause 5.3 of EN 50018:1994.

14 DESCRIPTIVE DOCUMENTS

14.1	Drawing	Sheet	Rev	Date	Title
	SIRA 0001	1 of 1	2	03 Mar 01	Dual Certified EEx de IIC Cable Gland For Braid & Unarmoured Circular Cable
	PL41526	1 of 1	2	03 Mar 01	A1Ex Plus & A2Ex Plus Gland Barrel
	PL41650	1 of 1	2	03 Mar 01	A1Ex/A1Ex Plus/A2Ex & A2Ex Plus Seals
	PL41750	1 of 1	2	03 Mar 01	A1Ex/A1Ex Plus/A2Ex & A2Ex Plus Skid Washers
	PL41852	1 of 1	2	03 Mar 01	A1Ex/A1Ex Plus/A2Ex & A2Ex Plus Gland Seal Housing
	PL43117	1 of 1	2	03 Mar 01	A1Ex/A1Ex Plus/A2Ex & A2Ex Plus Gland Body
	11861-284	1 of 1	1	14 Sep 95	Silicone Material

14.2 Report No. R51X5880B

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

15.1 The following sizes of cable glands shall only be used for fixed installations; in addition, the user/installer shall ensure that the cables are adequately clamped:

A1EX: M16, M20ss, M20s, M20, M25, M32, M40, M50, M63, M75s & M75

A1EXP: M16, M20ss, M20s, M20, M25, M32, M40, M50, M63, M75s & M75

A2EX: M32, M40, M50, M63, M75 & M75s

A2EXP: M75s & M75

15.2 The PCP compression (displacement) seals used in the A1EX and A1EXP ranges of cable glands have a service temperature range of -20°C to +90°C; therefore, these glands shall only be used with equipment where the surface temperature, at the point of mounting, does not exceed this range.

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SCHEDULE

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15.3 The silicone compression (displacement) seals used in the A2EX and A2EXP ranges of cable glands have a service temperature range of -50°C to +200°C; therefore, these glands shall only be used with equipment where the surface temperature, at the point of mounting, does not exceed this range.

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 Report No. R51X5880B.

17 **CONDITIONS OF CERTIFICATION**

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of SCS 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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EC TYPE-EXAMINATION CERTIFICATE VARIATION

CERTIFICATE NUMBER Sira 99ATEX1086X

Dated 11 August 1999
Latest issue 22 January 2002

VARIATION NUMBER 1 (ONE)

Dated 16 May 2006

VARIATION TO EQUIPMENT

To permit:

- 1 A change of the Applicant's name on the certificate:

From:
Pirelli Cables Limited
(Using the registered trademark of BICON)

To:
Prysmian Cables & Systems Limited
(Using the registered trademark of BICON)

- 2 The Applicant to substitute, on the label affixed to the package containing the product, the name Prysmian Cables & Systems Limited for Pirelli Cables Limited (Using the registered trademark of BICON), as reduced marking criteria are applicable to this equipment.

DESCRIPTIVE DOCUMENTS

None

ADDITIONAL CONDITIONS OF CERTIFICATION

None

File No. 51A14278

D Stubbings BA MIEE
Certification Manager

Report No. R51A14278A

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